

A Relational Study on Career Advancement and Instructional Quality of Technology and Livelihood Education Teacher

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Abstract—This quantitative study investigated the "Relationship between career advancement and instructional quality among Technology and Livelihood Education (TLE) teachers." The research quantified demographic variables, including gender, experience, age, and specialization, while assessing career advancement through indicators such as knowledge, competence, emotional intelligence, collaboration, and confidence. Additionally, instructional quality was evaluated based on factors including lesson mastery, communication, classroom management, assessment, and teacher-student relationships. The correlations between these factors were analyzed using Pearson's correlation coefficient and standard deviation. By surveying all TLE/Technical Vocational Livelihood (TVL) teachers across seven schools within the Department of Education (DepEd) in San Pablo City. The findings revealed a significant correlation between demographic profiles and instructional quality, with age emerging as a notable factor influencing instructional dimensions. Conversely, gender, experience, and specialization were found not to significantly predict instructional quality. Importantly, participation in professional development programs was found to positively impact overall instructional performance. The paper recommends that secondary institutions invest in educators' professional development and create opportunities for instructional excellence. Future research could explore qualitative aspects, focusing on students' holistic learning.

I. INTRODUCTION

The commitment of the education system is to the continuous improvement of human lives and the enhancement of the rights of children and their families through technological proficiency. Technology and Livelihood Education, shortened as 'TLE,' is considered a foundation of Philippine education because it is a minor subject that integrates foundational learning areas in home economics, information and communication technology, Agri-fisheries, and industrial arts (Barcelona et al., 2023). This education curriculum, used for the Philippines' K to 12 basic education system, helps nourish firsthand knowledge and information, entrepreneurial concepts, processes, delivery methods, work values, and life skills (DepEd Pasig, 2016). Being a minor subject, it is important in shaping productive members of the modern workforce and organizational structure. The rapid shift in the learning environment has brought forth emerging technologies that challenge learners and educators to acquire new skills in training, learning, development, and class operations. TLE traces its statutory credentials under the administration of former President Benigno S. Aquino III through the Ladderized Education Act of 2014, commonly referred to as

Republic Act No. 10647 (Official Gazette, 2014), wherein the provision guarantees the constitutional guarantee in terms of free education to all citizens. It seeks to be an all-inclusive learning system, well-equipped and integrated to present frictionless and borderless opportunities, significantly contributing to nation-building and facilitating pathways to employment and income generation. Training and seminars from accredited agencies, such as national certificate organizations, enhance this technique, which serves as a foundation for learning and effective teaching. This certificate is also a criterion for professional ranking sponsored by the government through the relevant agency and the Department of Budget and Management. According to Blanca (2019), this emphasizes the critical role that teaching strategy plays in enhancing student performance and gathering information. Participation in seminars and training significantly enhances the instructional quality of Technology and Livelihood Education (TLE) teachers, which is a critical factor in developing essential vocational skills in secondary students (Perez & Catapang, 2018). This research examines the relationship between career advancement and the instructional quality of TLE teachers, aiming to provide insights that encourage higher learning institutions to prioritize increased exposure and training for their faculty. Such investment is expected to contribute to improved learning outcomes within the discipline. Furthermore, this paper specifically investigates the correlation between career advancement and the instructional effectiveness of TLE teachers, highlighting the recognized positive impact of attendance at seminars and training on their teaching competencies.

1.1 Statement of the Problem

Problem/s which were addressed by the research

This quantitative study investigated the "Relationship between career advancement and instructional quality among Technology and Livelihood Education (TLE) teachers. Specifically, this study sought to answer the following questions:

1. What is the demographic profile of the TLE Teachers in terms of:
 - 1.1 Gender;
 - 1.2 Length of service;
 - 1.3 Age; and
 - 1.4 Specialization?

2. What is the level of teachers' career advancement in terms of:
 - 2.1 Knowledge;
 - 2.2 Competence;
 - 2.3 Emotional Intelligence;
 - 2.4 Collaboration; and
 - 2.5 Confidence?
3. What is the level of teachers' instructional quality in terms of:
 - 3.1 Mastery of Lesson;
 - 3.2 Communication skills;
 - 3.3 Classroom management;
 - 3.4 Uses of Assessment; and
 - 3.5 Teacher-student relationship?
4. Is there a significant relationship between demographic profile and instructional quality among Technology and Livelihood Education Teachers?
5. Is there a significant relationship between career advancement and instructional quality among Technology and Livelihood Education Teachers?

II. METHODOLOGY

This quantitative study investigated the "Relationship between career advancement and instructional quality among Technology and Livelihood Education (TLE) teachers." The research quantified demographic variables, including gender, experience, age, and specialization, while assessing career advancement through indicators such as knowledge, competence, emotional intelligence, collaboration, and confidence. Additionally, instructional quality was evaluated based on factors including lesson mastery, communication, classroom management, assessment, and teacher-student relationships. Employing standard deviation and Pearson's correlation coefficient, the study examined the relationships between these variables. By surveying all TLE/Technical Vocational Livelihood (TVL) teachers across seven schools within the Department of Education (DepEd) in San Pablo City.

III. RESULTS AND DISCUSSION

This chapter presents the data collected in this study, followed by its analysis and interpretation with the specific research questions, sub-problems, and hypotheses outlined in the initial chapter.

Demographic Profile of the TLE Teachers

In this study, the Demographic Profile of the TLE Teachers was described in terms of gender, age, length of service, and specialization and was determined by frequency and percentage.

The data in Figure 1 presents the gender distribution of the respondents. Out of 88 participants, 29 or 33% are male, while 59 or 67% are female. This implies that females comprise a more significant proportion of the respondents, accounting for more than half of the total population.

The higher representation of female respondents may be due to different factors, such as the nature of the study, the target group's demographic characteristics, or the individuals'

willingness to participate. This also implies that most respondents who chose TLE as their field of specialization are women.

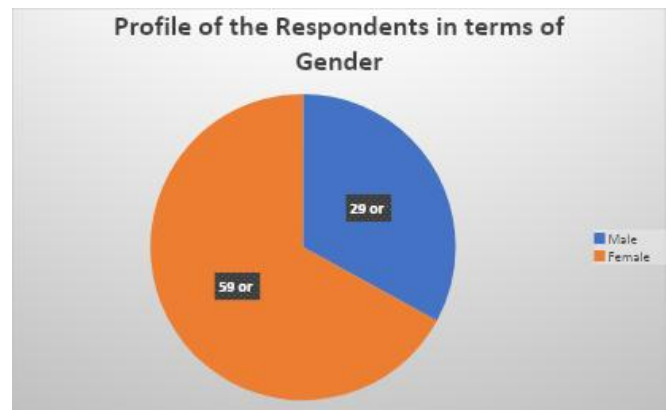


Figure 1. Profile of the Respondents in terms of Gender

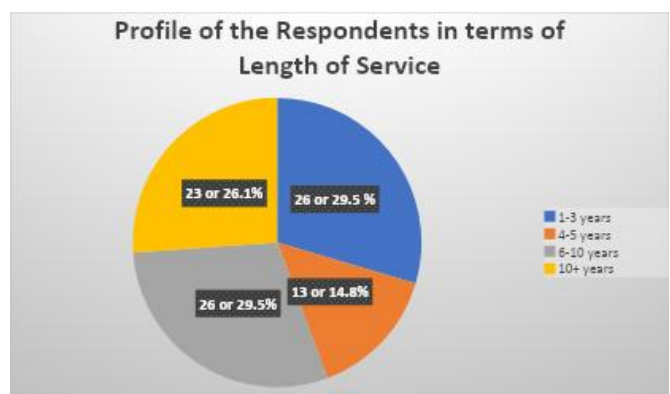


Figure 2. Profile of the Respondents in terms of Length of Service

Figure 2 shows the distribution of respondents based on their length of service in the teaching field. As shown, there is a balanced distribution among new and experienced teachers. The largest groups of respondents fall under 1-3 years (26 respondents) and 6-10 years (26 respondents), equally representing early-career and mid-career professionals. Those with more than 10 years of service (23 respondents) also play a significant portion, indicating a strong presence of experienced teachers. The diverse range of experience levels indicates that responses in the assessment may reflect a mix of perspectives from both new and seasoned professionals.

Figure 3 illustrates the distribution of respondents in terms of their age. As reflected in the graph, most respondents are young professionals under thirty years old. As shown, the largest group of respondents is within 24-30 years of age, implying that a significant portion of the respondents consist of young professionals or early-career individuals. Since younger individuals comprise the majority, the perspectives gathered in this assessment are likely related to their early-career experiences and aspirations.

Meanwhile, Figure 4 exhibits the respondents' demographic profile regarding their specialization. As presented, most respondents, 48 out of 88, or 55%, specialize in Home Economics. This aligns with the earlier gender distribution, where females made up a significant portion of

respondents, as Home Economics is traditionally a female-dominated field. This further implied that TLE teachers are more inclined to take Home Economics as their expertise, which is factored by the domination of women taking the course.

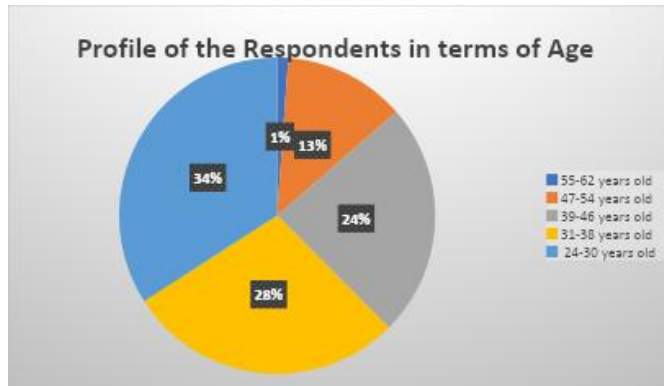


Figure 3. Profile of the Respondents in terms of Age

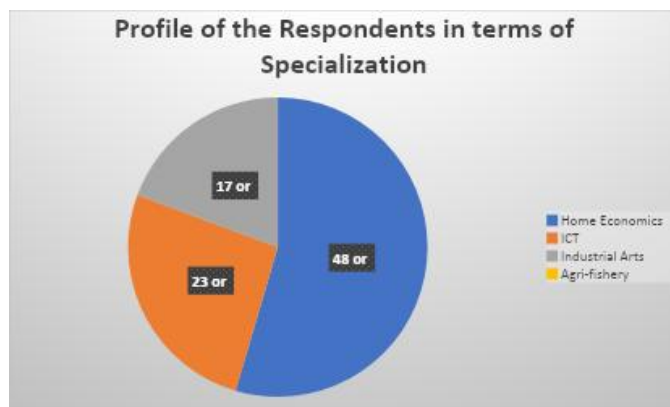


Figure 4. Profile of the Respondents in terms of Specialization

Level of Teachers' Career Advancement

In this study, the teachers' career advancement level was described in terms of knowledge, competence, emotional intelligence, collaboration, and confidence, and was determined by the mean and standard deviation.

TABLE 1. Level of Teachers' Career Advancement in terms of Knowledge

STATEMENT	Mean	SD	Remarks
Professional development/career advancement programs...			
offer educators new insights into innovations within their TLE field of specialization	4.81	0.45	Strongly Agree
Fosters a deeper understanding of the program curriculum and procedures among educators.	4.68	0.55	Strongly Agree
The TLE program enhances their instructional practices.	4.68	0.51	Strongly Agree
Serve as valuable resource and support for improving teachers' skills and understanding, which can be conveyed to their students.	4.83	0.41	Strongly Agree
Play a significant role in the evaluation and refinement processes to enhance teachers' effectiveness.	4.83	0.38	Strongly Agree
Grand Mean	4.77		
SD	0.47		
Verbal Interpretation	Very High		

As exhibited in Table 1, the level of teachers' career advancement in knowledge was very high, with the grand ($M=4.77$, $SD=0.47$). This indicates respondents' strong agreement on the influence of professional development programs in honing their knowledge, consequently enabling them to efficiently deliver learning.

Attending career advancement activities or programs such as training and seminars plays a vital role in enhancing teachers' effectiveness as these serve as sources to improve their skills and gain new insights to make such innovations in their field of specialization. Understanding deeper of the program curriculum and procedures through during trainings and seminars enhances their instructional practices. As such, career advancement programs equipped teachers to be widely and comprehensively knowledgeable in their field of specialization by which can result to a meaningful transfer of learning.

The training programs offered by agencies such as TESDA play a crucial role in empowering TLE educators and enhancing the quality of TLE instruction (Estecomen et al., 2019). These programs equip teachers with the necessary knowledge, competencies, and pedagogical skills to effectively deliver the TLE curriculum and prepare students for the evolving demands of the workforce.

TABLE 2. Level of Teachers' Career Advancement in terms of competence

STATEMENT	Mean	SD	Remarks
Professional development/career advancement programs...			
contribute significantly to professional development.	4.80	0.43	Strongly Agree
feedback leads to enhanced student appreciation of the subject matter.	4.83	0.41	Strongly Agree
are critical for enhancing educators' competencies in utilizing technology and integrating it into the curriculum.	4.83	0.43	Strongly Agree
foster a holistic approach to teaching through the practical application of technology and offers opportunities for hands-on practice.	4.81	0.42	Strongly Agree
enhance the skill sets of educators, consequently improving teaching and learning outcomes.	4.88	0.33	Strongly Agree
Grand Mean	4.83		
SD	0.41		
Verbal Interpretation	Very High		

The data presents a very high level of career advancement programs in terms of teachers' competence, supported by the grand ($M=4.83$, $SD=0.41$). This indicates that professional development and career advancement programs are perceived to significantly enhance teachers' competencies.

As shown, the respondents agreed strongly that these programs enhance educators' skill sets, leading to improved teaching and learning outcomes.

Similarly, feedback from attending career advancement programs improves students' appreciation of the subject matter and the importance of integrating technology into the curriculum. This indicates that teachers highly value feedback and technological integration as key factors in their professional growth. Teachers strongly believe that career advancement programs are vital in improving their competence, and continuous professional development,

particularly in technology integration and practical application, is necessary to enhance teaching effectiveness and student engagement.

By cultivating pedagogical competencies, TLE teachers can create dynamic, interactive classrooms where learners are empowered to participate actively, explore emerging technologies, and develop the adaptable, future-ready skills necessary to navigate an uncertain job market. Ultimately, mastering these essential instructional and management capabilities enables TLE educators to deliver learning experiences that effectively equip students for success in the rapidly evolving world of work.

TABLE 3. Level of Teachers' Career Advancement in terms of Emotional Intelligence

STATEMENT	Mean	SD	Remarks
Professional development/career advancement programs...			
enhanced the intrapersonal skills of educators and positively influenced their teaching methodologies.	4.78	0.44	Strongly Agree
enhanced the interpersonal skills of educators and helps to regulate your emotions under pressure.	4.83	0.41	Strongly Agree
strengthened the stress management skills of educators.	4.53	0.66	Strongly Agree
improved the emotional intelligence of educators, which has positively impacted on their teaching methodologies and ultimately enhanced student outcomes.	4.63	0.61	Strongly Agree
fosters positive practices in classroom management.	4.76	0.48	Strongly Agree
Grand Mean	4.71		
SD	0.54		
Verbal Interpretation			Very High

Table 3 presents the teachers' career advancement in terms of emotional intelligence, which is at a very high level, obtaining the grand mean ($M=4.71$, $SD=0.54$). This indicates that through involvement in various professional development and career advancement programs, teachers' interpersonal intelligence also leads to advancement.

Respondents strongly agree that these career growth opportunities help them regulate their emotions under pressure, which positively leads to transformative teaching practices. Enhancement in their interpersonal intelligence has a beneficial influence on teaching strategies and students' outcomes, and boosts educators' mental well-being. This further means that attending career enhancement programs uplifts teachers' emotional quotient, which drives them to achieve excellence in teaching and learning.

Table 4 shows that the teachers became very highly collaborative through participating in professional growth opportunities, as evidenced by the grand mean ($M=4.80$, $SD=0.40$). This means their participation in different professional development programs boosts their social skills.

Teachers strongly agree on the importance of career advancement programs in fostering continuous learning and collaboration among educators. Career advancement programs are beneficial in improving education quality and integrating technology into teaching; collaboration through these programs helps educators stay updated with modern teaching methods. Engagement in external professional activities and

other linkages and consortia development implies that teachers see career advancement as collaborating outside their institutions, such as delivering resource talks and participating in training programs. Furthermore, teachers perceive professional development as a highly effective means of fostering collaboration. It enables knowledge-sharing, external engagement, and network-building, all of which contribute to career growth and the advancement of educational programs.

TABLE 4. Level of Teachers' Career Advancement in terms of Collaboration

STATEMENT	Mean	SD	Remarks
Professional development/career advancement programs...			
are essential for enhancing the quality of education and ensuring the effective implementation of technology and livelihood education programs.	4.78	0.41	Strongly Agree
are effective strategies for addressing deficiencies in the skills and knowledge necessary for the successful integration of technology into lessons.	4.84	0.37	Strongly Agree
provide opportunities for teachers to engage in external business activities, such as delivering resource talks and serving as training officials.	4.78	0.41	Strongly Agree
facilitate the establishment of linkages and consortia for program development.	4.76	0.43	Strongly Agree
offer a platform for professional development and support educators in their pursuit of knowledge.	4.85	0.35	Strongly Agree
Grand Mean	4.80		
SD	0.40		
Verbal Interpretation			Very High

By learning from one another's experiences and insights, TLE teachers can continuously refine their subject matter knowledge and pedagogical skills, ultimately providing students with more engaging and effective learning experiences (Balta et al., 2023).

This data in table 5 indicates that teachers perceive career advancement programs as very highly beneficial in boosting their confidence having a grand ($M=4.81$, $SD=0.40$). It implies that professional development significantly promotes teachers' self-assurance in various aspects of their profession.

TABLE 5. Level of Teachers' Career Advancement in terms of Confidence

STATEMENT	Mean	SD	Remarks
Professional development/career advancement programs...			
Enhance teachers' capabilities to effectively perform and demonstrate skill sets in students and other audiences.	4.82	0.39	Strongly Agree
improved teachers' social agility after participating in training and seminars, leading to the expansion of their professional networks.	4.76	0.43	Strongly Agree
enable educators in managing TLE courses to create a holistic classroom by delivering learning tools with expertise.	4.82	0.39	Strongly Agree
are programs designed to help teachers strengthen their relationships with the communities to which they belong.	4.81	0.42	Strongly Agree
foster a compassionate approach to teaching among educators in the presence of their students.	4.86	0.37	Strongly Agree
Grand Mean	4.81		
SD	0.40		
Verbal Interpretation			Very High

Respondents strongly agree that professional development strengthens teachers' confidence and encourages empathy and compassion in their teaching methods. It also equipped them with the necessary skills and confidence to effectively demonstrate and apply their expertise in handling Technology and Livelihood Education (TLE) courses. Teachers perceive career advancement programs as highly effective in building confidence in teaching, networking, classroom management, and community engagement. The results imply that these programs enhance teachers' expertise and empower them to interact with students and colleagues with greater assurance and compassion.

Relevant and practical professional development training has been shown to promote confidence and a greater understanding of executing the objectives in teaching and the profession (İlğan & Basaran, 2023).

Level of Teachers' Instructional Quality

In this study, the level of teachers' instructional quality was described in terms of mastery of the lesson and was determined by the mean and standard deviation.

TABLE 6. Level of Teachers' Instructional Quality in terms of Mastery of the Lesson

STATEMENT	Mean	SD	Remarks
Attending seminars and training enables educators to develop their daily lesson plans strategically.	4.65	0.56	Strongly Agree
Professional development programs, including training and seminars, equip teachers to deliver learning materials effectively.	4.70	0.48	Strongly Agree
Seminars and training facilitate the establishment of positive teacher-student relationships within the classroom.	4.69	0.46	Strongly Agree
These programs provide educators with practical experience, allowing them to create high-quality learning resources.	4.77	0.42	Strongly Agree
Teachers enhance their creativity by offering alternative learning opportunities and applying insights gained from seminars and training.	4.74	0.44	Strongly Agree
Grand Mean	4.71		
SD	0.48		
Verbal Interpretation	Very High		

Table 6 indicates that career advancement in terms of mastery of the lesson was very high, with the obtained mean ($M=4.71$, $SD=0.48$). This indicates that teachers perceive professional development programs as instrumental in enhancing their mastery of lessons.

Teachers strongly agree that seminars and training provide practical experience, enabling them to design better educational materials and explore innovative teaching strategies that improve student learning. In addition, professional development programs equip teachers with the necessary skills to develop and present structured and practical lesson plans more effectively, so that the students better understand the subject matter. This implies that professional development notably improves teachers' mastery of lessons by improving lesson planning, material delivery, student engagement, resource development, and creative teaching approaches.

Mastery of lesson content is a critical foundation for effective TLE instruction. TLE teachers must develop a deep

and comprehensive understanding of their teaching subject to convey it clearly and meaningfully to students. As emphasized in the source, this content mastery extends beyond mere factual knowledge; it requires applying concepts, troubleshooting problems, and providing insightful explanations (Parveen et al., 2021).

Regarding communication skills, career advancement was manifested at a very high level, attaining the grand ($M=4.79$, $SD=0.44$), indicating that teachers viewed professional development programs as beneficial in improving their communication ability.

TABLE 7. Level of Teachers' Instructional Quality in terms of Communication Skills

STATEMENT	Mean	SD	Remarks
Seminars and training provide teachers with opportunities to enhance student engagement, including connection and support.	4.76	0.56	Strongly Agree
Participation in faculty and teacher development programs, such as seminars and training, helps teachers improve their facilitation skills with learners.	4.81	0.39	Strongly Agree
Attending seminars and training challenges teachers to enhance their effectiveness in delivering lessons and explaining concepts.	4.82	0.39	Strongly Agree
Participation in training and seminars enables teachers to effectively provide constructive feedback to learners.	4.80	0.40	Strongly Agree
Teachers refine their methods of lesson delivery through demonstration and body language	4.76	0.43	Strongly Agree
Grand Mean	4.79		
SD	0.44		
Verbal Interpretation	Very High		

It is strongly agreed that attending seminars and training challenges teachers to refine their communication techniques to ensure precise lesson delivery, improve their ability to guide discussions, manage classrooms, and interact with students more effectively. It is also recognized that training sessions enhance their ability to give meaningful, transparent, and supportive feedback, which scaffolds students' learning progress.

Furthermore, this indicates that professional development programs are vital in enhancing teachers' communication skills, including lesson facilitation, student engagement, feedback delivery, and non-verbal communication.

The effectiveness of Technology and Livelihood Education (TLE) instruction is closely linked to the teacher's communication skills and ability to create a positive, engaging classroom environment. TLE educators must clearly explain concepts, provide constructive feedback, and foster collaborative learning experiences. Consequently, secondary sources emphasize the critical role of effective management and support systems in the successful implementation of TLE programs (Albino & Albino, 2021).

Regarding classroom management, career advancement was also manifested as very high, gaining the grand ($M=4.80$, $SD=0.41$), indicating that teachers viewed professional development programs as effective in improving their ability to manage their classrooms.

With strong agreement, professional development equips teachers with better techniques to teach hands-on skills,

making practical lessons in Technology and Livelihood Education more effective. Similarly, teachers become more adept at demonstrating concepts and skills in ways that suit students' learning needs. Insights gained from training and seminars inspire students to take the lead in practical activities, encouraging independent and active learning. This further implies that professional development programs enhance teachers' classroom management skills, particularly in delivering practical lessons, engaging students, and demonstrating knowledge effectively. This strengthens teachers' ability to maintain an organized and productive learning environment.

TABLE 8. Level of Teachers' Instructional Quality in terms of Classroom Management

STATEMENT	Mean	SD	Remarks
Specialized TLE training or seminars improve teachers' technical knowledge and expertise.	4.85	0.35	Strongly Agree
Participating in TLE training or seminars enhances how teachers impart practical skills.	4.86	0.34	Strongly Agree
Active participation in seminars and training provides a straightforward way to maintain student engagement.	4.72	0.48	Strongly Agree
Insights gained from training and seminars encourage students to initiate and deliver practical activities.	4.77	0.42	Strongly Agree
Post-attendance of faculty and teachers at seminars and training helps demonstrate knowledge in ways that are inherently suited to the students.	4.82	0.44	Strongly Agree
Grand Mean	4.80		
SD	0.41		
Verbal Interpretation	Very High		

TLE instructors possessing strong communication skills and classroom management abilities are essential for fostering a learning environment that encourages active student engagement and the practical application of TLE concepts (Tan, 2021).

A very high level of career advancement in terms of the use of assessment is shown in Table 9, gaining the grand (M=4.71, SD=0.46), indicating that teachers perceived that attending professional development programs improves their classroom assessment strategies.

TABLE 9. Level of Teachers' Instructional Quality in terms of Use of Assessment

STATEMENT	Mean	SD	Remarks
Seminars and training offer TLE teachers the opportunity to develop innovative examination strategies.	4.77	0.42	Strongly Agree
These programs enable educators to design more engaging and interactive learning experiences for students.	4.72	0.45	Strongly Agree
Participation in seminars and training serves as a platform for teachers to benchmark effective practices in the implementation of learning activities and projects.	4.70	0.46	Strongly Agree
Professional development programs, including training and seminars, enhance faculty knowledge and improve holistic teaching methodologies.	4.70	0.46	Strongly Agree
Training and seminars facilitate the evaluation of the content delivered within the TLE curriculum.	4.64	0.48	Strongly Agree
Grand Mean	4.71		
SD	0.46		
Verbal Interpretation	Very High		

Teachers strongly agree that training and seminars help them create new and more interactive and student-centered assessments that effectively assess students' learning, particularly in Technology and Livelihood Education subjects. It also allows teachers to adopt best practices in implementing assessments, projects, and learning activities. This further means that professional advancement programs greatly enhance teachers' assessment techniques, enable them to develop innovative exams, adopt best practices, integrate interactive learning, and evaluate curriculum content effectively, further strengthening instructional quality and improving student learning outcomes.

With the efforts of teachers to acquire new knowledge and skills in instruction, it is essential to support the development of assessment tools that foster a holistic approach to improving learning outcomes and student performance (Tan, 2021).

TABLE 10. Level of Teachers' Instructional Quality in terms of Student-Teacher Relationship

STATEMENT	Mean	SD	Remarks
Attending training and seminars allows educators to conduct a curriculum needs assessment to serve their students better.	4.73	0.45	Strongly Agree
Participation in professional development programs enables teachers to evaluate students' needs and provide appropriate support.	4.78	0.41	Strongly Agree
These programs enhance teachers' skills in motivating and encouraging students' learning processes.	4.81	0.39	Strongly Agree
Teachers develop strong networking skills through participation in seminars and training related to the TLE curriculum.	4.75	0.43	Strongly Agree
The knowledge teachers gain through seminars and training contributes significantly to student achievement.	4.70	0.46	Strongly Agree
Grand Mean	4.75		
SD	0.43		
Verbal Interpretation	Very High		

Table 10 shows a very high level of career advancement in terms of student-teacher relationship gaining the grand (M=4.75, SD=0.43) implying that teachers perceived that attending professional development programs helps them strengthened their harmonious relationship with students which promote conducive learning environment.

Conducting Curriculum Needs Assessments – The mean score of 4.73 suggests that teachers strongly agree that attending training and seminars helps them identify and address students' learning needs, ensuring that the curriculum remains relevant and practical.

There is a strong agreement that training programs help teachers develop skills to inspire and encourage students, which leads to increased student engagement and a more positive learning environment. It enables them to evaluate students' challenges, provide necessary interventions, and connect with colleagues and students to support learning. It implies further that professional development enriches student-teacher relationships by improving teachers' ability to assess student needs, provide support, motivate learners, strengthen networking skills, and contribute to student success.

Creating harmony between the teacher and student relationship is effective since it has promoted an environment conducive to learning and growth (Hassan & Akbar, 2020). In other words, this mutual understanding, respect, and commitment towards each other make them work together in the journey of learning.

Significant Relationship Between Demographic Profile and Instructional Quality among Technology and Livelihood Education Teachers

Data were treated statistically in Minitab 14 using Pearson's R. The significant findings were presented in the

following table to test the relationship between demographic profile and instructional quality among technology and livelihood education teachers.

Shown in Table 11 is the relationship between demographic profiles such as gender, length of service, age, and specialization and instructional quality in five key areas: mastery of the lesson, communication skills, classroom management, use of assessment, and teacher-student relationships among technology and livelihood education teachers. The results include each relationship's Pearson correlation, p-values, and sample size (N=88).

TABLE 11. Significant Relationship Between Demographic Profile and Instructional Quality among Technology and Livelihood Education Teachers

Demographic Profile (IV)	Instructional Quality (DV)				
	Mastery of The Lesson	Communication Skills	Classroom Management	Use of Assessment	Teacher-Student Relationship
Gender:					
Pearson Correlation	0.086	0.021	0.075	0.036	0.040
p-value	0.425	0.848	0.489	0.741	0.709
N	88	88	88	88	88
Length of Service:					
Pearson Correlation	0.110	0.009	0.125	0.152	0.160
p-value	0.307	0.937	0.246	0.157	0.135
N	88	88	88	88	88
Age:					
Pearson Correlation	0.180	0.128	0.229	0.222	0.221
p-value	0.093	0.233	0.032*	0.038*	0.038*
N	88	88	88	88	88
Specialization:					
Pearson Correlation	0.108	0.071	0.007	0.082	0.009
p-value	0.316	0.509	0.946	0.450	0.934
N	88	88	88	88	88

Note: * p < .05

The results show that only the respondents' age shows a significant correlation with instructional quality in the three areas, such as classroom management, use of assessment and student-teacher relationship implying that older teachers tend to manage classrooms better, able to utilize assessment tools more effectively, and build stronger student relationships compared to younger educators. On a different note, gender, length of service, and specialization do not significantly

correlate to instructional quality, which implies that regardless of gender, teaching experience, and field of expertise teachers perform similarly in terms of lesson mastery, communication, classroom management, assessment, and student engagement as perceived by the respondents. Continuous training and development should be provided to all teachers, regardless of demographics, to ensure high instructional quality across all areas.

TABLE 12. Significant Relationship Between Career Advancement and Instructional Quality among Technology and Livelihood Education Teachers

Career Advancement (IV)	Instructional Quality (DV)				
	Mastery of The Lesson	Communication Skills	Classroom Management	Use of Assessment	Teacher-Student Relationship
Knowledge:					
Pearson Correlation	0.612	0.606	0.667	0.645	0.646
p-value	0.000*	0.000*	0.000*	0.000*	0.000*
N	88	88	88	88	88
Competence:					
Pearson Correlation	0.655	0.643	0.698	0.618	0.775
p-value	0.000*	0.000*	0.000*	0.000*	0.000*
N	88	88	88	88	88
Emotional Intelligence:					
Pearson Correlation	0.764	0.541	0.719	0.722	0.655
p-value	0.000*	0.000*	0.000*	0.000*	0.000*
N	88	88	88	88	88
Collaboration:					
Pearson Correlation	0.744	0.664	0.722	0.675	0.662
p-value	0.000*	0.000*	0.000*	0.000*	0.000*
N	88	88	88	88	88
Confidence:					
Pearson Correlation	0.709	0.693	0.655	0.595	0.710
p-value	0.000*	0.000*	0.000*	0.000*	0.000*
N	88	88	88	88	88

Note: * p < .05

Significant Relationship Between Career Advancement and Instructional Quality among Technology and Livelihood Education Teachers

Data were treated statistically in Minitab 14 using Pearson's R. The significant findings are presented in the following table to test the relationship between the interactive teaching approach and learners' motivation.

Presented in Table 12 is the relationship between career advancement in terms of knowledge, competence, emotional intelligence, collaboration, and confidence, and instructional quality in five key areas: mastery of the lesson, communication skills, classroom management, use of assessment, and teacher-student relationships among technology and livelihood education teachers. The results include each relationship's Pearson correlation, p-values, and sample size (N=88).

As presented, a significant relationship exists between career advancement and instructional quality among Technology and Livelihood Education teachers. This implies that teachers with higher knowledge, who are more competent and have higher emotional intelligence, effectively manage their classrooms, have better lesson mastery and student engagement, and tend to build stronger relationships with students. Besides, teachers who actively and confidently collaborate with colleagues and external networks develop more substantial lesson planning, classroom management, and assessment strategies and build stronger relationships with students, significantly enhancing instructional quality across all dimensions.

IV. CONCLUSION AND RECOMMENDATIONS

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

The existence of a significant relationship between the demographic profile of the respondents and instructional quality, only between age and classroom management, use of assessment, and student-teacher relationship, therefore resulted in the partial acceptance of the null hypothesis. This means that teachers may have equal capabilities and abilities regardless of gender, years in service, and specialization. This implies a level of equality in inherent teaching potential across these demographic categories within the studied group of TLE teachers in the Division of San Pablo City.

A significant relationship between career advancement and instructional quality in all areas resulted in rejecting the null hypothesis. This strongly suggests that active participation in professional development programs has a comprehensive and positive effect on teachers' overall professional performance. This implies that engagement in opportunities for growth and learning is not limited to enhancing specific skills or knowledge domains but rather contributes to a holistic improvement in various facets of a teacher's effectiveness. The interconnectedness of career advancement initiatives with enhanced instructional practices across areas such as knowledge, competence, emotional intelligence, collaboration, confidence, lesson mastery, communication, classroom management, assessment utilization, and teacher-student

relationships underscore the significance of continuous professional learning for educators.

The following recommendations were formulated based on the results and conclusions posted in the study.

To substantially enhance teaching effectiveness, educational institutions may consider strategically investing in sustained and differentiated professional development programs that explicitly aim to cultivate teachers' content knowledge, pedagogical competence—including technology integration and differentiated instruction, and emotional intelligence. This should encompass specific training in self-awareness, empathy, conflict resolution, and collaborative practices through Professional Learning Communities and mentorship opportunities. Furthermore, it is essential to foster professional confidence by creating avenues for leadership and recognition. Schools may ensure that all teachers have equal opportunities for professional growth and instructional excellence regardless of demographic factors.

Schools may proactively ensure equitable access to high-quality professional growth opportunities and resources that support instructional excellence for all educators, irrespective of their gender, years of service, age, or specialization. This encompasses the implementation of transparent and inclusive criteria for participation in professional development, the provision of diverse learning pathways that offer targeted support for educators at various stages of their careers, and the cultivation of a school culture that values and encourages the professional development of every educator.

Future researchers are encouraged to extend this investigation by conducting longitudinal studies to examine the long-term impact of career advancement initiatives on instructional quality and student outcomes, including a broader focus on students' holistic development, which encompasses academic achievement, social-emotional well-being, and 21st-century skills. Subsequent research could also explore the mediating roles of school leadership, organizational culture, and available resources in the relationship between teacher career advancement and instructional effectiveness, potentially employing mixed methods approaches to gain deeper insights into these complex dynamics.

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