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Teachers' Proficiency as Influenced by Instructional Supervision and Information and Communication Technology Integration in Public Elementary Schools

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A R T I C L E I N F O

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A B S T R A C T

This study examined the impact of instructional supervision and ICT integration on teachers' proficiency in public elementary schools in Region XI, using a quantitative correlational design with 400 teacher respondents. Findings revealed very high levels of instructional supervision, ICT integration, and teacher proficiency, with significant but low-degree correlations among them. While instructional supervision showed practical significance, ICT integration had limited practical application. The study recommends developmental and supportive supervision that promotes pedagogical excellence, ethical leadership, and technology use, emphasizing the need for a comprehensive, interconnected professional development framework to enhance educational effectiveness.

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INTRODUCTION

The proficiency of teachers is important to acquire effective education. In relation, the instructional supervision is a technical assistance to augment in improving the teachers' teaching performance (Comminghud, Futulan & Cordevilla, 2020; Alkaabi & Almamari, 2020). Also, ICT integration structures classroom in a modern way because the digital competence of a teacher could bridge the gap and transforms instructional practices to enhance classroom instruction. However, the teacher's attitude, self-efficacy, digital competence are likely associated with ICT integration (Peng, Abdul & Hajar, 2023).

The teachers realized the common issues in providing high quality of education (Glanz (2015). These issues are directly connected to the performance of students. Such growth and development of teachers requires a framework designed to improve teaching competence (Beach & Reinhartz, 2014). Also, teachers must be sensitive to the individual differences of students by being student-centered and interactive (Schleicher, 2012). The result of the TIMSS and PISA manifested that the teachers are incapable to guarantee the success of their students. It's seems that these issues are kept to the outcome of students' success. It might be critical to identify these issues but it can be resolved once determined and verified.

One of the targets of instructional supervision is to assist teachers changing their behavior towards improved instructions (Ngipuo, 2015). In order to realize the identified objectives and the goal of the educational system, instructional supervision pursues to assure that the teachers demonstrate their obligations to the best of their capabilities (Marshall, 2013). Similarly, ICT integration aids teaching and learning process (Tikam, 2013). ICT can improve the quality of learning, increase productivity of teachers, enhance the accessibility of all the needed resources in the Internet and operate as a tool to close the digital divide between different socioeconomic classes of students while it enhances engagement of students (Naji, 2017).

Improving teachers' skills is an ongoing endeavor to improve instruction. Section 42 of DepEd Order No. In 2017, the Philippine Professional Standards for Teachers (PPST) were adopted and put into effect by the Department of Education through the Teacher Education Council (TEC). The concept of lifelong learning, which involves the continuous acquisition and development of knowledge, skills, and attitudes, underpins these standards. However, the curriculum must incorporate ICT (Ghavifekr, Afshari & Amla Salleh, 2015). While the study has the potential to be cited, enhancing the theoretical framework, offering more practical recommendations, and connecting the findings with current educational trends will strengthen its contribution to the field. With these improvements, the study could be a reliable reference for other researchers exploring the integration of ICT and instructional supervision in improving teacher proficiency.

This study is primarily anchored on pragmatism theory since the teacher is responsible with the learning environment where pupils have to face different problems and solve of those problems. Pragmatism views a teacher to offer problems and stimulates to find solutions of the problem. Also, this study

is supported with Social Learning Theory developed by Bandura to employ instructional supervision that could influence teachers' proficiency through observational learning, modeling, feedback and reinforcement (Shao et al., 2017). Lastly, It is further backed by Fred Davis' Technology Acceptance Model (TAM), which examines the utility and usability of technology in order to predict and explain why people would embrace and utilize it. TAM supports teachers using technology with its effects in terms of ICT integration.

Within this framework, by examining teacher competency, instructional supervision, regarding ICT integration in Davao Region public elementary schools, the current study aims to bridge the gap. Instructional supervision can make teachers more effective while ICT integration boost classroom instruction.

Harris & Hofer (2015), stress that successful ICT integration requires not only technology access but also a clear connection between technology and pedagogy. The study should engage with their findings to provide evidence for the limited application of ICT in classrooms, especially when teachers are not adequately prepared to integrate it meaningfully. However, Zhao et al. (2019) and Ertmer (2015) emphasize that ICT integration is not automatic; it requires careful planning, support, and teacher development to be effective. The study can extend this literature by showing how gaps in teacher preparation and infrastructure contribute to the limited practical use of ICT.

In light of this, the present study evaluates the degree of teachers' proficiency by employing ICT integration and the interventions made from conducting of instructional supervision. The outcome of this study is expected to offer valuable implication designing professional development programs highlighting the importance of instructional supervision and The goal of ICT integration is to raise educational standards.

In particular, this study sought for answers to the following questions in order to ascertain the Impact of Instructional Supervision and ICT Integration on Teachers' Proficiency: Practical Implications in Public Elementary Schools. Specifically, it sought to answer the following questions.

1) What is the level of instructional supervision, ICT integration, and teachers' proficiency?
2) What is the significant relationship of instructional supervision and ICT integration to teachers' proficiency?
3) What is the significant effect of instructional supervision and ICT integration to teacher's proficiency?

THEORETICAL REVIEW

Educational Institutions

May make use of the findings of this study to give educators and learners the chance to gain the information and abilities necessary to reach their greatest potential and contribute positively to society.

Administrators and School Leaders

Similarly, findings of this study will benefit administrators and school leaders to give teachers necessary assistance to improve their teaching

capability as well as ensure a smooth and stable implementation of the school system.

Policy and decision-makers

The policy and decision-makers may use the results of this study as basis in the formulation of policies, guidelines, and programs that would enhance teachers' competence in promoting positive impact to their job.

Academics and Researchers

Lastly, future scholars will find this work to be a useful resource for conducting related research of their own. They will find it difficult to duplicate the study or carry out the research using alternative approaches due to its shortcomings and other restrictions.

The ideas and information provided in this study can serve as a reference for future researchers and academics, and it may even serve as a springboard for exploring additional topics of interest.

Conceptual Framework

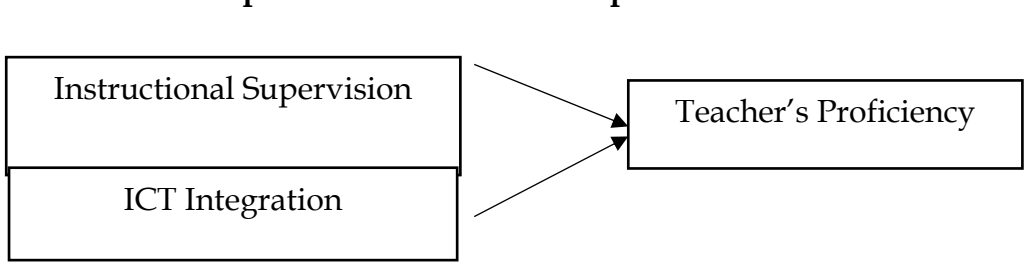
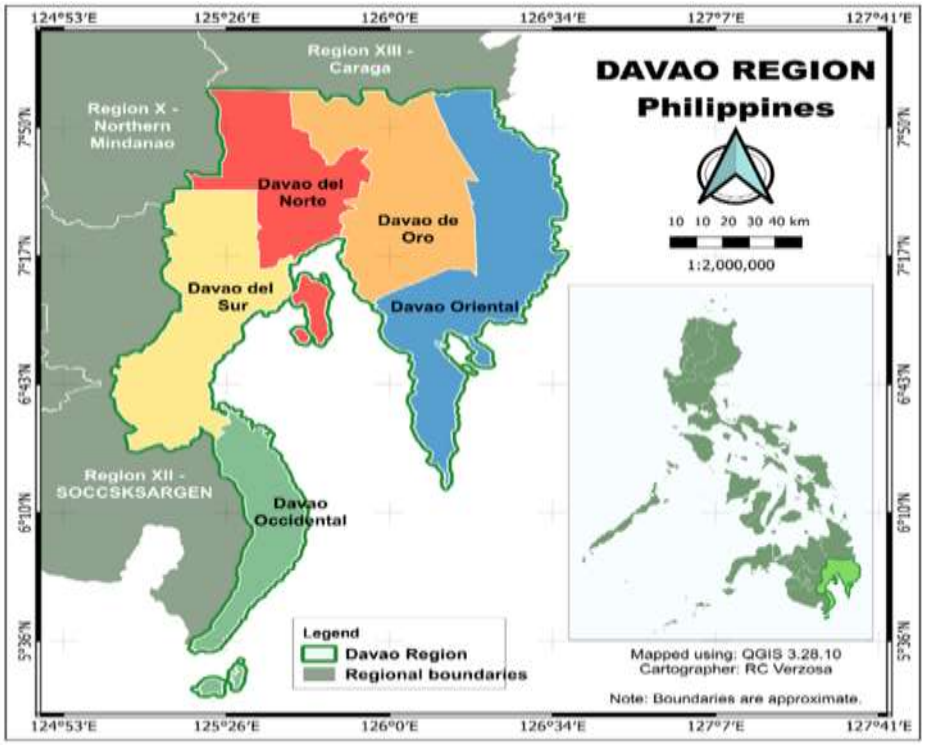


Figure 1. Conceptual Framework of the Study

METHODOLOGY

Study Area

The study was conducted in eleven (11) public elementary schools in Region XI, also known as the Davao area in southern Mindanao, where a number of primary schools have been identified. The following are Davao del Sur, Davao del Norte, Davao Oriental, Davao Occidental, and Davao de Oro. Eleven divisions have been identified: Mati City, Davao Oriental, Tagum City, Panabo City, Island Garden City of Samal, Digos City, Davao City, Davao de Oro, Davao Occidental, and Davao del Sur.



Map of Region XI – Davao Region

The integration of ICT and the effectiveness of instructional supervision in Region XI's public elementary schools are influenced by multiple factors, including local educational policies, regional digital infrastructure, teacher training programs, and cultural contexts. The interplay between these factors determined how successfully technology can be integrated into classrooms and how teachers developed proficiency in using ICT. To enhance the impact of ICT integration, Region XI needs a coordinated approach that involves investment in infrastructure, tailored professional development for teachers, and a commitment to equitable access to technology. Additionally, strong instructional supervision and community support can serve as catalysts for sustaining and expanding the use of ICT in education, ultimately improving teaching and learning outcomes for students in the region.

Respondents

The 400 primary school teachers of these designated divisions were the participants because they are employees of the organization and, in some way or another, have a shared institutional objective to be attained in the running of the schools. The number of participants per division is based on the population size of that division and is subject to universal sampling, which will be used to obtain the necessary number of respondents through random selection, thereby removing biases and guaranteeing that minorities of the population size will be fairly represented in this study.

To attain homogeneity, certain inclusion criteria implemented in determining the teacher respondents. The primary consideration of this study chose respondents who can provide information to achieve the purpose of this

study. Hence, only those full-time teachers who have been teaching in the public schools and have at least three years in service selected.

For the inclusion criteria, only those full time teachers who have been teaching in the public schools until present and at least three years of teaching experience were selected. More so, each division has teacher participants, and the representation of male and female participants also considered. There were changing of the participants if they cannot complete the answers in the questionnaire. For the exclusion, teachers who went abroad will not be part of the study. The researcher respect the decision of some schools' division when they refuse for the conduct of this research as part of ethics in research.

Survey Tool

Three modified research instruments were used to accomplish the goals of the current investigation. These research instruments were survey questionnaires on instructional supervision with 25 items, ICT integration with 30 items and teachers' proficiency with 57 items to determine how it contributes to teachers' proficiency and effectiveness against the teaching and learning gaps. The instruments were answered using the four points on the Likert scale. Minor modifications were made to fit the desired result of the investigation. These questionnaires were adapted from the different authors and formulated the items that are considered useful for this study.

Data Analysis

The information obtained from the survey surveys was encoded and kept confidential. The data were extensively examined using both descriptive and inferential statistical methods. Descriptive statistics such as the mean and standard deviation were computed for each component, ICT integration, and teachers' proficiency as assessed by teacher-participants in order to ascertain the level of instructional supervision. Additionally, Pearson correlation analyses were used to ascertain the connections between teachers' ability and ICT integration and instructional supervision. Structural Equation Modeling was used to investigate the effect of two variables to teachers' proficiency. All statistical analyses were conducted at a significance level of 0.05. This study examined the relationship between variables.

Ethical Considerations

To ensure that the research adhered to and established ethical criteria, Davao Oriental State University's University Research Ethics Board provided ethical clearance before data collection. Permission to conduct the study was granted by the Regional Director of the Department of Education's Davao Region's Regional Office, Region XI. The superintendents and heads of schools in the schools division were then promptly informed before to the survey. Also, informed consents were secured to all the teacher participants who volunteer themselves in participating the study. They were given guarantees that their answers would remain anonymous and that their name would be kept confidential. Teachers who participated in the study knew they could quit at any time without being held accountable. To ensure that the data were

appropriately maintained and used exclusively for this study, the right procedures were followed.

RESULTS

Levels of Instructional Supervision, ICT Integration and Teachers' Proficiency

The collaborative process to enhance instruction and education in schools is a great challenge among instructional supervisors, specially involving ICT integration which believed to be, would create a dynamic teaching environment and get pupils ready for the digital age. This challenge somehow affected teachers' proficiency to apply skills in a professional manner to support the method of teaching and learning. To examine the level of instructional supervision, ICT integration, and teachers' proficiency from Davao Region would have an implication on the recent status of educational management as well as the teaching and learning dynamics. The data gathered from survey is carefully analyzed and presented in summary form Table 1.

It can be observed from Table 1 that every corresponding indicator of instructional supervision, ICT integration, and teachers' proficiency is rated to the highest level of response scale, nearest to 4. Curriculum and planning, assessment and reporting, diversity of learners, learning environment, professional growth and development, community connections and professional engagement, and content knowledge and pedagogy are among the indicators of teachers' proficiency that have an average score that falls between 3.62 and 3.82. The average score for the reliability test for teachers' perceptions, the four indicators of ICT integration, the effectiveness of ICT integration for students, the instructors' perspectives on ICT integration, and the components of ICT integration effectiveness in teaching ranges from 3.32 to 3.69. Indicators of instructional supervision, teacher performance, guidance, and assistance receive ratings of 3.68, 3.72, and 3.63, respectively.

Table 1. The Level of Instructional Supervision, ICT Integration, and Teachers' Proficiency

Variable/Indicator	Mean	Std. Deviation	Level of Importance
Content Knowledge and Pedagogy	3.72	0.169	90.60%
Learning Environment	3.69	0.165	100.00%
Diversity of Learners	3.63	0.250	88.50%
Assessment and Reporting	3.62	0.222	70.90%
Curriculum and Planning	3.71	0.220	58.20%
Community Linkages and Professional Engagement	3.64	0.229	65.20%
Professional Growth and Development	3.82	0.157	66.40%
Teachers' Perception on ICT Integration	3.32	0.314	52.60%
Effectiveness of ICT Integration for Students	3.68	0.192	45.40%

Effectiveness Elements in ICT Integration in Teaching	3.63	0.268	100.00%
Reliability Test for Teachers' Perception	3.69	0.166	41.40%
Teachers' Guidance	3.68	0.204	88.40%
Teachers' Support	3.72	0.135	74.50%
Teachers' Performance	3.63	0.207	100.00%

This information would suggest that they have common perceptual cognition on such particular issues within their individual educational workplace. This claimed was supported by the individual ways of confirming and agreeing in such issues of which have a very small spread or deviation in individual response or rating. The standard deviate of corresponding to every indicator is less than one unit, meaning there is slight difference on teachers' rating to instructional supervision, ICT integration and teachers' proficiency. Furthermore, the most importance indicator of teachers' proficiency is the learning environment, for instructional supervision is the teachers' performance and lastly, one important measure of ICT integration is the efficacy of the elements used in teaching.

Table 2. Level of Instructional Supervision

Teachers' Guidance	Mean	SD	Description
1. directs teachers of instructional supervision approaches	3.78	.480	Very High
2. advices teachers to use active learning in the classroom	3.76	.431	Very High
3. frequently visits classrooms for instructional supervision purposes	3.64	.526	Very High
4. uses instructional data to focus attention on improving the curriculum or instruction	3.68	.472	Very High
5. assists teachers in lesson planning	3.70	.512	Very High
6. assists teachers in developing or selecting instructional materials	3.69	.515	Very High
7. spreads new teaching methodologies among teachers	3.59	.590	Very High
8. facilitates experience sharing programs between teachers	3.61	.547	Very High
Category Mean	3.68	.204	Very High
Teachers' Support			
1. listens and responds to teachers concerns	3.69	.462	Very High
2. provides opportunities for teachers to share strategies	3.69	.516	Very High
3. encourages participation in professional communities	3.67	.470	Very High
4. conducts meaningful evaluations	3.76	.429	Very High
5. encourages school self-evaluation on instructional matters	3.82	.385	Very High
6. designs appropriate intervention for	3.52	.515	Very High

teachers' methods and techniques			
7. aids teachers in doing action research	3.91	.290	Very High
Category Mean	3.72	.135	Very High
Teachers' Performance			
1. reviews student work products when evaluating classroom instruction	3.78	.480	Very High
2. conducts informal observations in classrooms on a regular basis	3.52	.515	Very High
3. points out specific strengths in teacher's instructional practices in post-observation feedback	3.45	.623	Very High
4. assess the effectiveness of instruction	3.75	.470	Very High
5. provides evidence of growth and valuable data of teachers	3.55	.503	Very High
6. explains the purpose and goals of the evaluation	3.80	.438	Very High
7. gives the right comments for teacher's evaluation	3.77	.420	Very High
Category Mean	3.68	.207	Very High
Overall Mean	3.69	.182	Very High

Teachers' Support

The category mean as shown in the table above in terms of teachers' support is 3.72, which is labeled as very high and it means that the teachers' support is highly evident. The items in this category have means ranging from 3.91 to 3.52, which is indicative of the second domain of the level of instructional supervision. With the statement "Aids teachers in doing action research," item number seven had the highest mean of 3.91, which is very high, while item number six, which states that "designs appropriate intervention for teachers' methods and techniques," received the lowest mean, which is also quite high. In other words, it is very clear that teachers are supporting their students, as shown by the teacher participants.
Teachers' Performance.

Level of ICT Integration

The total mean of the instructors' evaluation of their ICT integration, as displayed in table 1.2, is 3.58, which is regarded as exceptionally high. This suggests that there is a visible incorporation of ICT by teachers. Additionally, the standard deviation of.235 suggests that the instructors' assessments of ICT integration vary little.

Teachers' Perception on ICT Integration

The data reveals a category mean of 3.32 for teachers' perceptions of ICT integration, which is regarded as extremely high and indicates that instructors highly agreed with these perceptions. For the first domain of the level of ICT

integration, it is noted that the means of the items in this category fall between 3.21 and 3.95, or high to extremely high.

Effectiveness of ICT Integration for Students

Teachers highly agreed with the category mean of 3.68, which is classified as very high, regarding the efficiency of ICT integration for students. The products in this category are believed to have very high means in the second domain of the ICT integration level, which ranges from 3.49 to 3.84. The statement "ICT helps to broaden students' knowledge paradigm" on item number six had the lowest mean (3.49), while the statement "ICT allows students to be more creative and imaginative" on item number one had the highest mean (3.84). The teacher participants were therefore convinced that integrating ICT into the classroom is beneficial for children.

Table 3. Level of ICT Integration

Teachers' Perception on ICT Integration	Mean	SD	Description
1. I feel confident learning new computer skills.	3.78	.460	Very High
2. I find it easier to teach by using ICT.	3.71	.462	Very High
3. I am aware of the great opportunities that ICT offers for effective teaching	3.68	.484	Very High
4. I think that ICT supported teaching makes learning more effective.	3.38	.817	Very High
5. The use of ICT helps teachers to improve teaching with more updated materials.	3.38	.691	Very High
6. I think the use of ICT improves the quality of teaching.	3.21	.797	High
7. I think the use of ICT helps to prepare teaching resources and materials	3.82	.401	Very High
8. The use of ICT enables the students' to be more active and engaging in the lesson.	3.95	.250	Very High
Category Mean	3.32	.314	Very High
Effectiveness of ICT Integration for Students			
1. ICT allows students' to be more creative and imaginative.	3.84	.372	Very High
2. The use of ICT helps students to find related knowledge and information for learning.	3.68	.493	Very High
3. The use of ICT encourages students to communicate more with their classmates	3.71	.467	Very High
4. The use of ICT increases students' confidence to participate actively in the class.	3.85	.465	Very High
5. Students learn more effectively with the use of ICT.	3.52	.583	Very High
6. The use of ICT helps to broaden students'	3.49	.596	Very High

knowledge paradigm.			
7. The use of ICT helps to improve students' ability specifically in reading, writing.	3.77	.429	Very High
8. The use of ICT enables students to express their ideas and thoughts better.	3.58	.515	Very High
Category Mean	3.68	.192	Very High
Effectiveness Elements in ICT Integration in Teaching			
1. The ICT facilities in my school are well-functioning and can be used.	3.74	.461	Very High
2. Little access to ICT prevents me from using it in teaching.	3.60	1.554	Very High
3. Lack of supports from the school top management discourages me from using ICT.	3.67	.508	Very High
4. Teaching time are not enough for me to use the ICT for teaching and learning purposes.	3.71	.564	Very High
5. All ICT tools in my school go to waste and less used by teachers.	3.54	.711	Very High
6. Teachers are given more time to learn and be comfortable with the use of ICT in teaching.	3.51	.617	Very High
7. There is computer lab in my school in which I can bring students there to watch educational videos.	3.55	.658	Very High
8. Teachers are given the freedom to design their own teaching with the help from the ICT.	3.64	.567	Very High
Category Mean	3.63	.268	Very High
Reliability Test for Teachers' Perception			
1. I find it easier to teach English language by using ICT.	3.56	.654	Very High
2. I am aware of the great opportunities that ICT offers for effective teaching.	3.90	.335	Very High
3. ICT supported teaching makes learning more effective.	3.68	.500	Very High
4. The use of ICT helps teachers to improve teaching with more updated materials	3.64	.485	Very High
5. The use of ICT improves the quality of teaching.	3.71	.469	Very High
6. The use of ICT helps to prepare teaching resources and materials.	3.64	.492	Very High
Category Mean	3.69	.166	Very High
Overall Mean	3.58	.235	Very High

Effectiveness Elements in ICT Integration in Teaching. For the effectiveness elements in ICT integration in teaching, the table displays very high category mean of 3.63, which means that the teacher strongly agreed with the effectiveness elements in ICT integration in teaching. The table indicates that the means of the items in the third domain of the ICT integration level range from 3.74 to 3.51, which is considered to be very high.

Reliability Test for Teachers' Perception. Regarding the reliability test for teachers' perception, the instructors indicated significant agreement with it, as seen by their endorsement of a very high category mean of 3.69. The table shows that the means of the elements in the fourth and final domain of the ICT integration level range from 3.56 to 3.90, which is referred to as extremely high.

Level of Teachers' Proficiency

With an overall mean of 3.69, which is characterized as very high, the instructors' competency level as evaluated by the teachers and shown in table 1.3 is clearly visible. Furthermore, its standard deviation of.208 indicates that there is a small variation in the teachers' ratings of their own competency.

Table 4. Level of Teachers' Proficiency

Content Knowledge and Pedagogy	Mean	SD	Description
1. the content knowledge and its application within and across curriculum areas.	3.93	.541	Very High
2. research-based knowledge and principles of teaching and learning	3.72	.566	Very High
3. conducting and writing research papers	3.73	.411	Very High
4. the strategies for developing critical and creative thinking, as well as other higher order thinking skills	3.79	.506	Very High
5. Mother Tongue, Filipino and English in teaching and learning	3.70	.463	Very High
6. Classroom communication strategies	3.69	.607	Very High
7. on developing contextualized and localized IM's	3.61	.575	Very High
8. using ICT in teaching all learning areas	3.60	.459	Very High
Category Mean	3.72	.169	Very High
Learning Environment			
1. learner safety and security	3.70	.401	Very High
2. fair learning environment	3.80	.494	Very High
3. management of classroom structure and activities	3.58	.454	Very High
4. the support for learner participation	3.71	.472	Very High
5. maintaining learners' proper discipline in the class	3.67	.533	Very High
6. on increasing learners' participation through motivational activities	3.66	.436	Very High
7. handling learners' misbehavior	3.75	.589	Very High

8. building a harmonious relationship among learners	3.60	.635	Very High
Category Mean	3.69	.165	Very High
Diversity of Learners			
1. learners' linguistic, cultural, socio-economic and religious background	3.61	.580	Very High
2. learners with disabilities, giftedness, and talents	3.70	.674	Very High
3. learners in difficult circumstances	3.46	.542	Very High
4. learners from indigenous groups	3.61	.513	Very High
5. using different teaching strategies responsive to varied learners	3.67	.690	Very High
6. giving the right approach for learners with giftedness and difficulties	3.47	.505	Very High
7. handling learners with special needs	3.69	.454	Very High
8. developing appropriate strategies inclusive for indigenous learners	3.72	.455	Very High
9. handling learners in difficult circumstances like a disaster, chronic illness, etc.	3.71	.569	Very High
Category Mean	3.63	.250	Very High
Assessment and Reporting			
1. on the design, selection, organization, and utilization of assessment strategies	3.58	.747	Very High
2. monitoring and evaluation of learner progress and achievement to key stakeholders	3.56	.465	Very High
3. feedback to improve learning	3.69	.466	Very High
4. communication of learner needs, progress and achievement to key stakeholders	3.68	.564	Very High
5. the use assessment data to enhance teaching and learning practices and programs	3.61	.446	Very High
6. on using a variety of assessment tools appropriate for varied learners	3.73	.633	Very High
7. performing test validity, reliability, and item analysis for quality assessment	3.52	.650	Very High
8. monitoring and evaluating students' progress and achievement	3.66	.649	Very High
9. on using assessment data to improve classroom practice and learning	3.52	.519	Very High
Category Mean	3.62	.222	Very High
Curriculum and Planning			
1. Planning and management of teaching-learning process	3.75	.533	Very High
2. The learning outcomes aligned with	3.74	.564	Very High

learning competencies			
3. The relevance and responsiveness of learning programs	3.62	.574	Very High
4. professional collaboration to enrich teaching practice	3.58	.559	Very High
5. teaching and learning resources including ICT	3.65	.461	Very High
6. on using a variety of resources such as technology to attain the learning objectives	3.70	.279	Very High
7. on collaborating with other professionals to enrich knowledge and teaching practice	3.92	.477	Very High
8. on aligning teaching methods and assessment tools to learning objectives	3.65	.429	Very High
9. on developing effective lesson plans	3.79	.450	Very High
Category Mean	3.71	.220	Very High
Community Linkages and Professional Development			
	3.72	.594	Very High
1. the establishment of learning environments that are responsive to community contexts	3.55	.238	Very High
2. the engagement of parents and the wider school community in the educative process	3.94	.671	Very High
3. professional ethics	3.48	.423	Very High
4. involving parents in their child's education	3.77	.549	Very High
5. linking with government agencies to promote learners welfare	3.76	.656	Very High
6. contextualizing the lessons in the being taught	3.48	.699	Very High
7. learning best practices for a good relationship among school, home and community	3.39	.448	Very High
8. learning the Code of Ethics for Professional Teachers	3.64	.229	Very High
Category Mean			
Professional Growth and Development			
1. professional links with colleagues	3.76	.373	Very High
2. professional reflection and learning to improve practice	3.86	.300	Very High
3. professional development goals	3.90	.410	Very High
4. encouraging others to work professionally	3.79	.316	Very High
5. guiding teachers enough resources in teaching	3.89	.467	Very High
6. developing my learning capability in engaging professional development	3.72	.455	Very High

Category Mean	3.82	.157	Very High
Overall Mean	3.69	.208	Very High

Assessment and Reporting

The extremely high category mean of 3.62 in assessment and reporting indicates that teachers strongly agreed with the findings. The means of the items in this category range from 3.73 to 3.52, which is considered to be quite high for the fourth domain of the teachers' competency level.

Curriculum and Planning

Teachers strongly agreed with the curriculum and planning, as evidenced by the very high category mean of 3.71 for curriculum and planning. The means of the items in this category, which span from 3.92 to 3.58, are regarded as extremely high for the fifth domain of the teachers' proficiency level.

Community Linkages and Professional Development

A very high category mean of 3.64 for professional growth and community links indicates that instructors highly agreed with these concepts. The means of the items in this category range from 3.94 to 3.39, which is considered very high for the sixth domain of the teachers' competency level.
Professional Growth and Development.

Teachers strongly agreed with this component of professional development, as seen by the extremely high category mean of 3.82 for professional growth and development. For the seventh and last domain of the degree of teachers' proficiency, it is observed that the means of the items in this category range from 3.90 to 3.72, which is regarded as fairly high.

Significant Relationship of Instructional Supervision and ICT Integration to Teachers' Proficiency

The two independent variables, the instructional supervision and ICT integration are carefully analyzed to determine the direction between them with the teachers' proficiency. This is done to assess the likelihood that a relationship is causal and it also important factor in establishing the cause and effect relationship.

Table 5. The Correlation Between Instructional Supervision, ICT Integration and Teachers' Proficiency

Variable	1	2	3
1. Teachers' Proficiency			
2. ICT Integration	.182**		
3. Instructional Supervision	0.001	-0.02	1

**. Correlation is significant at the 0.01 level (1-tailed).

Significant Effect of Instructional Supervision and ICT Integration to Teacher's Proficiency

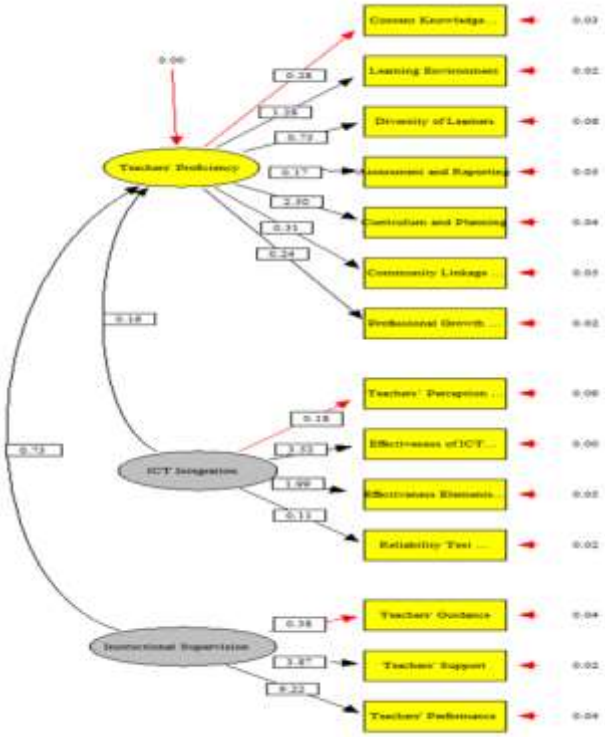


Figure 3. Structural Equation Model on Significant Effect of Instructional Supervision and ICT Integration to Teacher's Proficiency

The significant effect of instructional supervision and ICT integration toward teachers' proficiency was analyzed considering all the corresponding indicators of the variable mentioned above. The structural equation modeling was used to account the factor loading of each indicator and quantify the corresponding effect sizes accordingly. The Figure 1 was provided to visualize the complexity of the interactions among indicators and variables being studied. It can be observed from Figure 1 that the instructional supervision's indicators have the corresponding factor loadings. The factor loading teachers' guidance, teachers' supports, and teachers' performance are 0.38, 3.87, and 9.22 respectively. While the 0.18, 3.52, 1.99, and 0.11 are factor loadings of the ICT integration such as teachers' perception on ICT integration, effectiveness of ICT integration for students, effectiveness elements in ICT integration in teaching, and reliability test for teachers' perception respectively. These factor loadings of corresponding instructional supervision's and ICT integration's indicators generated an effect sizes such as 0.73 and 0.16 towards teachers' proficiency.

DISCUSSION

Level of Instructional Supervision

The results of the study discovered that the level of instructional supervision is very high. In particular, this implies that the level of teachers' guidance, teachers' support and teachers' performance are all very high.

Furthermore, The advice, support, and performance of instructors as indicators are at the heart of the conversation over the degree of monitoring of

instruction. According to the study's findings, there is a very high degree of instructional oversight. In particular, this implies that the level of teachers' guidance, teachers' support and teachers' performance are all very high. Thus, the teachers are highly evident with teachers' guidance, teachers' support and teachers' performance in the field. The teachers' guidance, teachers' support and teachers' performance lead to better outcome of the students' learning observed in enhanced academic performance and acquisition of learning from the teachers. This finding conform to the research study conducted by Rizada (2024) which found that instructional supervision offer guidance to teachers particularly on the appropriate teaching methods to the needs of the students and how to find and utilize available instructional materials.

Level of ICT integration

The primary subjects of discussion on the degree of ICT integration are teachers' views of ICT integration, the effectiveness of ICT integration for students, the usefulness of ICT integration for teaching, and reliability tests for teachers' perceptions as indicators. The study's findings showed that there is a very high degree of ICT integration. As a result, the teachers' perceptions of ICT integration, its efficacy for students, its components of effectiveness in teaching, and its reliability test have all been well agreed with by the instructors. The teachers integrate ICT offer a wide scope of the possibilities for student engagement, innovative pedagogical practices, effective and flexible classroom management and efficient assessment of practices. This finding corroborates with the study of Roble et al. (2019) affirmed that the integration of ICT has a strong influence in classroom management and student behavior. Teachers commented that with technology, students were interested in class participation and had stimulated motivation. ICT integration improved teachers' communication with their students and assisted collaborative learning in students' peer learning.

Level of Teachers' Proficiency

The indicators used to determine the level of teachers' proficiency include content understanding and pedagogy, learning environment, diversity of learners, curriculum and planning, assessment and reporting, community linkages, professional development, and professional growth and development. The results of the study demonstrated the high level of proficiency by teachers. The learning environment, student diversity, curriculum and preparation, assessment and reporting, professional development, professional growth and development, and topic comprehension and pedagogy have all received high evaluations from the teachers. In the Philippines, teacher quality is assessed using the Philippine Professional Standards for Teachers, which specify the standards for teachers' increasing levels of practice, expertise, and professional involvement. Simultaneously, the standards consider the expanding expertise of educators and apply it in a more intricate manner to a wider range of teachers' skills (DO 42, s. 2017).

In addition, facilitating learning for students is the primary goal of teaching. The instructor is the most important of these three resources:

instructional, social, and practical. As a practical resource, the teacher can help the students and provide the accessible learning materials. Additionally, as a pedagogical resource, the instructor offers a variety of learning activities that prioritize communication between the teacher and students. Lastly, the teacher as a social resource discusses about social concerns that occur during the discussion and emphasize in classroom instruction (Skog, Pettersson & From, 2024). Therefore, teachers' proficiency was manifested in teaching.

CONCLUSIONS AND RECOMMENDATIONS

The level of instructional supervision is very high. This means that teachers' guidance, teachers' support and teachers' performance are highly evident. Hence, instructional supervision leads better outcome of the students' learning observed in enhanced academic performance and acquisition of learning from the teachers. Also, the level of ICT integration is very high. This indicates that the teachers have strongly agreed with teachers' perception on ICT integration, effectiveness of ICT integration for students, effectiveness elements in ICT integration in teaching and reliability test for teachers' perception. Thus, the teachers integrate ICT offer a wide scope of the possibilities for student engagement, innovative pedagogical practices, effective and flexible classroom management and efficient assessment of practices. Finally, teachers have a very high degree of proficiency. This suggests that the teachers have a strong agreement with the following: curriculum and planning, assessment and reporting, variety of learners, learning environment, professional development, professional growth and development, and topic knowledge and pedagogy. This indicates that teachers adhere to the Philippine Professional Standards for Teachers in order to be guided by the standards as they are explained to raise professional involvement, practice, and knowledge levels. Additionally, it enables teachers to apply their growing expertise across a wider and more complex spectrum of their proficiency as sophistication increases (DO 42, s. 2017). With regards to the significant relationship of instructional supervision and ICT integration to teachers' proficiency, the results showed that there is direct of correlation between instructional supervision and teachers' proficiency and it is positive, the same direct of correlation occurred between ICT integration and teachers' proficiency.

The findings of this study highlight the significant role that instructional supervision plays in improving teacher proficiency, particularly in the context of public elementary schools in Region XI. While ICT integration holds potential for enhancing classroom learning, its impact is often hindered by limited infrastructure, insufficient teacher training, and access issues in many rural schools. Instructional supervision, on the other hand, provides more immediate, personalized support, enabling teachers to enhance their teaching practices and address challenges quickly.

To leverage the benefits of both approaches, school heads and policymakers must prioritize the integration of instructional supervision with ICT initiatives. School heads should ensure that supervisors have sufficient time and resources to provide regular, actionable feedback to teachers. Additionally,

policymakers must invest in infrastructure improvements and targeted professional development to ensure that ICT tools are not just available, but effectively used in the classroom.

Overcoming the barriers to ICT integration requires a multi-faceted approach: improving digital infrastructure, offering hands-on training for teachers, and ensuring that equitable access to technology is prioritized. Blended learning models could be a practical solution for gradually incorporating ICT into schools with limited resources.

By aligning instructional supervision and ICT integration as complementary strategies, Region XI's schools can move toward fostering a more effective teaching environment that enhances teacher proficiency and ultimately improves student outcomes.

FURTHER STUDY

Every research is subject to limitations; thus, you can explain them here and briefly provide suggestions to further investigations.

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