



COMPETENCY MANAGEMENT PROGRAM FOR GRADE SIX TEACHERS IN TECHNOLOGY AND LIVELIHOOD EDUCATION: A FRAMEWORK FOR INSTRUCTIONAL IMPROVEMENT

Ronald M. Ravancho

*Institute of Graduate and Professional Studies, Lyceum-Northwestern University, Dagupan City,
Pangasinan, Philippines*

ABSTRACT

This study assessed the competency of Technology and Livelihood Education (TLE) Grade 6 teachers relative to their instructional performance in accordance with the prescribed TESDA regulations in the Second Congressional District, Schools Division Office I Pangasinan during the School Year 2025-2026. Specifically, it described the teachers' personal and professional profile, determined their level of competencies in knowledge of content, strategies and methods, classroom management, ICT integration, and assessment and evaluation, examined the relationship between teachers' profile variables and competencies, and identified their competency needs. The study employed a descriptive research design utilizing a researcher-made questionnaire as the primary data-gathering instrument, complemented by interviews and focus group discussions to support the quantitative findings. The respondents consisted of 284 TLE Grade 6 teachers. Findings revealed that the respondents were predominantly female, mostly 36 years old and above, specialized in Home Economics, had less than 10 years of teaching experience, possessed primarily a bachelor's degree, attended six to eight professional development seminars, and exhibited low research productivity. Overall, the teachers demonstrated a moderate level of competence in all competency domains, with ICT integration identified as the area requiring the greatest improvement. Age and sex were not significantly related to teacher competencies, while area of specialization, teaching experience, seminars and trainings attended, and research productivity showed significant relationships with selected competency areas. Highest educational attainment was significantly associated only with ICT integration. The study further identified competency needs in ICT integration, differentiated instruction, assessment practices, and the development of higher-order thinking skills. Based on these findings, a

Competency Management Program for Grade Six Teachers in Technology and Livelihood Education: A Framework for Instructional Improvement was developed to serve as a strategic guide for strengthening teachers' professional competencies through continuous capacity-building initiatives, ultimately enhancing instructional quality and learner outcomes in TLE.

Keywords: *TLE Grade 6 teachers, competency management program, instructional improvement*

INTRODUCTION

In any professional field, the basic pre-requisite for recruitment and promotion is competence, or the combination of knowledge, skills, and attitudes required for effective performance. It involves the acquired knowledge, exerted effort, and professional experience all of which facilitate task completion. (Spencer & Spencer, 1993). Main and Hammond (2008) contend that competency also encompasses personal characteristics which, when owned and used, lead to completion of task or position. In school, competencies strengthen one another and start with the basic then move on to the advanced levels as learning progresses. (Council on Education for Public Health, 2006).

In the professional world of teaching, a teacher's competency comprises of personal, professional, and social aspects. This includes teaching, as an expert in the subject and in theories related to teaching and learning, as well as in managing learning processes and adapting oneself in the community (Klassen & Chiu, 2010). Teacher education institutions in many parts of the world explore ways of using competencies to assist the professional development of teachers without undermining the quality of instruction. Pre-service education programs that teachers usually undergo do not guarantee competence that would meet the demands of development. Thus, it becomes imperative that schools continue to examine and reinforce the initial and ongoing formation of teachers to make them more effective and competent.

Educators, play a great role in training and preparing the youth for the country to become competitive in the 21 centuries. They are considered the most important resources in an educational system. They bring organization to life, make it work, and give its distinctive character. The quality of an educational institution to a great extent depends on the excellence and competency of its faculty. Hence, teacher competency should be ensured, especially in subject areas that have a direct relevance and impact to society.

Technology and Livelihood Education (TLE) is one of the subjects in the Enhanced Basic Education Curriculum of the Department of Education (DepEd). This subject teaches competencies to students that are very useful in everyday living. To highlight its worth in the K-12 Basic Education Program (BEP), the DepEd has formed a Technical Vocational unit in the Bureau of Secondary Education. For them, this unit needs strengthening as one of the three key strands that will prepare high school graduates by arming them with skills for employment.

The main goal of teaching technical and vocational education in the K to 12 Basic Education Program is to prepare students for the world of work through the acquisition of theoretical and practical skills. The students are expected to be equipped with the necessary knowledge within their trades in order to face the challenges of the labor market.

Education plays a critical role in preparing learners for lifelong learning and global competitiveness (UNESCO, 2015). Taking into consideration the global environment, people view education not only a way of developing people's skills but also a way of preparing our students to be globally competitive. If the schools were able to produce quality graduates it will redound on the quality of work they will provide in their respective workplace. The academic track provides for a continuum toward preparation for higher tertiary education and skills development qualifications for National Certificates I and II (NC I and NC II). While public private partnerships have long been in existence, industry-academe linkages and partnership are essentially weak if not non-existent in many of our academic institutions and need to be strengthened and made part of local socio-economic development.

The development of the nation largely depends on education. The quality of education will also be determined on the performances of teachers in the school. Improving teacher quality is considered as an essential reform to improve student attainment and ensure it has a world class system of education (Australian Institute for Teaching and School Leadership), 2011. Becoming a teacher entails finishing a degree and passing the licensure exam for teachers. Nonetheless, the degree and certificates are not guarantee for teaching effectiveness. Shulman (1987) emphasized that effective teaching depends on the integration of content knowledge and pedagogical knowledge. This is what defines a competent teacher who can develop the 21st century skills and improve students' learning.

Teaching in the elementary can be a challenging task for teachers as it greatly demands the strong competencies to be able to develop the knowledge and skills of the pupils indicated in the curriculum. The improvement is mandated under Republic Act 10533 otherwise known as the Enhanced Basic Education Act which stipulates that the program should meet the demand for quality teachers and school leaders. In response to this mandate, the curriculum for EPP in the elementary was enhanced in terms of specific skills and knowledge that the elementary pupils must develop in order to meet the requirements for further learning. The subject being taught in grade 4 encompasses the field of ICT & Entrepreneurship, Agriculture, Home Economics, and Industrial Arts. It is geared toward the development of technological proficiency and is anchored on knowledge and information, entrepreneurial concepts, process and delivery, work and values. These teachers may have the limited opportunity to undergo skills training by their respective schools due to insufficient MOOE. Darling-Hammond et al. (2017) emphasized that equitable access to sustained professional learning opportunities is essential for improving teacher effectiveness. It was observed that only the chosen few could avail of it. Although, the Technical Education Skills Development Authority in the province provides free training, elementary teachers cannot actively participate due to their busy

class schedule and other school-related functions. Corollary to this, teaching of EPP may not be effective as the curriculum requires developed competencies of teachers to be able to deliver quality instruction. Furthermore, being generalists, teachers may not possess the specific skills and knowledge necessary to facilitate learning of the learners.

In any professional field, the basic pre-requisite for recruitment and promotion is competence, or the combination of basic skills, knowledge, and attitude of an individual. It involves the acquired knowledge, exerted effort, and professional experience all of which facilitate task completion. (Nijveldt, et al., 2001). Main and Hammond (2008) contend that competency also encompasses personal characteristics which, when owned and used, lead to completion of task or position. In school, competencies strengthen one another and start with the basic then move on to the advanced levels as learning progresses. (Council on Education for Public Health, 2006).

In the professional world of teaching, a teacher's competency comprises of personal, professional, and social aspects. This includes teaching, as an expert in the subject and in theories related to teaching and learning, as well as in managing learning processes and adapting oneself in the community (Klassen & Chiu, 2010). Teacher education institutions in many parts of the world explore ways of using competencies to assist the professional development of teachers without undermining the quality of instruction. Pre-service education programs that teachers usually undergo do not guarantee competence that would meet the demands of development. Thus, it becomes imperative that schools continue to examine and reinforce the initial and ongoing formation of teachers to make them more effective and competent.

The school is a very important institution which can provide career pathways for students. Teaching Technology and Livelihood Education (TLE) would provide practical knowledge and skills of vocational and technological efficiency and problem solving in daily life.

Technology and Livelihood Education (TLE) is a subject area under the Basic Education Curriculum which equips learners with knowledge and information, skills and process, right work values and life skills in the field of Home Economics, Carpentry, Entrepreneurship, Agriculture, Industrial Arts, and Computer Education. The acquisition of basic vocational knowledge, skills and attitudes to facilitate occupational efficiency requires skill-oriented teaching and learning activities. Thus, there is a need for the realistic and experiential learning aided by the right and adequate tools, and instructional materials for instruction is necessary.

Instructional materials are the tools teachers use to teach their students. Excellent instructional material has a big impact on the students learning since students learn most by doing. Together with the excellent instructional materials are its adequate numbers of units in proportion with the number of the students. Engaging in hands on activities gives the learners idea on how this experience can be applied in a real-life situation. This instructional material serves as an aid for instruction. Through this, the teacher will be able to make his/her strategies in teaching more effective and meaningful. It is much

easier also for students to learn and understand their lesson as well as acquire the skills necessary in the field.

Educators, play a great role in training and preparing the youth for the country to become competitive in the 21st centuries. They are considered the most important resources in an educational system. They bring organization to life, make it work, and give its distinctive character. The quality of an educational institution to a great extent depends on the excellence and competency of its faculty. Hence, teacher competency should be ensured, especially in subject areas that have a direct relevance and impact to society.

Research Questions

This study assessed the competency management program for Grade six teachers in Technology and Livelihood Education (TLE) as basis for designing a framework for instructional improvement in the public elementary schools of the Second Congressional District of Pangasinan under the Schools Division Office I Pangassinan during the School Year 2025-2026.

Specifically, it sought to answer the following research questions:

1. What are the personal and professional characteristics of TLE 6 teachers in terms of:
 - 1.1 age;
 - 1.2 sex;
 - 1.3 number of years teaching;
 - 1.4 highest educational attainment;
 - 1.5 seminars and trainings attended and;
 - 1.6 number of completed and presented researches?
2. What is the level of manifestation of competencies along the four areas of TLE, namely:
 - 2.1 Home Economics;
 - 2.2 Industrial Arts;
 - 2.3 Information and Communications Technology, and;
 - 2.4 Agri-Fishery Arts?
3. What is the level of competencies of TLE teachers in terms of:
 - 3.1 knowledge of content within and across curriculum teaching areas;
 - 3.2 strategies and methods;
 - 3.3 classroom management;
 - 3.4 integration of ICT and;
 - 3.5 assessment and evaluation?
4. Is there a significant relationship between the level of competencies of TLE 6 teachers and their profile variables?
5. What are the competency needs of TLE 6 teachers?
6. Based from the findings, what competency management program for TLE 6 teachers can be proposed?

METHODOLOGY

Research Design

The study used the descriptive method of research as it aimed to assess the level of competencies of TLE 6 teachers. According to Frankel (2010), descriptive research involves looking into the present situation and describing it using quantitative measurements. This method involves collection of data as an attempt to examine the situation in order to establish the norm and to predict what will happen under same circumstances.

This research design was selected as it can be used to assess the characteristics of individuals or groups of physical environments such as teachers of particular schools. The study used this method in gathering data and information towards the development of a competency management program for TLE, geared of enhancing the instructional performance of TLE 6 teachers.

A researcher–constructed questionnaire was utilized in this study to gather important data relative to the study. To substantiate the data gathered, the researcher also conducted interviews and focus group discussion.

Instrumentation and Data Collection

The study utilized a research-made questionnaire, as main gathering tool. Interviews and focused group discussion (FGD) were done to substantiate relevant findings. Unstructured questions for the interview were used to guide the researcher in getting additional information while the FGD agenda was used to provide direction during the FGD.

Questionnaire: The survey questionnaire was developed in fidelity to the specific objectives stated as reasons for constructing the study. It was based on the concepts and related studies as inputs to the instrument.

Construction: The instrument was used to answer the research objectives related to the level of competencies of TLE teachers and their competency needs in teaching specialization courses of TLE. The questionnaire consisted of three parts. The first part focuses on the personal and professional characteristics of TLE teachers, including age, sex, are of specialization, number of years in teaching, highest educational attainment, seminars and trainings attended, and number of completed and presented researches. The second part includes the level of competencies along the four areas: home economics, agri-fishery arts, information, and communications technology ang industrial arts. The last part involves the competencies of TLE teachers.

Validation: Experts in the field of research were requested to evaluate, in independent rounds, if the questionnaire has theory, construction or content validity. The results of the validation were incorporated in the final design of the instrument.

Also, a reliability test was conducted to ensure the reliability of the instrument. Cronbach's alpha was used for this purpose. Results of the test showed high reliability and internal consistency with values ranging from 0.8102 to 0.9841 which meant good to excellent reliability and consistency.

Administration: Necessary permits were acquired by the researcher in order to distribute the questionnaires, as well as to conduct interviews and Focus Group Discussion. Permits were secured from various offices in order to follow the protocols of research and instrument distribution. The respondents were asked to answer the questionnaire after permission was granted. The responses were kept confidential; Data Privacy Act was also strictly followed in the use of information given by the respondents. The respondents were also guided in cases where they need additional explanations related to the items given in the questionnaire.

A week was given to the respondents in order for them to analyze the items carefully. Follow-ups were made as necessary, while still ensuring that no pressure was given to the respondents. After the allotted time, retrieval was done ensuring 100% retrieval rate.

Interview. Unstructured interview was conducted to add necessary information to the data obtained from the questionnaire. There were five questions answered by teachers and heads to assess the level of competencies of TLE teachers in order to identify the competency needs in teaching specialization courses. The interviews were done after the retrieval of the questionnaires. A total of 55 teachers were interviewed, and their responses were recorded and provided support to the quantitative data.

Focus Group Discussion. This was conducted among the respondents to verify the responses obtained from the research instrument. Selected public secondary TLE teachers were invited to serve as discussants on matters regarding the level of competencies of TLE teachers, and the competency needs in teaching specialization courses of TLE. The FGD agenda were developed to facilitate the flow of group discussion. TLE teachers had insightful conversations regarding the issues and concerns in TLE instruction.

Assessing the level of competencies of TLE teachers in teaching specialization courses was at the core of the discussion. Issues and concerns regarding the attainment of learner's National Certificate I and II were also discussed. The group shared some of the issues and concerns in their respective schools, as well as the responsibilities that they undertake.

Prior to any data gathering activity, an initial permit from the Schools Division Superintendent was solicited. Afterwards, the researcher asked permission from the principals of the target schools. Upon securing the necessary permission, the researcher started to distribute the questionnaire to the respondents. The distribution of questionnaires was done according to the date and time agreed by the researcher and the administrators. The data gathered were tabulated for statistical treatment.

The interview was done through a face-to-face encounter to solicit new ideas from the interviewees using guidelines to ensure that the same general ideas were generated. The questions were prepared beforehand, and all the responses were recorded. The interviews were done in separate instances. On the other hand, the Focus Group Discussion was done at a predetermined time and place. The discussions were facilitated by the researcher and the ideas were recorded to ensure complete capturing of ideas. The topics for discussion were prepared before the FGD and the discussants were made aware of the objectives of the study, as well as the recording of the discussion to verify gathered information.

Tools for Data Analysis

The data gathered were tabulated, analyzed, and interpreted using the following statistical tools:

Frequency Count. This was used to determine the distribution of responses in terms of personal and professional characteristics with their corresponding categories for each profile.

Frequency and Percentage. Used to describe categorical profile variables such as age, sex, seminars attended, and research productivity.

Mean (Weighted Mean). Used to determine the level of competencies of TLE 6 teachers in terms of: Content knowledge, Strategies and methods, Classroom management, ICT integration, Assessment and evaluation

Pearson Product-Moment Correlation Coefficient (r). Used to determine the relationship between the profile variables and the competency levels of TLE 6 teachers.

RESULTS

Table 1
Profile of TLE 6 Teachers

Profile Variable	Category	Frequency (f)	Percentage (%)
Age	25 years old and below	48	16.90
	26–35 years old	70	24.65
	36 years old and above	166	58.45
	Total	284	100.00
Sex	Female	246	86.62
	Male	38	13.38
	Total	284	100.00
	Total	284	100.00%
Years in Teaching	Less than 10 years	141	49.65
	10–19 years	85	29.93

	20 years and above	58	20.42
	Total	284	100.00
Highest Educational Attainment	Baccalaureate Degree	172	60.56
	Advanced Degree (Master's/Doctorate)	112	39.44
	Total	284	100.00
Seminars and Trainings Attended	Less than 5 seminars	84	29.58
	6–8 seminars	159	55.99
	9 and above seminars	41	14.44
	Total	284	100.00
Research Productivity	1 research presented	187	65.85
	2 or more researches presented	97	34.15
	Total	284	100.00

Table 2
Respondents' Level of Competencies on the Four Areas of TLE

Area / Indicators	Mean	Descriptive Equivalent
Home Economics		
Improves attitudes toward home economics	4.52	Very High
Demonstrates skills in home management	4.35	Very High
Applies basic home economics knowledge	4.30	Very High
Overall Mean (Home Economics)	4.39	Very High
Industrial Arts		
Practices basic housekeeping procedures	4.40	Very High
Observes safety precautions in doing work	4.45	Very High
Reads and follows instructions before using equipment	4.42	Very High
Overall Mean (Industrial Arts)	4.42	Very High
Agri-Fishery Arts		
Observes the 5C's principle in work area	3.65	Moderate
Identifies areas of concern for safety measures	3.60	Moderate
Applies appropriate safety measures in workplace	3.70	Moderate
Overall Mean (Agri-Fishery Arts)	3.65	Moderate
Information and Communications Technology (ICT)		
Uses computers to collect information	3.72	Moderate
Uses ICT to communicate with stakeholders	3.68	Moderate
Integrates ICT in teaching-learning process	3.75	Moderate
Overall Mean (ICT)	3.72	Moderate

Table 3.1
Competencies of TLE 6 Teachers in Terms of Knowledge of Content within and across Curriculum Teaching Areas

Indicators	Mean	Descriptive Equivalent
Explains concepts clearly and accurately	3.80	High
Connects lessons across subject areas	3.30	Moderate
Demonstrates mastery of subject matter	3.75	High
Motivates learners to relate topics to real life	3.90	High
Uses appropriate examples and illustrations	3.25	Moderate
Integrates values in lessons	3.70	High
Applies knowledge in practical situations	3.20	Moderate
Encourages critical thinking	3.15	Moderate
Relates lessons to learners' experiences	3.85	High
Uses updated and relevant content	3.35	Moderate
Average Weighted Mean	3.53	Moderate Competence

Table 3.2
Competencies of TLE 6 Teachers in Terms of Strategies and Methods

Indicators	Mean	Descriptive Equivalent
Uses varied teaching strategies	3.60	High
Encourages student participation	3.40	Moderate
Uses collaborative learning methods	3.30	Moderate
Promotes problem-solving activities	3.65	High
Encourages learners to express ideas clearly	3.45	Moderate
Uses learner-centered approaches	3.70	High
Adapts strategies to learner needs	3.25	Moderate
Integrates higher-order thinking skills	3.20	Moderate
Uses differentiated instruction	3.15	Moderate
Engages students in meaningful tasks	3.55	High
Average Weighted Mean	3.42	Moderate Competence

Table 3.3
Competencies of TLE 6 Teachers in Terms of Classroom Management

Indicators	Mean	Descriptive Equivalent
Maintains a safe and orderly classroom	3.75	High
Establishes classroom rules and routines	3.40	Moderate
Manages student behavior effectively	3.35	Moderate
Uses positive reinforcement	3.65	High

Handles conflicts appropriately	3.20	Moderate
Communicates expectations clearly	3.80	High
Maintains student engagement	3.30	Moderate
Applies discipline fairly	3.50	High
Creates a respectful environment	3.85	High
Promotes self-discipline among learners	3.25	Moderate
Average Weighted Mean	3.51	Moderate Competence

Table 3.4
Competencies of TLE 6 Teachers in Terms of Integration of ICT

Indicators	Mean	Descriptive Equivalent
Uses ICT in lesson delivery	3.40	Moderate
Integrates multimedia presentations	3.25	Moderate
Uses online resources in teaching	3.35	Moderate
Facilitates digital collaboration	3.10	Moderate
Uses ICT to enhance engagement	3.45	Moderate
Communicates using digital platforms	3.50	High
Designs ICT-based activities	3.05	Moderate
Uses technology for assessment	2.95	Moderate
Promotes digital literacy	3.30	Moderate
Applies ICT tools effectively	3.20	Moderate
Average Weighted Mean	3.26	Moderate Competence

Table 3.5
Competencies of TLE 6 Teachers in Terms of Assessment and Evaluation

Indicators	Mean	Descriptive Equivalent
Uses appropriate assessment tools	3.55	High
Monitors student progress regularly	3.50	High
Aligns assessment with objectives	3.30	Moderate
Uses formative and summative assessment	3.60	High
Provides timely feedback	3.25	Moderate
Interprets assessment results accurately	3.20	Moderate
Uses assessment to improve instruction	3.65	High
Maintains assessment records properly	3.35	Moderate
Communicates results to stakeholders	3.40	Moderate
Uses data for decision-making	3.15	Moderate
Average Weighted Mean	3.39	Moderate Competence

Table 4
Relationship Between Profile Variables and TLE 6 Teachers' Competencies

Profile Variables	Competency Areas	r-value	p-value	Decision on H_0	Interpretation
Age	All competencies	0.062	0.298	Failed to reject H_0	Not Significant
Sex	All competencies	0.048	0.412	Failed to reject H_0	Not Significant
Years of Teaching Experience	Content Knowledge	0.312	0.000	Rejected H_0	Significant
	Strategies & Methods	0.289	0.000	Rejected H_0	Significant
	Classroom Management	0.301	0.000	Rejected H_0	Significant
	ICT Integration	0.276	0.001	Rejected H_0	Significant
	Assessment & Evaluation	0.294	0.000	Rejected H_0	Significant
Highest Educational Attainment	Content Knowledge	0.121	0.087	Failed to reject H_0	Not Significant
	Strategies & Methods	0.134	0.065	Failed to reject H_0	Not Significant
	Classroom Management	0.102	0.112	Failed to reject H_0	Not Significant
	ICT Integration	0.241	0.002	Rejected H_0	Significant
Seminars & Trainings Attended	Strategies & Methods	0.268	0.000	Rejected H_0	Significant
	Classroom Management	0.254	0.001	Rejected H_0	Significant
	ICT Integration	0.297	0.000	Rejected H_0	Significant
	Assessment & Evaluation	0.261	0.000	Rejected H_0	Significant
Research Completed/Presented	Content Knowledge	0.283	0.000	Rejected H_0	Significant
	Classroom Management	0.221	0.002	Rejected H_0	Significant
	ICT Integration	0.245	0.001	Rejected H_0	Significant
	Assessment & Evaluation	0.274	0.000	Rejected H_0	Significant
	Strategies & Methods	0.118	0.096	Failed to reject H_0	Not Significant

Interpretation Guide

p-value < 0.05 → Significant relationship (Reject H_0)

p-value ≥ 0.05 → Not significant (Fail to reject H_0)

r-value (strength of relationship):

0.00–0.19 → Very weak

0.20–0.39 → Weak to moderate

0.40 and above → Moderate to strong

Table 5
Competency Needs of TLE 6 Teachers

Competency Area	Observed Level	Identified Competency Needs	Interpretation
Knowledge of Content within and across Curriculum	Moderate	Strengthening mastery of content, improving integration across subjects, and enhancing application of concepts in real-life situations	Teachers demonstrate adequate content knowledge but need further development in deepening understanding and applying content in interdisciplinary and practical contexts.
Strategies and Methods	Moderate	Use of differentiated instruction, integration of higher-order thinking skills (HOTS), and adoption of learner-centered and innovative teaching strategies	While teachers can deliver lessons, there is a need to enhance their ability to address diverse learner needs and promote critical thinking.
Classroom Management	Moderate	Improved handling of student behavior, conflict management, and strengthening of positive discipline strategies	Teachers maintain order but need to further develop proactive and responsive classroom management techniques to handle varied classroom situations.
Integration of ICT	Moderate (lowest among competencies)	Advanced use of ICT tools, development of ICT-based instructional materials, and integration of technology in assessment and collaboration	ICT integration remains the weakest area, indicating a need for intensive training to move from basic to more advanced and transformative use of technology.
Assessment and Evaluation	Moderate	Improved use of formative assessment, data interpretation, timely feedback, and data-driven decision-making	Teachers need to strengthen their assessment literacy, particularly in analyzing results and using data to guide instruction.

DISCUSSION

Table 1 presents the demographic profile of the 284 Technology and Livelihood Education (TLE) Grade 6 teachers included in the study. In terms of age, the majority of the respondents (166 or 58.45%) were 36 years old and above, followed by those aged 26–35 years old (70 or 24.65%) and 25 years old and below (48 or 16.90%). Regarding sex, most respondents were female (246 or 86.62%), while only 38 (13.38%) were male. With respect to teaching experience, nearly half (141 or 49.65%) had less than 10 years of teaching experience, followed by 85 (29.93%) with 10–19 years, and 58 (20.42%) with 20 years and above. These findings indicate that the TLE teaching workforce is predominantly composed of experienced female teachers with varying lengths of teaching experience.

In terms of educational qualifications, the majority (172 or 60.56%) possessed a baccalaureate degree, while 112 (39.44%) had earned advanced degrees at the master's or doctoral level. Regarding professional development, 159 teachers (55.99%) had attended 6–8 seminars and trainings, 84 (29.58%) had attended fewer than five seminars, and 41 (14.44%) had attended nine or more seminars. Moreover, most respondents (187 or 65.85%) had presented one research study, whereas 97 (34.15%) had presented two or more research studies. These findings suggest that although many teachers have actively participated in professional development activities and research, opportunities remain for further academic advancement and scholarly engagement to strengthen professional competencies.

Table 2 illustrates the respondents' level of competencies across the four major areas of Technology and Livelihood Education. The findings revealed that teachers demonstrated Very High competency in Industrial Arts (Overall Mean = 4.42) and Home Economics (Overall Mean = 4.39). These results indicate that teachers possess strong knowledge, skills, and confidence in delivering instruction in these two competency areas. Specifically, teachers consistently observed safety precautions, followed proper work procedures, demonstrated home management skills, and effectively applied home economics concepts, reflecting their readiness to facilitate quality instruction in these learning areas.

In contrast, teachers demonstrated only Moderate competency in Information and Communications Technology (ICT) (Overall Mean = 3.72) and Agri-Fishery Arts (Overall Mean = 3.65). While respondents showed moderate competence in integrating ICT into teaching, communicating through technology, applying workplace safety measures, and observing proper agricultural work practices, these areas obtained relatively lower ratings than Home Economics and Industrial Arts. These findings suggest that although teachers possess fundamental competencies across all four TLE areas, additional professional development is needed, particularly in ICT integration and Agri-Fishery Arts, to achieve balanced competence across the TLE curriculum.

Table 3.1 shows the competencies of TLE Grade 6 teachers in terms of knowledge of content within and across curriculum teaching areas. The findings yielded an average

weighted mean of 3.53, interpreted by the study as Moderate Competence, indicating that teachers demonstrate adequate knowledge of curriculum content but still require further enhancement in integrating concepts across learning areas. This finding suggests that teachers generally possess sufficient subject matter knowledge to facilitate instruction, although opportunities remain for strengthening interdisciplinary teaching and practical application of content.

Among the indicators, "Motivates learners to relate topics to real life" obtained the highest mean ($M = 3.90$, High), followed by "Relates lessons to learners' experiences" ($M = 3.85$) and "Explains concepts clearly and accurately" ($M = 3.80$). Conversely, "Encourages critical thinking" registered the lowest mean ($M = 3.15$, Moderate), while applying knowledge in practical situations, using appropriate examples, connecting lessons across subject areas, and using updated content also received Moderate ratings. These findings indicate that teachers effectively contextualize lessons but need further development in promoting higher-order thinking and interdisciplinary instruction.

Table 3.2 reveals the competencies of TLE Grade 6 teachers in terms of instructional strategies and methods. The results produced an average weighted mean of 3.42, interpreted as Moderate Competence, indicating that teachers moderately demonstrate effective instructional strategies during classroom instruction. This finding suggests that while teachers utilize a variety of teaching approaches, they do not consistently employ differentiated, learner-centered, and higher-order instructional practices that address diverse learner needs.

The highest-rated indicator was "Uses learner-centered approaches" ($M = 3.70$, High), followed by "Promotes problem-solving activities" ($M = 3.65$) and "Uses varied teaching strategies" ($M = 3.60$). Conversely, "Uses differentiated instruction" obtained the lowest mean ($M = 3.15$, Moderate), while integrating higher-order thinking skills, adapting instruction to learner needs, collaborative learning, encouraging learner participation, and expressing ideas were also rated Moderate. These findings suggest that teachers regularly implement learner-centered instruction but require further training in differentiation and higher-order instructional approaches.

Table 3.3 indicates the competencies of TLE Grade 6 teachers in terms of classroom management. The findings revealed an average weighted mean of 3.51, interpreted as Moderate Competence, indicating that teachers generally demonstrate effective classroom management practices. This finding implies that teachers are capable of maintaining orderly classrooms and promoting positive learning environments; however, consistent implementation of proactive classroom management strategies may still be improved.

Among the indicators, "Creates a respectful environment" obtained the highest mean ($M = 3.85$, High), followed by "Communicates expectations clearly" ($M = 3.80$) and "Maintains a safe and orderly classroom" ($M = 3.75$). In contrast, "Handles conflicts appropriately" received the lowest mean ($M = 3.20$, Moderate), while promoting self-discipline, maintaining learner engagement, managing behavior, and establishing classroom

routines also obtained Moderate ratings. These findings indicate that although teachers effectively establish positive classroom environments, additional emphasis on conflict resolution and learner behavior management may further strengthen classroom effectiveness.

Table 3.4 reflects the competencies of TLE Grade 6 teachers in terms of ICT integration. The data yielded an average weighted mean of 3.26, interpreted as Moderate Competence, indicating that teachers moderately integrate information and communication technology into teaching and learning. This finding suggests that although teachers are capable of utilizing basic digital technologies, more advanced applications of ICT for instruction, collaboration, and assessment remain areas requiring improvement.

Among the indicators, "Communicates using digital platforms" obtained the highest mean ($M = 3.50$, High), followed by "Uses ICT to enhance engagement" ($M = 3.45$, Moderate) and "Uses ICT in lesson delivery" ($M = 3.40$, Moderate). Conversely, "Uses technology for assessment" registered the lowest mean ($M = 2.95$, Moderate), while designing ICT-based activities, facilitating digital collaboration, integrating multimedia presentations, and applying ICT tools also received Moderate ratings. These findings indicate that teachers primarily use ICT for communication and instructional delivery but require further capacity-building in technology-enhanced assessment and innovative digital learning experiences.

Table 3.5 demonstrates the competencies of TLE Grade 6 teachers in terms of assessment and evaluation. The findings produced an average weighted mean of 3.39, interpreted as Moderate Competence, indicating that teachers moderately demonstrate competency in assessing learner performance and utilizing assessment results. This finding suggests that teachers regularly implement assessment practices but may still strengthen assessment literacy, data interpretation, and evidence-based instructional decision-making.

Among the indicators, "Uses assessment to improve instruction" obtained the highest mean ($M = 3.65$, High), followed by "Uses formative and summative assessment" ($M = 3.60$) and "Uses appropriate assessment tools" ($M = 3.55$). Conversely, "Uses data for decision-making" obtained the lowest mean ($M = 3.15$, Moderate), while interpreting assessment results, providing timely feedback, aligning assessments with objectives, maintaining records, and communicating assessment results also received Moderate ratings. These findings indicate that teachers appropriately administer assessments but require additional training in data-driven instructional planning and assessment analysis.

Table 4 presents the relationship between the profile variables of TLE Grade 6 teachers and their competencies. The findings revealed that age and sex were not significantly related to any competency area, as evidenced by p-values greater than the 0.05 level of significance. Likewise, highest educational attainment was not significantly related to content knowledge, instructional strategies, and classroom management, although it showed a significant relationship with ICT integration ($r = 0.241$, $p = 0.002$). These

findings indicate that demographic characteristics alone do not necessarily determine teachers' professional competencies.

On the other hand, years of teaching experience demonstrated significant positive relationships with all five competency areas, with correlation coefficients ranging from 0.276 to 0.312, indicating weak to moderate positive relationships. Similarly, the number of seminars and trainings attended significantly influenced strategies and methods, classroom management, ICT integration, and assessment and evaluation, while research productivity showed significant relationships with content knowledge, classroom management, ICT integration, and assessment and evaluation. These findings suggest that continuous teaching experience, sustained professional development, and research engagement contribute significantly to enhancing teachers' professional competencies, emphasizing the importance of lifelong learning and continuous professional growth among TLE teachers.

Table 5 summarizes the competency needs identified among TLE Grade 6 teachers based on the observed levels of competence across the five professional domains. The findings indicate that all competency areas were rated at a Moderate level, highlighting the need for continuous professional development. The identified competency needs include strengthening content mastery, improving interdisciplinary teaching, enhancing differentiated instruction, integrating higher-order thinking skills, improving classroom management practices, strengthening ICT integration, and enhancing assessment literacy. These findings suggest that although teachers demonstrate adequate competence, additional interventions are necessary to achieve higher levels of instructional effectiveness.

Among the identified needs, ICT integration emerged as the area requiring the greatest attention, as it was identified as the lowest among the competency domains. Teachers specifically need advanced training in the use of ICT tools, development of digital instructional materials, technology-enhanced assessment, and collaborative learning platforms. Likewise, improvements are needed in assessment and evaluation through stronger data interpretation and formative assessment practices, while classroom management, instructional strategies, and content knowledge also require enhancement through continuous professional learning. These findings underscore the importance of sustained capacity-building programs, mentoring, and targeted training initiatives to further strengthen the competencies of TLE Grade 6 teachers and improve the quality of Technology and Livelihood Education instruction.

Conclusions

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

1. The TLE 6 teachers are generally composed of experienced and predominantly female educators, most of whom are still developing in terms of advanced academic qualifications and research involvement.

2. The overall competency level of TLE 6 teachers is moderate, indicating that while they are competent in delivering instruction, there is still a need to enhance their skills to reach a higher level of effectiveness.
3. Demographic factors such as age and sex do not influence teacher competence, suggesting that competence is not determined by personal characteristics but by professional development and experience.
4. Professional factors such as specialization, teaching experience, seminars and trainings, and research engagement have a significant influence on teacher competencies, highlighting the importance of continuous professional growth.
5. Teachers' highest educational attainment is significantly related only to ICT integration, indicating that advanced studies may enhance technological competence but not necessarily all aspects of teaching.
6. The competency needs identified in the study suggest that teachers require further development, particularly in ICT integration, innovative teaching strategies, assessment practices, and higher-order thinking skills, to improve instructional effectiveness.
7. Overall, the study concludes that TLE 6 teachers are functionally competent but still in need of continuous capacity building to further enhance their teaching performance.

Recommendations

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

1. School Administrators and Educational Leaders. Should provide continuous and targeted professional development programs focusing on ICT integration, differentiated instruction, and assessment strategies to enhance teacher competence.
2. Department of Education (DepEd). Should strengthen policies and programs that promote teacher training, mentoring, and research engagement, particularly in TLE-related competencies.
3. Teachers. Should actively participate in seminars, trainings, and postgraduate studies, and engage in action research to continuously improve their competencies and instructional practices.
4. Instructional Supervisors and Master Teachers. Should provide coaching and mentoring to help teachers improve in areas such as ICT integration, classroom management, and assessment practices.
5. Future Researchers. Should conduct further studies to explore other variables that may influence teacher competence, such as motivation, teaching style, leadership support,

and availability of resources, to provide a more comprehensive understanding of teacher development.

6. Curriculum Planners and Program Developers. Should design enhanced training modules and competency-based programs aligned with the needs identified in this study, particularly in technology integration and modern pedagogical approaches.

Compliance with Ethical Standards

As with any plan in education, the individual school's culture and climate must be considered when implementing a research project. The results that were gathered from the survey questionnaire were under the research's utmost care in order to protect the privacy of the respondents. With that, names of the respondents were withheld in the attachment papers. Further, the learners were assigned with code numbers. So, prior to the answering of the questionnaire, the subjects were assured of the confidentiality of their answer and that the results taken were solely for the purpose of this research to ensure a valid and reliable data. No codes or identifying links to participants and results of the questionnaire provided were utilized for this project. On the other hand, it was also the ultimate principle of this study not to exactly copy the work of other researchers except if the references are properly cited. Moreover, the researcher assured the respondents that the information taken would solely for the purposes of this research work and that the gathered data were handled in accordance with RA 10173 or the Data Privacy Act of 2012 to ensure a valid and reliable data.

REFERENCES

- Australian Institute for Teaching and School Leadership. (2011). *National Professional Standards for Teachers*. Australian Institute for Teaching and School Leadership.
- Council on Education for Public Health. (2006). *Competencies and learning objectives*. Council on Education for Public Health.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2010). *How to design and evaluate research in education* (8th ed.). McGraw-Hill.
- Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741–756. <https://doi.org/10.1037/a0019237>
- Main, S., & Hammond, L. (2008). Best practice or most practiced? Preservice teachers' beliefs about effective behavior management strategies and reported self-efficacy. *Australian Journal of Teacher Education*, 33(4), 28–38. <https://doi.org/10.14221/ajte.2008v33n4.3>
- Nijveldt, M., Beijaard, D., Brekelmans, M., Verloop, N., & Wubbels, T. (2005). Assessing the interpersonal competence of beginning teachers: The quality of the judgement process. *European Journal of Teacher Education*, 28(2), 131–148.

- Republic Act No. 10533. (2013). *An Act Enhancing the Philippine Basic Education System by Strengthening Its Curriculum and Increasing the Number of Years for Basic Education, Appropriating Funds Therefor and for Other Purposes (Enhanced Basic Education Act of 2013)*. Official Gazette of the Republic of the Philippines.
- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1–22.
<https://doi.org/10.17763/haer.57.1.j463w79r56455411>
- Spencer, L. M., Jr., & Spencer, S. M. (1993). *Competence at work: Models for superior performance*. John Wiley & Sons.
- UNESCO. (2015). *Rethinking education: Towards a global common good?* UNESCO Publishing.

APA Citation:

Ravancho, R. M. (2026). COMPETENCY MANAGEMENT PROGRAM FOR GRADE SIX TEACHERS IN TECHNOLOGY AND LIVELIHOOD EDUCATION: A FRAMEWORK FOR INSTRUCTIONAL IMPROVEMENT. *Ignatian International Journal for Multidisciplinary Research*, 4(8), 1053–1072.
<https://doi.org/10.5281/zenodo.21996728>

pearljoy.grado20@yahoo.com