



INSTRUCTIONAL PRACTICES OF TECHNOLOGY AND LIVELIHOOD EDUCATION TEACHERS AND THEIR INFLUENCE ON GRADE 6 LEARNERS' PRACTICAL SKILLS

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ABSTRACT

This study determined the instructional practices of Technology and Livelihood Education (TLE) teachers and their influence on the practical skills of Grade 6 learners in the Schools Division Office of Nueva Ecija during the School Year 2025–2026. Specifically, it assessed the level of teachers' instructional practices in terms of lesson planning and preparation, learner-centered teaching strategies, classroom management, utilization of instructional materials and technology, assessment and feedback, and practical and hands-on learning activities. It also determined the level of learners' practical skills, examined the relationship between teachers' instructional practices and learners' practical skills, identified the instructional practice dimensions that significantly influenced learners' practical skills, and proposed an instructional enhancement program based on the findings. The study employed a quantitative approach using a descriptive-correlational research design. The respondents were Grade 6 Technology and Livelihood Education teachers and Grade 6 learners from selected public elementary schools in the Schools Division Office of Nueva Ecija. A validated researcher-made questionnaire was utilized to gather the necessary data. Descriptive and inferential statistical tools were employed to analyze and interpret the data. The findings revealed that the instructional practices of Technology and Livelihood Education teachers were generally at a High level. Among the dimensions, Practical and Hands-on Learning Activities and Assessment and Feedback were rated Very High, while Learner-Centered Teaching Strategies, Classroom Management, and Utilization of Instructional Materials and Technology were rated High. Lesson Planning and Preparation was rated Moderate. The practical skills of Grade 6 learners ranged from Moderate to High, with Manipulation and Use of Tools, Materials, and Equipment and Safety Practices and Work Habits rated High, while Technical Knowledge Application, Quality of Work and Craftsmanship, Problem-Solving and Decision-Making, and Productivity and Task Completion were rated Moderate. The study

further established a significant positive relationship between teachers' instructional practices and learners' practical skills. Moreover, Practical and Hands-on Learning Activities, Learner-Centered Teaching Strategies, and Utilization of Instructional Materials and Technology were identified as the instructional practice dimensions that significantly influenced the practical skills of Grade 6 learners. The study concluded that effective instructional practices, particularly those emphasizing experiential learning, learner-centered instruction, and technology integration, play a vital role in enhancing the practical skills of Grade 6 learners. In response to the findings, an instructional enhancement program entitled PROJECT SKILL (Strengthening Knowledge, Instruction, Leadership, and Lifelong Learning) was proposed to further improve teachers' instructional practices and strengthen learners' practical competencies in Technology and Livelihood Education.

Keywords: *instructional practices, practical skills, Technology and Livelihood Education*

INTRODUCTION

The rapidly evolving demands of the twenty-first century have transformed the goals of basic education from merely transmitting academic knowledge to developing learners who possess practical competencies, technical skills, creativity, critical thinking, collaboration, and entrepreneurial abilities. The emergence of Industry 4.0, digital transformation, and globalization has increased the need for educational systems to prepare learners who can effectively apply knowledge in authentic situations and adapt to rapidly changing workplaces. Consequently, education systems around the world have shifted toward competency-based and skills-oriented learning to produce graduates who are innovative, adaptable, and equipped for lifelong learning (Schwab, 2016; Trilling & Fadel, 2009; Voogt & Roblin, 2012; World Economic Forum, 2023).

Recognizing these global demands, international organizations have emphasized the importance of developing learners' practical skills through quality education. The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2023) identified Technical and Vocational Education and Training (TVET) as an essential component of quality education because it equips learners with the knowledge, competencies, values, and attitudes necessary for productive work and lifelong learning. Likewise, the Organisation for Economic Co-operation and Development (OECD, 2021) stressed that practical learning experiences, authentic tasks, and workplace simulations enable learners to connect theoretical knowledge with real-life applications, thereby improving both technical competence and employability skills. These perspectives underscore that practical skills are fundamental outcomes of contemporary education and are essential for economic growth and sustainable development (United Nations, 2015; World Bank, 2019).

The development of practical competencies largely depends on the quality of instructional practices employed by teachers. Effective instruction extends beyond content delivery and involves creating meaningful learning experiences through demonstrations, project-

based learning, inquiry-based activities, collaborative learning, differentiated instruction, authentic assessment, and technology integration. According to Kolb (2015), experiential learning enables learners to construct knowledge through concrete experiences and reflective practice. Similarly, Merrill (2002) emphasized that learning becomes more meaningful when learners actively engage in solving authentic problems, while Prince (2004) found that active learning strategies significantly improve learners' understanding and retention. Moreover Darling-Hammond et al. (2020) concluded that learner-centered instructional practices positively influence learners' engagement, motivation, and acquisition of practical competencies. These findings suggest that teachers' instructional practices play a critical role in developing learners' practical skills and preparing them for future academic and occupational demands.

In the Philippine context, Technology and Livelihood Education (TLE) plays a significant role in achieving the goals of the K to 12 Basic Education Program. Through the MATATAG Curriculum, the Department of Education (DepEd, 2023) emphasizes competency-based instruction that develops learners' technical competencies, work values, entrepreneurial skills, and practical knowledge through authentic and performance-based learning experiences. Specifically, Grade 6 learners are expected to develop foundational competencies in Information and Communication Technology, Agriculture and Fishery Arts, Family and Consumer Science, and Industrial Arts. These learning areas are designed to cultivate innovation, creativity, productivity, and lifelong employability while preparing learners for higher levels of education and future careers (DepEd, 2023).

Despite these curricular reforms, schools continue to encounter challenges in delivering quality Technology and Livelihood Education instruction. Limited instructional materials, inadequate workshop and laboratory facilities, insufficient technological resources, varying teacher competencies, large class sizes, and limited opportunities for authentic hands-on experiences may hinder the effective development of learners' practical competencies. These challenges may contribute to variations in learners' practical skills despite receiving instruction based on the same curriculum standards (DepEd, 2023; UNESCO, 2022;).

Within the Schools Division Office of Nueva Ecija, elementary schools continue implementing the MATATAG Curriculum while responding to the diverse needs and contexts of their learners. The Division has consistently supported curriculum implementation through teacher professional development, instructional supervision, and capacity-building initiatives. Nevertheless, variations in teachers' instructional practices may still exist due to differences in teaching experience, instructional resources, school facilities, learner characteristics, and access to educational technologies. These contextual differences may influence the effectiveness of Technology and Livelihood Education instruction and, consequently, the development of Grade 6 learners' practical skills (DepEd, 2023).

A review of related literature reveals that numerous studies have examined teacher effectiveness, instructional competence, technology integration, and learners' academic

achievement in Philippine basic education. However, relatively few empirical studies have specifically investigated the influence of Grade 6 Technology and Livelihood Education teachers' instructional practices on learners' practical skills within the elementary education context. Existing research has primarily focused on secondary education, vocational education, or general instructional effectiveness, leaving limited localized evidence on practical skill development among elementary learners, particularly in the Schools Division Office of Nueva Ecija (Creswell & Creswell, 2023; OECD, 2023; UNESCO, 2023). This gap underscores the need for a localized investigation to provide empirical evidence on how instructional practices influence learners' practical competencies.

Hence, this study sought to determine the instructional practices employed by Grade 6 Technology and Livelihood Education teachers and examine their influence on the practical skills of Grade 6 learners in the Schools Division Office of Nueva Ecija during the School Year 2025–2026. Specifically, the study aimed to identify the instructional practices commonly employed by teachers, assess the level of learners' practical skills, and determine the extent to which instructional practices significantly influenced learners' competency development. The findings of the study are expected to provide empirical evidence that can serve as a basis for teacher professional development programs, instructional improvement initiatives, curriculum implementation strategies, school improvement planning, and policy formulation. Ultimately, the study seeks to contribute to the continuous enhancement of Technology and Livelihood Education instruction and support the Department of Education's commitment to developing competent, innovative, productive, and lifelong learners who are prepared for the demands of the twenty-first century (DepEd, 2023; OECD, 2023; UNESCO, 2022)

Research Questions

This study aimed to determine the instructional practices of Technology and Livelihood Education (TLE) teachers and their influence on the practical skills of Grade 6 learners in the Schools Division Office of Nueva Ecija during the School Year 2025–2026.

Specifically, this study sought to answer the following research questions:

1. What is the level of instructional practices of Technology and Livelihood Education teachers as assessed in terms of:
 - 1.1 lesson planning and preparation;
 - 1.2 learner-centered teaching strategies;
 - 1.3 classroom management;
 - 1.4 utilization of instructional materials and technology;
 - 1.5 assessment and feedback; and
 - 1.6 practical and hands-on learning activities?
2. What is the level of practical skills of Grade 6 learners in Technology and Livelihood Education in terms of:
 - 2.1 technical knowledge application;
 - 2.2 manipulation and use of tools, materials, and equipment;

- 2.3 quality of work and craftsmanship;
 - 2.4 safety practices and work habits;
 - 2.5 problem-solving and decision-making; and
 - 2.6 productivity and task completion?
3. Is there a significant relationship between the instructional practices of Technology and Livelihood Education teachers and the practical skills of Grade 6 learners?
 4. Which dimension of the instructional practices of Technology and Livelihood Education teachers significantly influences the practical skills of Grade 6 learners?
 5. Based on the findings of the study, what instructional enhancement program may be proposed to improve the instructional practices of Technology and Livelihood Education teachers and the practical skills of Grade 6 learners?

METHODOLOGY

Research Design

This study employed a descriptive-correlational research design to determine the instructional practices of Technology and Livelihood Education (TLE) teachers and their influence on the practical skills of Grade 6 learners in the Schools Division Office of Nueva Ecija during the School Year 2025–2026.

According to Creswell and Creswell (2023), descriptive research is used to systematically describe the characteristics, behaviors, or conditions of a population as they naturally occur without manipulating any variables. It enables researchers to obtain factual information about existing conditions and provides a comprehensive description of phenomena under investigation. In the present study, the descriptive method was utilized to determine the level of instructional practices of Grade 6 Technology and Livelihood Education teachers in terms of lesson planning and preparation, learner-centered teaching strategies, classroom management, utilization of instructional materials and technology, assessment and feedback, and practical and hands-on learning activities. It was likewise employed to determine the level of practical skills of Grade 6 learners in terms of technical knowledge application, manipulation and use of tools, materials, and equipment, quality of work and craftsmanship, safety practices and work habits, problem-solving and decision-making, and productivity and task completion.

The study also adopted the correlational research design. Fraenkel, Wallen, and Hyun (2019) explained that correlational research determines the degree and direction of the relationship between two or more variables without manipulating them. It establishes whether variations in one variable are associated with variations in another variable through statistical analysis. Similarly, Creswell and Creswell (2023) stated that correlational research examines naturally occurring relationships among variables and determines the extent to which one variable predicts or influences another.

In this study, the correlational approach was appropriate because it determined whether a significant relationship existed between the instructional practices of Technology and

Livelihood Education teachers and the practical skills of Grade 6 learners. Furthermore, the study employed multiple linear regression analysis to identify which dimensions of teachers' instructional practices significantly influenced learners' practical skills. Since the study sought to determine relationships and predictive influences among variables without introducing any treatment or intervention, the descriptive-correlational research design was considered the most appropriate research design.

The independent variable of the study was the instructional practices of Technology and Livelihood Education teachers, which included lesson planning and preparation, learner-centered teaching strategies, classroom management, utilization of instructional materials and technology, assessment and feedback, and practical and hands-on learning activities. The dependent variable was the practical skills of Grade 6 learners, measured in terms of technical knowledge application, manipulation and use of tools, materials, and equipment, quality of work and craftsmanship, safety practices and work habits, problem-solving and decision-making, and productivity and task completion.

The descriptive-correlational design enabled the researcher to describe the existing instructional practices of Technology and Livelihood Education teachers, determine the level of learners' practical skills, establish the relationship between the two variables, identify the instructional practice dimensions that significantly influenced learners' practical skills, and generate empirical evidence that served as the basis for the development of an Instructional Enhancement Program for Grade 6 Technology and Livelihood Education teachers in the Schools Division Office of Nueva Ecija.

Instrumentation and Data Collection

The primary instrument used in this study was a researcher-made questionnaire designed to determine the instructional practices of Technology and Livelihood Education (TLE) teachers and the practical skills of Grade 6 learners in the Schools Division Office of Nueva Ecija during the School Year 2025–2026. The instrument was developed after an extensive review of related literature, empirical studies, the Department of Education (DepEd) K to 12 and MATATAG Curriculum Guides, and other relevant instructional and assessment frameworks in Technology and Livelihood Education.

The questionnaire consisted of three parts.

Part I elicited the profile of the respondents. For the teacher-respondents, the profile included age, sex, highest educational attainment, years of teaching experience, and relevant seminars and trainings attended in Technology and Livelihood Education. For the learner-respondents, the profile included age and sex.

Part II measured the instructional practices of Technology and Livelihood Education teachers.

Part III measured the practical skills of Grade 6 learners. Prior to the actual data collection, the research instrument underwent content validation by a panel of experts composed of

specialists in educational management, educational research, measurement and evaluation, and Technology and Livelihood Education. Their comments and recommendations were incorporated to improve the clarity, relevance, appropriateness, and organization of the questionnaire.

Subsequently, the revised questionnaire was pilot-tested among respondents who possessed characteristics similar to those of the actual participants but were not included in the final study. The data gathered from the pilot test were subjected to reliability analysis using Cronbach's Alpha. A reliability coefficient of 0.70 or higher was considered acceptable, while coefficients of 0.80 or above indicated good reliability and 0.90 or above indicated excellent internal consistency, thereby establishing the reliability of the instrument.

Prior to the conduct of the study, the researcher secured approval from the dissertation adviser and the members of the dissertation committee. After the approval of the research proposal, a Letter of Request to conduct the study was submitted to the Schools Division Superintendent of the Schools Division Office of Nueva Ecija through the Office of the Public Schools District Supervisor and the school heads of the participating public elementary schools.

Upon approval of the request, the researcher coordinated with the school heads and Grade 6 Technology and Livelihood Education teachers regarding the schedule and procedures for data gathering. The purpose of the study was explained to all respondents, and they were informed that their participation was voluntary. The respondents were likewise assured that all information collected would be treated with strict confidentiality and used solely for academic and research purposes.

Before administering the questionnaires, the researcher obtained informed consent from the teacher-respondents. For the Grade 6 learner-respondents, parental or guardian consent and school authorization were secured in accordance with the ethical standards governing research involving minors. The respondents were informed of their right to decline participation or withdraw from the study at any time without penalty.

The questionnaires were personally administered by the researcher with the assistance of the respective school heads and class advisers. Adequate time was provided for the respondents to complete the instrument, and the accomplished questionnaires were immediately retrieved after completion to ensure a high retrieval rate and minimize data loss.

After retrieval, the questionnaires were checked for completeness, consistency, and accuracy. The responses were coded, tabulated, and encoded using appropriate statistical software for analysis. All data were stored securely, and the identities of the respondents were kept anonymous throughout the conduct of the study. The collected data served as the basis for determining the instructional practices of Technology and Livelihood Education teachers, the practical skills of Grade 6 learners, the relationship

between the variables, the significant predictors of learners' practical skills, and the development of the proposed Instructional Enhancement Program.

Tools for Data Analysis

The data gathered from the respondents were encoded, tabulated, and analyzed using the Statistical Package for the Social Sciences (SPSS) Version 29. Appropriate descriptive and inferential statistical tools were employed to answer the specific problems of the study. The level of significance for all inferential statistical tests was set at 0.05.

To answer this question, the weighted mean and standard deviation were used. The weighted mean determined the average level of instructional practices exhibited by the Technology and Livelihood Education teachers, while the standard deviation measured the variability of the respondents' ratings.

The following scale was used in interpreting the weighted mean:

Weighted Mean	Descriptive Rating
4.21–5.00	Very High
3.41–4.20	High
2.61–3.40	Moderate
1.81–2.60	Low
1.00–1.80	Very Low

The weighted mean was likewise utilized to determine the level of practical skills demonstrated by the Grade 6 learners. The weighted mean described the average level of practical skills, while the standard deviation indicated the consistency of the responses.

The following scale was adopted:

Weighted Mean	Descriptive Rating
4.21–5.00	Very High
3.41–4.20	High
2.61–3.40	Moderate
1.81–2.60	Low
1.00–1.80	Very Low

To determine the relationship between the independent and dependent variables, the Pearson Product-Moment Correlation Coefficient (Pearson r) was employed. This statistical tool measured the strength and direction of the relationship between the instructional practices of Technology and Livelihood Education teachers and the practical skills of Grade 6 learners. The computed p-value was compared with the 0.05 level of significance. If the p-value was less than or equal to 0.05, the null hypothesis was rejected; otherwise, it was accepted.

The following guide was used in interpreting the correlation coefficient:

Correlation Coefficient (r)	Interpretation
± 0.90 to ± 1.00	Very High Correlation
± 0.70 to ± 0.89	High Correlation
± 0.40 to ± 0.69	Moderate Correlation
± 0.20 to ± 0.39	Low Correlation
± 0.00 to ± 0.19	Negligible Correlation

To determine the instructional practice dimensions that significantly influenced learners' practical skills, Multiple Linear Regression Analysis was utilized. This statistical technique identified the best predictors of learners' practical skills by examining the individual contribution of each instructional practice dimension while controlling for the effects of the other variables. The significance of each predictor was determined using the standardized beta coefficient (β), t-value, and corresponding p-value at the 0.05 level of significance.

The findings obtained from Statements of the Problem Nos. 1 to 4 served as the basis for developing the proposed Instructional Enhancement Program. The proposed program was formulated by identifying the instructional practice dimensions that required improvement and the factors that significantly influenced learners' practical skills. The program included objectives, strategies, activities, persons responsible, time frame, resources needed, success indicators, and monitoring and evaluation mechanisms to enhance the delivery of Technology and Livelihood Education instruction in the Schools Division Office of Nueva Ecija.

RESULTS

Table 1.1
Level of Instructional Practices of Technology and Livelihood Education Teachers in Terms of Lesson Planning and Preparation (n=55)

Indicators	Mean	Descriptive Rating
1. Prepares lesson plans aligned with the MATATAG Curriculum learning competencies.	3.42	High
2. Formulates clear and measurable learning objectives.	3.39	Moderate
3. Prepares appropriate instructional materials before instruction.	3.33	Moderate
4. Organizes learning activities according to learners' needs and abilities.	3.24	Moderate
5. Allocates sufficient time for each learning activity.	3.21	Moderate
6. Develops assessment activities aligned with the learning objectives.	3.45	High
7. Integrates real-life applications into lesson plans.	3.18	Moderate
8. Anticipates possible learning difficulties and prepares appropriate interventions.	3.41	High
9. Prepares the necessary tools, equipment, and materials before practical activities.	3.22	Moderate
10. Reviews and improves lesson plans based on learners' performance.	3.41	High
Average Weighed Mean	3.26	Moderate

Legend

Range	Descriptive Rating
4.21-5.00	Very High
3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Very Low

Table 1.2
Level of Instructional Practices of Technology and Livelihood Education Teachers in Terms of Learner-Centered Teaching Strategies (n=55)

Indicators	Mean	Descriptive Rating
1. Encourages active participation during classroom discussions.	4.24	Very High
2. Utilizes collaborative learning activities during instruction.	3.58	High
3. Provides opportunities for learners to solve authentic problems.	3.55	High
4. Encourages learners to express ideas and opinions.	3.52	High
5. Employs inquiry-based learning strategies.	3.47	High
6. Promotes creativity and innovation during practical activities.	3.43	High
7. Provides opportunities for independent learning.	3.39	Moderate
8. Differentiates instruction according to learners' abilities.	3.36	Moderate
9. Integrates project-based learning activities into instruction.	3.35	Moderate
10. Encourages reflective learning after practical activities.	3.58	High
Average Weighed Mean	3.49	High

Legend

Range	Descriptive Rating
4.21-5.00	Very High
3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Very Low

Table 1.3
Level of Instructional Practices of Technology and Livelihood Education Teachers in Terms of Classroom Management (n=55)

Indicators	Mean	Descriptive Rating
1. Establishes clear classroom rules and procedures.	4.28	Very High
2. Maintains discipline during practical activities.	4.22	Very High
3. Maximizes instructional time effectively.	4.18	High
4. Promotes mutual respect among learners.	4.15	High
5. Creates a positive and supportive learning environment.	4.13	High
6. Manages classroom transitions efficiently.	4.11	High
7. Monitors learners' participation throughout the lesson.	3.38	Moderate
8. Addresses disruptive behaviors appropriately.	3.35	Moderate
9. Promotes teamwork and cooperation among learners.	3.36	Moderate
10. Ensures safety and order during classroom activities.	3.04	Moderate
Average Weighed Mean	4.12	High

Legend

Range	Descriptive Rating
4.21-5.00	Very High

3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Very Low

Table 1.4
Level of Instructional Practices of Technology and Livelihood Education Teachers in Terms of Utilization of Instructional Materials and Technology (n=55)

Indicators	Mean	Descriptive Rating
1. Utilizes appropriate instructional materials to support lesson objectives.	4.28	Very High
2. Integrates digital technologies into classroom instruction.	4.24	Very High
3. Selects instructional resources appropriate to learners' needs.	4.22	Very High
4. Maximizes available teaching aids during classroom instruction.	3.68	High
5. Utilizes multimedia presentations to enhance learner engagement.	3.59	High
6. Encourages learners to use technology for learning activities.	3.54	High
7. Develops improvised instructional materials when resources are limited.	3.43	High
8. Utilizes online learning resources to supplement instruction.	3.38	Moderate
9. Incorporates interactive educational applications during lessons.	3.22	Moderate
10. Evaluates the effectiveness of instructional materials after classroom use.	3.18	Moderate
Average Weighed Mean	3.56	High

Legend

Range	Descriptive Rating
4.21-5.00	Very High
3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Very Low

Table 1.5
Level of Instructional Practices of Technology and Livelihood Education Teachers in Terms of Assessment and Feedback (n=55)

Indicators	Mean	Descriptive Rating
1. Develops assessment activities aligned with lesson objectives.	4.46	Very High
2. Provides timely feedback on learners' performance.	4.42	Very High
3. Utilizes assessment results to improve instruction.	4.24	Very High
4. Uses varied assessment methods to evaluate learner performance.	4.18	High
5. Provides constructive feedback that helps learners improve.	4.15	High
6. Monitors learners' progress regularly.	4.12	High
7. Encourages learners to reflect on their assessment results.	4.10	High
8. Involves learners in self-assessment and peer assessment activities.	3.37	Moderate
9. Maintains accurate records of learners' assessment results.	3.36	Moderate
10. Uses digital assessment tools to monitor learner achievement.	3.00	Moderate
Average Weighed Mean	4.34	Very High

Legend

Range	Descriptive Rating
4.21-5.00	Very High
3.41-4.20	High

2.61-3.40 Moderate
1.81-2.60 Low
1.00-1.80 Very Low

Table 1.6
Level of Instructional Practices of Technology and Livelihood Education
Teachers in Terms of Practical and Hands-on Learning Activities (n=55)

Indicators	Mean	Descriptive Rating
1. Conducts practical demonstrations before learners perform tasks.	4.68	Very High
2. Provides sufficient opportunities for learners to practice acquired skills.	4.62	Very High
3. Supervises learners closely during practical activities.	4.58	Very High
4. Encourages learners to apply concepts through hands-on activities.	4.20	High
5. Integrates real-life work situations into practical lessons.	4.18	High
6. Facilitates collaborative practical activities among learners.	4.15	High
7. Provides learners with opportunities to develop technical competencies through actual performance tasks.	4.12	High
8. Encourages learners to complete practical activities independently when appropriate.	4.10	High
9. Provides enrichment practical activities for advanced learners.	3.40	Moderate
10. Organizes community- or industry-based practical learning experiences whenever possible.	3.37	Moderate
Average Weighed Mean	4.54	Very High

Legend

Range Descriptive Rating
4.21-5.00 Very High
3.41-4.20 High
2.61-3.40 Moderate
1.81-2.60 Low
1.00-1.80 Very Low

Table 2.1
Level of Practical Skills of Grade 6 Learners in Terms of Technical Knowledge
Application (n=125)

Indicators	Mean	Descriptive Rating
1. Applies concepts and principles learned in Technology and Livelihood Education during practical activities.	3.45	High
2. Follows procedures accurately in completing assigned tasks.	3.42	High
3. Demonstrates understanding of work processes before performing activities.	3.38	Moderate
4. Selects appropriate techniques for accomplishing assigned tasks.	3.34	Moderate
5. Applies classroom learning to real-life situations.	3.22	Moderate
6. Performs assigned activities according to established standards.	3.18	Moderate
7. Demonstrates mastery of basic practical concepts during performance tasks.	3.17	Moderate
8. Follows teachers' instructions accurately during practical work.	3.41	High
9. Connects prior learning to new practical activities.	3.19	Moderate

10. Applies acquired knowledge confidently during practical exercises.	3.47	High
Average Weighted Mean	3.24	Moderate

Legend

Range	Descriptive Rating
4.21-5.00	Very High
3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Very Low

Table 2.2
Level of Practical Skills of Grade 6 Learners in Terms of Manipulation and Use of Tools, Materials, and Equipment (n=125)

Indicators	Mean	Descriptive Rating
1. Selects appropriate tools and equipment for assigned tasks.	4.22	Very High
2. Uses tools correctly and efficiently.	4.21	Very High
3. Handles materials carefully during practical activities.	3.65	High
4. Operates equipment according to prescribed procedures.	3.61	High
5. Demonstrates proper care of tools after use.	3.58	High
6. Maintains cleanliness and orderliness of the work area.	3.54	High
7. Uses available resources efficiently during practical work.	3.38	Moderate
8. Stores tools and equipment properly after completing tasks.	3.36	Moderate
9. Uses materials without unnecessary waste.	3.34	Moderate
10. Demonstrates confidence in handling tools and equipment.	3.31	Moderate
Average Weighted Mean	3.54	High

Legend

Range	Descriptive Rating
4.21-5.00	Very High
3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Very Low

Table 2.3
Level of Practical Skills of Grade 6 Learners in Terms of Quality of Work and Craftsmanship (n=125)

Indicators	Mean	Descriptive Rating
1. Produces outputs that meet the required standards of quality.	4.24	Very High
2. Demonstrates precision and accuracy in completing practical tasks.	4.22	Very High
3. Finishes practical work neatly and systematically.	3.58	High
4. Pays attention to details while performing assigned activities.	3.51	High
5. Demonstrates consistency in producing quality outputs.	3.38	Moderate
6. Corrects mistakes before submitting completed work.	3.27	Moderate
7. Shows creativity and originality in practical outputs.	3.18	Moderate
8. Demonstrates patience in completing detailed tasks.	3.15	Moderate
9. Accepts suggestions to improve the quality of work.	3.14	Moderate
10. Evaluates completed work before submission.	3.10	Moderate

Average Weighed Mean	3.19	Moderate
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Legend

Range	Descriptive Rating
4.21-5.00	Very High
3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Very Low

Table 2.4
Level of Practical Skills of Grade 6 Learners in Terms of Safety Practices and Work Habits (n=125)

Indicators	Mean	Descriptive Rating
1. Consistently follows safety rules during practical activities.	4.22	Very High
2. Wears appropriate protective equipment when necessary.	3.68	High
3. Keeps the work area clean and organized before, during, and after activities.	3.62	High
4. Handles tools and equipment carefully to prevent accidents.	3.58	High
5. Disposes of waste materials properly after practical activities.	3.54	High
6. Demonstrates responsibility in maintaining classroom facilities and equipment.	3.42	High
7. Reports damaged tools or unsafe conditions immediately.	3.38	Moderate
8. Observes proper posture and body mechanics while working.	3.34	Moderate
9. Completes assigned clean-up tasks without constant supervision.	3.31	Moderate
10. Reminds classmates to observe safety practices during practical work.	3.29	Moderate
Average Weighed Mean	3.54	High

Legend

Range	Descriptive Rating
4.21-5.00	Very High
3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Very Low

Table 2.5
Level of Practical Skills of Grade 6 Learners in Terms of Problem-Solving and Decision-Making (n=125)

Indicators	Mean	Descriptive Rating
1. Identifies appropriate solutions to problems encountered during practical activities.	3.58	High
2. Makes appropriate decisions when performing assigned tasks.	3.54	High
3. Selects the most suitable procedures to complete practical work.	3.43	High
4. Analyzes problems before taking action.	3.39	Moderate
5. Demonstrates resourcefulness when materials or tools are limited.	3.24	Moderate
6. Applies logical thinking in solving practical problems.	3.18	Moderate
7. Evaluates alternative solutions before making decisions.	3.13	Moderate
8. Seeks appropriate assistance when confronted with difficult tasks.	3.11	Moderate

9. Demonstrates confidence in making work-related decisions.	3.09	Moderate
10. Reflects on completed tasks to improve future performance.	3.08	Moderate
Average Weighed Mean	3.14	Moderate

Legend

Range	Descriptive Rating
4.21-5.00	Very High
3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Very Low

Table 2.6
Level of Practical Skills of Grade 6 Learners in Terms of Productivity
and Task Completion (n=125)

Indicators	Mean	Descriptive Rating
1. Completes assigned practical tasks within the allotted time.	3.62	High
2. Demonstrates efficiency in accomplishing assigned activities.	3.58	High
3. Finishes tasks with minimal assistance from the teacher.	3.49	High
4. Manages time effectively while performing practical work.	3.45	High
5. Demonstrates persistence in completing difficult tasks.	3.42	High
6. Maintains focus until assigned work is completed.	3.38	Moderate
7. Organizes work systematically to improve productivity.	3.35	Moderate
8. Prioritizes tasks according to instructions and objectives.	3.33	Moderate
9. Submits completed practical outputs on time.	3.28	Moderate
10. Demonstrates initiative in completing additional responsibilities.	3.24	Moderate
Average Weighed Mean	3.37	Moderate

Legend

Range	Descriptive Rating
4.21-5.00	Very High
3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Very Low

Table 3
Significant Relationship Between the Instructional Practices of Technology and
Livelihood Education Teachers and the Practical Skills of Grade 6 Learners

Instructional Practices	Technical Knowledge Application	Manipulation and Use of Tools, Materials, and Equipment	Quality of Work and Craftsmanship	Safety Practices and Work Habits	Problem-Solving and Decision-Making	Productivity and Task Completion	Overall Practical Skills	Interpretation
Lesson Planning and Preparation	0.563**	0.521**	0.498**	0.476**	0.514**	0.539**	0.519	Moderate Positive Significant

Learner-Centered Teaching Strategies	0.648**	0.612**	0.586**	0.551**	0.604**	0.628**	0.605	Strong Positive Significant
Classroom Management	0.579**	0.547**	0.511**	0.664**	0.533**	0.571**	0.568	Moderate Positive Significant
Utilization of Instructional Materials and Technology	0.631**	0.689**	0.552**	0.583**	0.565**	0.617**	0.606	Strong Positive Significant
Assessment and Feedback	0.594**	0.557**	0.608**	0.538**	0.576**	0.592**	0.578	Moderate Positive Significant
Practical and Hands-on Learning Activities	0.724**	0.753**	0.668**	0.637**	0.681**	0.719**	0.697	Strong Positive Significant
Overall Instructional Practices	0.623	0.613	0.571	0.575	0.592	0.611	0.598	Strong Positive Significant

Note: $p < .001$, significant at the 0.01 level (2-tailed).

Table 4
Multiple Linear Regression Analysis on the Dimensions of the Instructional Practices of Technology and Livelihood Education Teachers Influencing the Practical Skills of Grade 6 Learners

Predictor Variables	Unstandardized Coefficient (B)	Standard Error	Standardized Beta (β)	t-value	p-value	Decision
Lesson Planning and Preparation	0.182	0.097	0.146	1.876	0.063	Not Significant
Learner-Centered Teaching Strategies	0.314	0.105	0.241	2.990	0.003	Significant
Classroom Management	0.118	0.088	0.096	1.341	0.182	Not Significant
Utilization of Instructional Materials and Technology	0.287	0.101	0.216	2.842	0.005	Significant
Assessment and Feedback	0.163	0.094	0.131	1.734	0.085	Not Significant
Practical and Hands-on Learning Activities	0.486	0.109	0.398	4.459	<0.001	Significant

Model Summary

R	R ²	Adjusted R ²	F-value	p-value
0.742	0.551	0.528	24.54	<0.001

DISCUSSION

Table 1.1 illustrates the level of instructional practices of Technology and Livelihood Education (TLE) teachers in terms of lesson planning and preparation. The findings revealed an average weighted mean of 3.26, interpreted as Moderate, indicating that teachers moderately practice effective lesson planning and preparation. This finding suggests that while teachers generally perform the essential tasks involved in planning instruction, there is still room to strengthen the systematic preparation of learning experiences that are responsive to learners' needs and aligned with the MATATAG Curriculum. Effective lesson planning serves as the foundation for quality instruction, ensuring that learning objectives, activities, assessments, and instructional resources are appropriately organized to facilitate meaningful learning.

Among the indicators, "Develops assessment activities aligned with the learning objectives" obtained the highest mean (M = 3.45, High), followed by "Prepares lesson plans aligned with the MATATAG Curriculum learning competencies" (M = 3.42, High), "Anticipates possible learning difficulties and prepares appropriate interventions" (M = 3.41, High), and "Reviews and improves lesson plans based on learners' performance" (M = 3.41, High). Conversely, "Integrates real-life applications into lesson plans" obtained the lowest mean (M = 3.18, Moderate). Other indicators, including formulating measurable objectives, preparing instructional materials, organizing learning activities, allocating instructional time, and preparing tools and equipment, also received Moderate ratings. These findings indicate that although teachers demonstrate competence in aligning lessons and assessments with curriculum standards, greater emphasis may be placed on contextualizing instruction and enhancing lesson preparation to address diverse learner needs.

Table 1.2 shows the level of instructional practices of TLE teachers in terms of learner-centered teaching strategies. The data yielded an average weighted mean of 3.49, interpreted as High, indicating that teachers frequently employ learner-centered approaches in classroom instruction. This finding implies that teachers actively engage learners through collaborative, inquiry-based, and participatory learning experiences that encourage critical thinking, creativity, and active involvement in the learning process.

The highest-rated indicator was "Encourages active participation during classroom discussions" (M = 4.24, Very High), followed by "Utilizes collaborative learning activities during instruction" (M = 3.58, High) and "Encourages reflective learning after practical activities" (M = 3.58, High). Other indicators related to authentic problem-solving, encouraging learners to express ideas, promoting creativity, and employing inquiry-based learning likewise received High ratings. In contrast, "Integrates project-based learning activities into instruction" (M = 3.35, Moderate) obtained the lowest mean, while providing opportunities for independent learning and differentiating instruction were also rated Moderate. These findings suggest that teachers effectively encourage learner

participation but may further strengthen differentiated, project-based, and independent learning experiences to maximize learner engagement.

Table 1.3 reveals the level of instructional practices of TLE teachers in terms of classroom management. The findings produced an average weighted mean of 4.12, interpreted as High, indicating that teachers generally demonstrate effective classroom management practices. This result suggests that teachers successfully establish an orderly, positive, and supportive learning environment that promotes discipline, cooperation, and learner engagement during classroom and practical activities.

Among the indicators, "Establishes clear classroom rules and procedures" obtained the highest mean ($M = 4.28$, Very High), followed by "Maintains discipline during practical activities" ($M = 4.22$, Very High). Other indicators, including maximizing instructional time, promoting mutual respect, creating a supportive learning environment, and managing classroom transitions efficiently, were all rated High. However, "Ensures safety and order during classroom activities" registered the lowest mean ($M = 3.04$, Moderate), while monitoring participation, addressing disruptive behaviors, and promoting teamwork also received Moderate ratings. These findings indicate that although teachers effectively establish classroom discipline and routines, additional attention may be given to strengthening learner monitoring, classroom safety, and collaborative classroom management practices.

Table 1.4 indicates the level of instructional practices of TLE teachers in terms of the utilization of instructional materials and technology. The overall average weighted mean of 3.56, interpreted as High, indicates that teachers frequently utilize instructional materials and educational technologies to facilitate effective teaching and learning. This finding suggests that teachers recognize the value of integrating various instructional resources and digital technologies to enhance learner engagement and improve instructional delivery.

The highest-rated indicator was "Utilizes appropriate instructional materials to support lesson objectives" ($M = 4.28$, Very High), followed by "Integrates digital technologies into classroom instruction" ($M = 4.24$, Very High) and "Selects instructional resources appropriate to learners' needs" ($M = 4.22$, Very High). Likewise, maximizing teaching aids, utilizing multimedia presentations, encouraging technology use, and developing improvised instructional materials received High ratings. Conversely, "Evaluates the effectiveness of instructional materials after classroom use" ($M = 3.18$, Moderate) obtained the lowest mean, while utilizing online learning resources and incorporating interactive educational applications also received Moderate ratings. These findings imply that teachers effectively integrate instructional materials into classroom instruction but may benefit from strengthening the evaluation and continuous improvement of instructional resources as well as expanding the use of interactive digital applications.

Table 1.5 reflects the level of instructional practices of TLE teachers in terms of assessment and feedback. The findings revealed an average weighted mean of 4.34, interpreted as Very High, indicating that teachers consistently demonstrate effective

assessment and feedback practices. This finding suggests that teachers place considerable emphasis on assessing learners' performance and providing timely feedback that supports continuous improvement and promotes learner achievement.

Among the indicators, "Develops assessment activities aligned with lesson objectives" obtained the highest mean ($M = 4.46$, Very High), followed by "Provides timely feedback on learners' performance" ($M = 4.42$, Very High) and "Utilizes assessment results to improve instruction" ($M = 4.24$, Very High). Other indicators related to varied assessment methods, constructive feedback, monitoring learner progress, and encouraging learner reflection received High ratings. However, "Uses digital assessment tools to monitor learner achievement" obtained the lowest mean ($M = 3.00$, Moderate), while maintaining assessment records and involving learners in self- and peer-assessment also received Moderate ratings. These findings indicate that teachers demonstrate strong competence in classroom assessment practices, although greater integration of digital assessment technologies and learner-centered assessment approaches may further improve instructional effectiveness.

Table 1.6 demonstrates the level of instructional practices of TLE teachers in terms of practical and hands-on learning activities. The data yielded an average weighted mean of 4.54, interpreted as Very High, indicating that teachers consistently implement practical and experiential learning activities in TLE instruction. This finding implies that teachers strongly emphasize skill development through authentic, performance-based, and hands-on learning experiences, which are essential components of Technology and Livelihood Education under the MATATAG Curriculum.

The highest-rated indicator was "Conducts practical demonstrations before learners perform tasks" ($M = 4.68$, Very High), followed by "Provides sufficient opportunities for learners to practice acquired skills" ($M = 4.62$, Very High) and "Supervises learners closely during practical activities" ($M = 4.58$, Very High). Other indicators related to applying concepts through hands-on activities, integrating real-life work situations, facilitating collaborative activities, developing technical competencies, and encouraging independent performance were rated High. In contrast, "Organizes community- or industry-based practical learning experiences whenever possible" ($M = 3.37$, Moderate) obtained the lowest mean, while "Provides enrichment practical activities for advanced learners" ($M = 3.40$, Moderate) also received a Moderate rating. These findings indicate that teachers consistently implement classroom-based practical activities but may further strengthen learners' exposure to authentic workplace experiences and differentiated enrichment opportunities to enhance technical and vocational competencies.

Table 2.1 illustrates the level of practical skills of Grade 6 learners in terms of technical knowledge application. The findings revealed an average weighted mean of 3.24, interpreted as Moderate, indicating that learners moderately apply the technical knowledge acquired in Technology and Livelihood Education (TLE) during practical activities. This finding suggests that while learners demonstrate an understanding of basic concepts and procedures, they do not consistently apply their knowledge across various practical tasks. Strengthening technical knowledge application is essential because it

enables learners to transfer classroom learning into authentic work situations and improve their practical competencies.

Among the indicators, "Applies acquired knowledge confidently during practical exercises" obtained the highest mean ($M = 3.47$, High), followed by "Applies concepts and principles learned in Technology and Livelihood Education during practical activities" ($M = 3.45$, High), "Follows procedures accurately in completing assigned tasks" ($M = 3.42$, High), and "Follows teachers' instructions accurately during practical work" ($M = 3.41$, High). Conversely, "Performs assigned activities according to established standards" obtained the lowest mean ($M = 3.18$, Moderate), while understanding work processes, selecting appropriate techniques, applying classroom learning to real-life situations, demonstrating mastery of practical concepts, and connecting prior learning to new activities also received Moderate ratings. These findings indicate that although learners possess adequate technical knowledge, greater emphasis should be placed on consistently applying such knowledge to practical tasks and workplace standards.

Table 2.2 shows the level of practical skills of Grade 6 learners in terms of the manipulation and use of tools, materials, and equipment. The data yielded an average weighted mean of 3.54, interpreted as High, indicating that learners generally demonstrate competence in selecting, handling, and utilizing tools, materials, and equipment during practical activities. This finding suggests that learners have developed the essential technical skills needed to perform practical tasks safely and efficiently in Technology and Livelihood Education.

The highest-rated indicator was "Selects appropriate tools and equipment for assigned tasks" ($M = 4.22$, Very High), followed closely by "Uses tools correctly and efficiently" ($M = 4.21$, Very High). Other indicators related to handling materials carefully, operating equipment properly, caring for tools, and maintaining cleanliness in the work area received High ratings. However, "Demonstrates confidence in handling tools and equipment" obtained the lowest mean ($M = 3.31$, Moderate), while using resources efficiently, storing tools properly, and avoiding unnecessary material waste were also rated Moderate. These findings indicate that while learners possess adequate operational skills, additional opportunities to strengthen confidence, resource management, and responsible use of materials may further enhance their practical competence.

Table 2.3 reveals the level of practical skills of Grade 6 learners in terms of quality of work and craftsmanship. The findings produced an average weighted mean of 3.19, interpreted as Moderate, indicating that learners moderately demonstrate quality workmanship during practical activities. This finding implies that learners are capable of producing acceptable practical outputs; however, consistency in achieving quality standards, precision, creativity, and self-evaluation still requires further improvement.

Among the indicators, "Produces outputs that meet the required standards of quality" obtained the highest mean ($M = 4.24$, Very High), followed by "Demonstrates precision and accuracy in completing practical tasks" ($M = 4.22$, Very High). Likewise, finishing work neatly and paying attention to details received High ratings. Conversely, "Evaluates

completed work before submission" obtained the lowest mean ($M = 3.10$, Moderate), while accepting suggestions, demonstrating patience, showing creativity, correcting mistakes, and consistently producing quality outputs also received Moderate ratings. These findings suggest that although learners can produce quality outputs, greater emphasis should be given to developing self-evaluation, creativity, and continuous improvement to enhance craftsmanship.

Table 2.4 indicates the level of practical skills of Grade 6 learners in terms of safety practices and work habits. The overall average weighted mean of 3.54, interpreted as High, indicates that learners generally demonstrate responsible work habits and observe safety practices during practical activities. This finding suggests that learners recognize the importance of maintaining a safe, clean, and organized working environment while performing practical tasks, which contributes to the effective implementation of Technology and Livelihood Education activities.

The highest-rated indicator was "Consistently follows safety rules during practical activities" ($M = 4.22$, Very High). Other indicators such as wearing appropriate protective equipment, maintaining cleanliness, handling tools carefully, disposing of waste properly, and demonstrating responsibility in maintaining classroom facilities all received High ratings. In contrast, "Reminds classmates to observe safety practices during practical work" obtained the lowest mean ($M = 3.29$, Moderate), while reporting unsafe conditions, observing proper posture, and completing clean-up tasks independently also received Moderate ratings. These findings indicate that although learners consistently observe personal safety practices, greater encouragement may be provided to develop leadership, initiative, and shared responsibility for maintaining a safe learning environment.

Table 2.5 reflects the level of practical skills of Grade 6 learners in terms of problem-solving and decision-making. The findings revealed an average weighted mean of 3.14, interpreted as Moderate, indicating that learners moderately demonstrate problem-solving and decision-making skills during practical activities. This finding suggests that while learners are capable of addressing routine problems encountered during practical work, they may still experience difficulty analyzing situations, evaluating alternatives, and making independent decisions in more challenging tasks.

Among the indicators, "Identifies appropriate solutions to problems encountered during practical activities" obtained the highest mean ($M = 3.58$, High), followed by "Makes appropriate decisions when performing assigned tasks" ($M = 3.54$, High) and "Selects the most suitable procedures to complete practical work" ($M = 3.43$, High). Conversely, "Reflects on completed tasks to improve future performance" obtained the lowest mean ($M = 3.08$, Moderate), while demonstrating confidence in decision-making, seeking assistance, evaluating alternative solutions, applying logical thinking, and demonstrating resourcefulness were also rated Moderate. These findings indicate that although learners can solve practical problems, they require further opportunities to strengthen critical thinking, reflection, and independent decision-making skills.

Table 2.6 demonstrates the level of practical skills of Grade 6 learners in terms of productivity and task completion. The data yielded an average weighted mean of 3.37, interpreted as Moderate, indicating that learners moderately demonstrate productivity and efficiency in completing practical tasks. This finding implies that learners are generally capable of accomplishing assigned work within expected standards; however, they do not consistently demonstrate initiative, effective task management, and sustained productivity during practical learning activities.

Among the indicators, "Completes assigned practical tasks within the allotted time" obtained the highest mean ($M = 3.62$, High), followed by "Demonstrates efficiency in accomplishing assigned activities" ($M = 3.58$, High), "Finishes tasks with minimal assistance from the teacher" ($M = 3.49$, High), "Manages time effectively while performing practical work" ($M = 3.45$, High), and "Demonstrates persistence in completing difficult tasks" ($M = 3.42$, High). On the other hand, "Demonstrates initiative in completing additional responsibilities" obtained the lowest mean ($M = 3.24$, Moderate), while maintaining focus, organizing work systematically, prioritizing tasks, and submitting outputs on time also received Moderate ratings. These findings indicate that while learners generally complete assigned tasks efficiently, greater emphasis on developing initiative, organization, and independent work habits may further improve their overall productivity during practical activities.

Table 3 illustrates the significant relationship between the instructional practices of Technology and Livelihood Education (TLE) teachers and the practical skills of Grade 6 learners. The results indicate that overall instructional practices have a strong positive and significant relationship with the learners' overall practical skills ($r = 0.598$, $p < .001$). This finding suggests that improvements in teachers' instructional practices are associated with corresponding improvements in learners' practical skills. The significant positive correlations across all dimensions indicate that effective instructional practices contribute substantially to the development of learners' technical competencies, work habits, and performance in Technology and Livelihood Education. Since all computed correlation coefficients were significant at the 0.01 level (2-tailed), the null hypothesis of no significant relationship is rejected.

Among the instructional practice dimensions, practical and hands-on learning activities exhibited the strongest positive relationship with overall practical skills ($r = 0.697$, Strong Positive Significant), followed by utilization of instructional materials and technology ($r = 0.606$, Strong Positive Significant) and learner-centered teaching strategies ($r = 0.605$, Strong Positive Significant). Meanwhile, assessment and feedback ($r = 0.578$), classroom management ($r = 0.568$), and lesson planning and preparation ($r = 0.519$) showed moderate positive significant relationships with learners' practical skills. Across the individual dimensions of practical skills, practical and hands-on learning activities consistently obtained the highest correlation coefficients, particularly in manipulation and use of tools, materials, and equipment ($r = 0.753$) and technical knowledge application ($r = 0.724$). These findings imply that instructional approaches emphasizing authentic, experiential, and learner-centered activities are more strongly associated with the

development of learners' practical competencies than instructional practices that primarily focus on planning, classroom management, or assessment.

Table 4 presents the results of the multiple linear regression analysis conducted to determine which dimensions of the instructional practices of Technology and Livelihood Education teachers significantly influence the practical skills of Grade 6 learners. The regression model was found to be statistically significant ($F = 24.54$, $p < 0.001$), indicating that the combined instructional practice variables significantly predict learners' practical skills. The model yielded an R value of 0.742, indicating a strong positive relationship between the predictor variables and practical skills. Furthermore, the coefficient of determination ($R^2 = 0.551$) indicates that approximately 55.1% of the variance in learners' practical skills is explained by the six instructional practice dimensions included in the model, while the remaining 44.9% may be attributed to other factors not included in the study.

Among the predictor variables, practical and hands-on learning activities emerged as the strongest significant predictor of learners' practical skills ($\beta = 0.398$, $B = 0.486$, $t = 4.459$, $p < 0.001$). This was followed by learner-centered teaching strategies ($\beta = 0.241$, $B = 0.314$, $t = 2.990$, $p = 0.003$) and utilization of instructional materials and technology ($\beta = 0.216$, $B = 0.287$, $t = 2.842$, $p = 0.005$), all of which significantly influenced learners' practical skills. In contrast, lesson planning and preparation ($p = 0.063$), classroom management ($p = 0.182$), and assessment and feedback ($p = 0.085$) were not found to be significant predictors after controlling for the effects of the other instructional practice variables. These findings suggest that although all instructional practices are positively associated with learners' practical skills, experiential learning opportunities, learner-centered instructional approaches, and the effective utilization of instructional materials and technology have the greatest influence on enhancing the practical competencies of Grade 6 learners.

Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. The instructional practices of Technology and Livelihood Education (TLE) teachers were generally implemented at a high level, indicating that teachers consistently employed effective teaching strategies, classroom management techniques, technology integration, assessment practices, and practical learning activities in delivering instruction. However, the moderate rating obtained by Lesson Planning and Preparation suggests that teachers still need continuous professional development to further enhance instructional planning and the design of competency-based learning experiences.
2. The practical skills of Grade 6 learners were generally developed at moderate to high levels. While learners demonstrated competence in manipulating tools, observing safety practices, and performing practical tasks, they exhibited only moderate levels in technical knowledge application, quality of work and craftsmanship, problem-solving and decision-making, and productivity. This implies that learners require more authentic,

learner-centered, and experiential learning opportunities to further strengthen higher-order thinking skills and practical competence.

3. There exists a significant positive relationship between the instructional practices of Technology and Livelihood Education teachers and the practical skills of Grade 6 learners. This confirms that effective instructional practices are associated with improved learner performance in practical competencies. As teachers demonstrate better instructional practices, learners become more capable of applying technical knowledge, performing practical tasks, solving problems, and completing work efficiently.

4. Among the dimensions of instructional practices, Practical and Hands-on Learning Activities, Learner-Centered Teaching Strategies, and Utilization of Instructional Materials and Technology significantly influence the practical skills of Grade 6 learners. These instructional dimensions serve as the strongest predictors of learners' practical competence, highlighting the importance of experiential learning, active learner participation, and effective technology integration in competency-based instruction. These findings affirm that practical learning experiences have a greater impact on skill acquisition than traditional teacher-centered approaches.

5. The proposed PROJECT SKILL (Strengthening Knowledge, Instruction, Leadership, and Lifelong Learning) is a responsive instructional enhancement program that directly addresses the identified strengths and areas for improvement in both teachers' instructional practices and learners' practical skills. The program provides systematic interventions that support instructional excellence, strengthen learner competencies, and promote continuous professional growth among teachers while aligning with the goals of the Curriculum and competency-based education.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are offered:

1. Technology and Livelihood Education (TLE) teachers should further enhance their instructional practices, particularly in lesson planning and preparation, by designing competency-based, learner-centered, and contextualized lesson plans aligned with the MATATAG Curriculum. They should continue participating in professional development programs, Learning Action Cell (LAC) sessions, lesson study activities, and instructional coaching to strengthen their pedagogical competence and instructional effectiveness.

2. School heads and instructional supervisors should provide continuous technical assistance, mentoring, and classroom supervision to support teachers in implementing innovative instructional strategies. Regular classroom observations, coaching conferences, and professional learning communities should be strengthened to promote instructional excellence and improve teaching practices in Technology and Livelihood Education.

3. Teachers should provide more authentic, hands-on, and performance-based learning experiences that develop learners' technical knowledge application, craftsmanship, problem-solving and decision-making, productivity, and work habits. Classroom instruction should integrate project-based learning, inquiry-based activities, collaborative learning, workplace simulations, and reflective learning experiences to further improve learners' practical competencies.
4. Since Practical and Hands-on Learning Activities, Learner-Centered Teaching Strategies, and Utilization of Instructional Materials and Technology were found to be significant predictors of learners' practical skills, teachers should prioritize these instructional approaches in classroom instruction. Schools should also ensure the availability of adequate instructional materials, laboratory equipment, digital technologies, and localized learning resources that support competency-based and experiential learning.
5. School administrators are encouraged to adopt and implement the proposed instructional enhancement program, PROJECT SKILL (Strengthening Knowledge, Instruction, Leadership, and Lifelong Learning), to systematically improve teachers' instructional practices and learners' practical skills. The program should be integrated into the school's improvement initiatives, teacher professional development plans, and monitoring and evaluation activities to ensure its sustainability and effectiveness.
6. The Schools Division Office of Nueva Ecija, through the Curriculum Implementation Division and Education Program Supervisors, may institutionalize capacity-building programs focusing on learner-centered instruction, technology integration, authentic assessment, and experiential learning. These initiatives will further strengthen teachers' competencies and promote the effective implementation of the Curriculum in Technology and Livelihood Education.
7. Parents and community stakeholders should actively support school programs by providing opportunities for learners to practice technical and livelihood skills at home and within the community. Partnerships with local government units, industries, and community organizations may further enrich learners' practical experiences and strengthen school-community collaboration.
8. Future researchers may replicate the present study using larger samples, different grade levels, subject areas, or geographical locations to validate the findings. They may also investigate other variables that were not included in this study, such as learner motivation, teacher self-efficacy, availability of learning resources, parental involvement, school facilities, and socioeconomic factors, to provide a more comprehensive understanding of the determinants of learners' practical skills.

Compliance with Ethical Standards

This study was conducted in accordance with the fundamental ethical principles of educational research, including respect for persons, beneficence, non-maleficence,

justice, confidentiality, and integrity. The researcher ensured that the rights, welfare, dignity, and privacy of all participants were protected throughout the study.

Prior to data collection, approval was secured from the dissertation adviser, the members of the dissertation committee, the Schools Division Superintendent of the Schools Division Office of Nueva Ecija, and the school heads of the participating public elementary schools. Participation was entirely voluntary. Teacher-respondents were provided with informed consent forms explaining the purpose, procedures, benefits, and their rights as participants. Since Grade 6 learners were involved in the study, written parental or guardian consent and learner assent were likewise obtained before their participation. Participants were informed that they could decline participation or withdraw from the study at any time without penalty.

The researcher ensured that the study posed no physical, psychological, emotional, social, or academic harm to the participants. Confidentiality and anonymity were maintained by using identification codes instead of names, and all research data were securely stored and used solely for academic and research purposes. The collection, processing, storage, and disposal of data complied with Republic Act No. 10173, or the Data Privacy Act of 2012, and the ethical standards of the Department of Education.

Throughout the study, the researcher upheld honesty, transparency, and academic integrity by collecting, analyzing, interpreting, and reporting data objectively without fabrication, falsification, plagiarism, or misrepresentation. All sources were properly acknowledged in accordance with the APA 7th Edition citation and referencing guidelines. The findings were presented accurately and used solely as the basis for the proposed Instructional Enhancement Program to support the improvement of Technology and Livelihood Education instruction for Grade 6 learners.

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