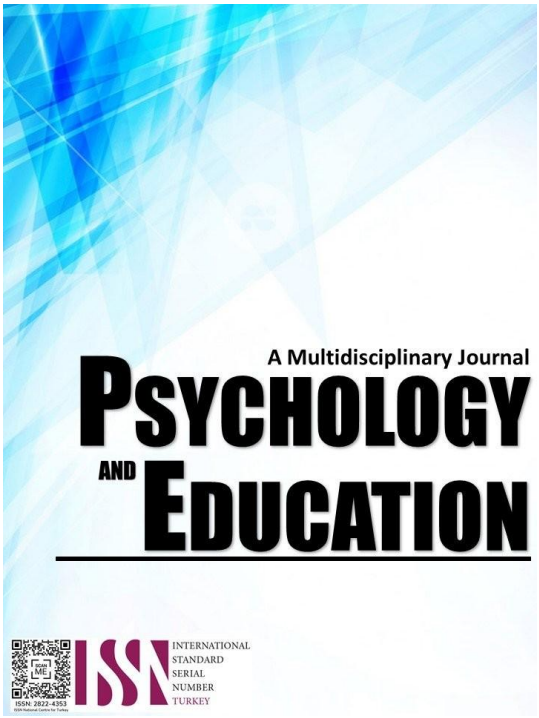
INVESTIGATING THE RELATIONSHIP BETWEEN INSTITUTIONAL SUPPORT, SELF-EFFICACY, AND INSTRUCTIONAL COMPETENCE AMONG ICT TEACHERS



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Research Article

Investigating the Relationship Between Institutional Support, Self-Efficacy, and Instructional Competence Among ICT Teachers

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Abstract

This study investigated the relationships between Institutional Support, Self-Efficacy, and ICT Teachers' Competence among public high school educators in East District 2, Cagayan de Oro City Division, for the 2025-2026 school year. Employing a descriptive-correlational research design, the study utilized a complete enumeration of 214 ICT teachers across six secondary institutions. Data were gathered using adapted self-report questionnaires and analyzed using weighted means, standard deviations, and the Pearson Product-Moment Correlation Coefficient. The findings revealed a workforce primarily composed of early-career professionals, holding Teacher 1 positions and having less than six years of experience. Despite their junior status, respondents reported "Very High" levels across all primary variables: Institutional Support, Self-Efficacy, and Instructional Competence. While teachers demonstrated exceptional proficiency in planning and integrating technology, a "confidence-usage gap" was identified; indicators for technical troubleshooting and infrastructure resources received the lowest relative scores, suggesting that physical assets and technical resilience lag behind pedagogical intent. Correlational analysis established significant positive relationships between Institutional Support and Competence and between Self-Efficacy and Competence. The overall synergistic effect was also significant, validating Bandura's Triadic Reciprocal Causality. The study concludes that ICT competence is a dynamic outcome of both environmental support and internal belief systems. Recommendations include modernizing ICT laboratories, implementing "Technical Resilience" training modules for early-career teachers, and establishing peer-mentorship models to bridge the gap between digital use and technical troubleshooting.

Keywords: *ICT teachers' competence, institutional support, self-efficacy, institutional competence*

Introduction

The integration of Information and Communication Technology (ICT) into education has become a defining feature of contemporary pedagogy, reshaping teaching and learning processes across diverse educational contexts. As digital tools and platforms continue to evolve, educational systems are increasingly expected to cultivate technologically literate and innovative learners. In this landscape, ICT teachers play a pivotal role in facilitating meaningful technology integration. However, the effectiveness of this integration is not solely dependent on the availability of tools, but also on the competencies and confidence of teachers who implement them.

One of the key determinants of successful ICT integration is the level of institutional support provided to teachers. Institutional support encompasses access to adequate infrastructure, reliable internet connectivity, updated hardware and software, technical assistance, and sustained professional development opportunities. It also includes administrative encouragement and the presence of a collaborative culture that fosters innovation. When these forms of support are present, teachers are more likely to experiment with new technologies, refine their pedagogical strategies, and sustain the integration of ICT in meaningful ways.

Conversely, insufficient institutional support often acts as a barrier to effective technology integration. Teachers who lack access to necessary resources or encounter persistent technical issues may experience frustration, reduced motivation, and eventual disengagement from ICT-based teaching practices. Such limitations can lead to the underutilization of available technologies and hinder efforts to modernize classroom instruction. As identified in earlier studies, these external constraints—commonly referred to as first-order barriers—can significantly impede the successful adoption of ICT in education.

In addition to external factors, teachers' internal beliefs about their capabilities, particularly their sense of self-efficacy, play a crucial role in shaping their instructional practices. Self-efficacy, as conceptualized by Bandura, refers to an individual's belief in their ability to organize and execute actions required to achieve specific outcomes. For ICT teachers, this includes confidence in learning new technologies, designing digital learning experiences, managing technical challenges, and adapting to continuous technological changes. Teachers with high self-efficacy are more likely to demonstrate resilience, persistence, and openness to innovation.

On the other hand, teachers with low self-efficacy may struggle to integrate ICT effectively, even when adequate resources are available. They may experience anxiety when confronted with unfamiliar technologies, leading to avoidance behaviors and a reliance on traditional teaching methods. This highlights that access to technology alone is insufficient; teachers must also possess the confidence and skills necessary to utilize these tools effectively. Thus, self-efficacy functions as a critical internal driver of teacher performance in technology-enhanced learning environments.

Emerging literature suggests that institutional support and self-efficacy are not independent factors but are dynamically interconnected. A supportive institutional environment can enhance teachers' self-efficacy by providing opportunities for skill development, positive reinforcement, and collaborative learning. Conversely, teachers with strong self-efficacy are more likely to maximize available

institutional resources and actively seek professional growth. This reciprocal relationship underscores the importance of aligning both external support systems and internal psychological readiness to achieve optimal teaching outcomes.

Given the growing reliance on digital education, particularly in contexts such as the Philippines, understanding the combined influence of institutional support and self-efficacy on ICT teachers is essential. Examining how these factors interact provides valuable insights for policymakers, school leaders, and teacher education institutions in designing targeted interventions and support mechanisms. Ultimately, fostering both robust institutional support and high teacher self-efficacy is critical for developing a competent and adaptable ICT teaching workforce capable of preparing learners for the demands of the digital age.

Research Questions

This study was conducted to examine the Institutional Support and Self-Efficacy on ICT Teachers' Competence in selected public high institutions in East District 2, Cagayan de Oro City Division, for the Institutional Year 2025-2026. Specifically, this study aimed to address the following questions:

1. What is the level of Institutional Support provided to ICT teachers in terms of professional development, administrative support, technical assistance, and a conducive work environment?
2. What is the level of self-efficacy of ICTY teachers in using ICT tools in terms of integrating technology in instruction, troubleshooting, technical problems, and adapting to emerging technologies?
3. What is the level of institutional competence of ICT teachers in planning, delivering, and assessing ICT-integrated lessons?
4. Is there a significant relationship between institutional support and the instructional competence of ICT teachers?
5. Is there a significant relationship between ICT teachers' self-efficacy and their instructional competence?

Literature Review

ICT Teachers' Competence

ICT teacher competence remains a dynamic and crucial area of study in the digital age. Beyond basic technical proficiency, it now encompasses the ability to leverage emerging technologies, foster digital citizenship, and adapt pedagogical approaches to enhance learning in diverse digital environments (UNESCO, 2019). Recent research continues to underscore the multifaceted nature of this competence.

A study by Villegas and Buquia (2023) in the Philippines, for instance, assessed teachers' competence in ICT and found high levels of competency, particularly in basic applications, but also highlighted areas needing improvement, such as managing computer rooms and conducting online assessments. This indicates that while foundational skills are present, more advanced and integrated applications of ICT in teaching still require attention. Similarly, research in Masbate revealed that while teachers were competent in basic browsing and data filtering, weaknesses existed in evaluating information, collaborative online practices, and problem-solving with ICT tools. This emphasizes the need for continuous professional development that moves beyond rudimentary skills towards higher-order digital literacies.

The evolving landscape of education, accelerated by recent global events, further solidifies the importance of highly competent ICT teachers. A study on elementary mathematics teachers in the Philippines confirmed that limited access to resources and poor internet connectivity significantly hinder ICT integration, even among teachers with assessed competence. This highlights that competence alone is insufficient without the enabling environment. The "Matatag: Bansang Makabata, Batang Makabansa" agenda by the Philippine Department of Education (DepEd) (DepEd, 2024, as cited in Villegas & Buquia, 2023) further emphasizes the need for ICT-literate teachers to produce 21st-century learners, underscoring the ongoing national priority for developing robust ICT teacher competence.

Institutional Support

Institutional support is consistently identified as a critical determinant of successful ICT integration and, consequently, teachers' ICT competence. This support is multifaceted and includes: Availability of ICT Infrastructure: Modern and reliable hardware, robust internet connectivity, and up-to-date software are fundamental. Both confirm that inadequate internet connectivity and outdated equipment remain significant barriers to effective ICT integration in Philippine institutions, directly impacting teachers' ability to utilize their skills. Studies like that by Bituin Dorado & Alvar Ortega-Dela Cruz (2024) further emphasize how technological advancements have enabled widespread access to educational resources, making adequate infrastructure even more crucial.

Funding for Professional Development: Ongoing and relevant training programs are essential to keep teachers' ICT skills current and to foster pedagogical approaches that effectively integrate technology. Palines et al. (2025) found that teachers who participate in technology-enhanced professional development have more confidence and are more effective in using ICT in their teaching practices, which recommends professional development programs should address gaps in resource availability and enhance ICT skills.

Administrative and Technical Support: Strong leadership that champions ICT integration, provides clear policies, and ensures readily available technical assistance is vital. The PubMed identifier points to a recent study (likely indexed in late 2024 or early 2025), which highlighted that "Institutional support moderates the strength of the relationship between ICT competence and attitude towards digital

use in teaching." This indicates the significant role of administrative and technical backing in creating a conducive environment for teachers to apply and develop their ICT skills. The importance of strategic planning and resource allocation by Institutional administrators is paramount.

Conducive Work Environment

An institutional culture that encourages collaboration, experimentation, and shared learning among teachers regarding ICT use fosters a positive environment for competence development. This also includes psychological support to reduce "technostress" (Lumanas & Japos, 2025). Recent literature strongly reaffirms the direct positive relationship between comprehensive institutional support and teachers' ICT competence. When institutions provide the necessary resources, training, and encouragement, teachers are better equipped to develop and apply their ICT skills effectively (Villanueva et al., 2026).

Self-Efficacy

Teacher self-efficacy, particularly in the context of technology, is a powerful predictor of successful ICT integration and competence. It refers to a teacher's belief in their capability to effectively perform tasks related to ICT, including confidence in using various ICT tools, integrating ICT into teaching, troubleshooting technical issues, and adapting to new technologies.

Recent studies continue to emphasize the centrality of self-efficacy. Gomez and Gardose (2025), in a study in Davao City, Philippines, found a high level of self-efficacy among teachers, along with strong ICT skills, and identified a strong positive correlation between these variables. This suggests that confidence in using ICT is closely tied to actual skill levels. Pajulas and Macabirit (2026), focusing on Northern Mindanao educators, reinforce the principle that an increase in digital literacy improves digital competence and digital self-efficacy.

Furthermore, a systematic review by Bagsit (2025) highlights that "teachers' self-efficacy was the central role of technology integration in teaching and learning," with factors like ease of use and usefulness impacting self-efficacy. This underscores that practical experiences and perceived benefits of ICT significantly shape a teacher's confidence. Teachers with higher self-efficacy are more likely to exhibit perseverance, determination, and less stress when facing technological challenges.

Relationships between Institutional Support, Self-Efficacy, and ICT Teachers' Competence

The interconnectedness of these variables is a key focus of contemporary research, moving beyond simple direct relationships to explore mediating and moderating effects.

Direct Relationships: The direct positive link is well-established. When institutions provide adequate infrastructure, continuous professional development, and administrative assistance, teachers acquire and refine their ICT skills (Villanueva et al., 2026).

Self-Efficacy and ICT Teachers' Competence: A teacher's confidence directly translates into their willingness to engage with technology. High self-efficacy is a driving force behind proactive skill development (Gomez & Gardose, 2025; Bagsit, 2025).

Mediating Relationship: Self-Efficacy as a Mediator

Recent studies provide compelling evidence for the mediating role of self-efficacy. Institutional support can indirectly influence ICT teachers' competence by first impacting their self-efficacy. Gomez and Gardose (2025) explicitly found that "self-efficacy partially mediates the relationship between teachers' ICT skills and student engagement."

Similarly, Dandoy and Gaje (2026) found that professional self-efficacy mediates the relationships between data use and technology integration. This implies that institutional support, by providing access to tools and training, increases a teacher's technology use self-efficacy, which in turn leads to their actual use and competence. Lumanas (2025), in a study on teachers in Northern Mindanao, found that "teachers' techno-efficacy mediates the positive relationship between ICT competence and attitude."

Furthermore, a study on pre-service teachers by Abrenilla et al. (2025) indicated that generative AI technology and self-efficacy play a "chain mediating role between institutional support and instructional design." These studies reinforce Bandura's (1997) Social Cognitive Theory, where supportive environments enhance self-efficacy, motivating individuals to master new challenges.

Moderating Relationship: Institutional Support as a Moderator

The moderating effect of institutional support is an area with emerging evidence. This hypothesis posits that the level of support can strengthen or weaken the impact of self-efficacy on competence. Lumanas (2025) directly investigated this, stating that "institutional support moderates the strength of the relationship between ICT competence and attitude towards digital use."

In a low-support environment, high self-efficacy might be frustrated by a lack of resources or technical issues. A teacher might feel confident, but without the necessary tools, their ability to demonstrate competence would be constrained. This concept is supported by Pajulas (2026), which highlights how systemic barriers "weaken" the translation of teacher potential into actualized competence.

The reviewed literature provides a strong theoretical and empirical basis for investigating the relationships between Institutional support, self-efficacy, and ICT teachers' competence. It highlights that while direct relationships are evident, the mediating role of self-

efficacy in translating support into competence and the moderating influence of support on the self-efficacy-competence link warrant further exploration. This study's focus on these intricate relationships, particularly within the specific context of public high institutions in District 2, Cagayan de Oro City Division, will contribute valuable insights to the existing body of knowledge and inform evidence-based interventions for enhancing ICT education in the region.

The body of recent literature overwhelmingly supports the significant roles of Institutional support and self-efficacy in shaping ICT teachers' competence. These studies not only confirm direct relationships but also increasingly explore the mediating role of self-efficacy and the moderating influence of Institutional support. The Philippine context, as seen in several recent publications, mirrors global trends regarding the challenges and opportunities in enhancing teachers' digital capabilities. This study, by specifically examining these intricate relationships in public high institutions in Cagayan de Oro City, will contribute a localized understanding that can inform targeted interventions and policies to foster a highly competent ICT teaching workforce for the evolving digital landscape in Northern Mindanao.

Insights Gained

While Institutional support and a teacher's self-efficacy are two distinct factors, their relationship is not merely parallel but deeply intertwined and synergistic. A strong presence of both is necessary to cultivate truly competent ICT teachers.

Institutional support provides the foundation: Without adequate resources like infrastructure, training, and administrative backing, even the most confident and self-efficacious teacher will be limited in their ability to integrate technology effectively. It is like having a brilliant architect (the teacher) who is given no bricks or lumber to build with.

Self-efficacy is the catalyst. Conversely, providing top-notch support and resources is not enough if teachers lack the belief in their ability to use them. An institution can acquire all the latest gadgets, but if teachers do not feel confident in mastering and troubleshooting them, those resources will go underutilized. A teacher with high self-efficacy is more likely to embrace challenges and continuously improve their skills, making the most of the support provided.

The combined effect is paramount: The most significant finding is that these two factors have a powerful collective impact. The ideal scenario is when a teacher with high self-efficacy is in a well-supported environment. This combination creates a positive feedback loop: the support empowers the teacher, and the teacher's confidence and proactive nature maximize the benefits of that support. This synergistic relationship is crucial for developing a skilled and adaptable ICT teaching workforce capable of preparing students for the digital age.

Methodology

Research Design

This study employed a descriptive correlational research design to examine the relationships between Institutional support, self-efficacy, and ICT teachers' competence. This design is appropriate because it allows for the investigation of associations between variables without manipulating them, which is suitable for exploring how existing levels of Institutional support and teacher self-efficacy relate to their ICT competence in a naturalistic setting. Furthermore, the design will enable the testing of both direct relationships and more complex mediating and moderating effects as hypothesized.

Respondents

The participants of this study were ICT teachers from the selected public high institutions in East District 2, Cagayan de Oro City Division. The specific number of participants was determined through a sampling technique, purposive sampling, to ensure representativeness of the ICT teacher population in the district. The target population includes all teachers officially designated or primarily responsible for teaching ICT-related subjects or integrating ICT into their curriculum.

The sampling procedure for this study was discussed as the complete enumeration, also known as judgmental, selective, or subjective sampling. This non-probability sampling technique is chosen to select participants who possess specific characteristics relevant to the research objectives, ensuring that all teachers officially designated or primarily responsible for teaching ICT-related subjects or integrating ICT into their curriculum in the selected Institution are included.

Identification of Target Population: The target population for this study comprises all ICT teachers in the selected public high institutions within District 2, Cagayan de Oro City Division, for the Institutional Year 2025-2026. This includes teachers whose official designation is related to ICT or those who primarily integrate ICT into their daily teaching practices, as per Institutional records and administrative verification.

Instrument

The instrument was adopted from the Action Research: Conducted by Master Teachers and School Heads within the Department of Education (DepEd) to assess school-wide digital readiness. The questionnaires were structured into three main sections, each corresponding to a key variable.

Procedure

The data collection process adhered to ethical guidelines and ensured the privacy and voluntary participation of all respondents.

Formal permission was sought from the Department of Education (DepEd) Cagayan de Oro City Division Office and the principals of the selected public high institutions to conduct the study. The ICT teachers identified for the study were provided with a clear explanation of the study's purpose, procedures, potential risks, benefits, and assurance of confidentiality and anonymity. Informed consent was obtained before participation. The questionnaires were administered either in-person (during a designated time at the institution, if allowed) or through an online survey platform (e.g., Google Forms) if face-to-face interaction was restricted or more convenient. Clear instructions were provided, and researchers were available to clarify any questions. Completed questionnaires were collected, and data were meticulously encoded into a statistical software package for analysis. Strict protocols were followed to ensure data accuracy and integrity.

Data Analysis

After the questionnaires were distributed to the respondents of the study, the results were tallied and collated. The following statistical procedures were employed to answer the specific problems of the study:

For problems 1, 2, and 3, the Weighted Mean and Standard Deviation was used to determine the levels of Institutional Support, Self-Efficacy, and Instructional Competence. For problems 4 and 5, to determine if significant relationships exist between the variables, the Pearson Product-Moment Correlation Coefficient (r) was utilized.

Ethical Considerations

The researchers respect respondents' confidentiality by guaranteeing that their personal information and data were kept private and not released to anybody without their consent. The researchers treat respondents with respect and dignity, ensuring that their rights and welfare were protected throughout the research process. The researchers considered the potential risks and benefits of the research and take all necessary precautions to minimize potential harm to respondents while maximizing potential benefits.

Results and Discussion

This section presents, analyzes, and interprets data gathered from respondents. The order of presentation is based on the order of specific problems in the statement of the problem.

This study aimed to examine the Institutional Support and Self-Efficacy on ICT Teachers' Competence in selected public high institutions in East District 2, Cagayan de Oro City Division, for the Institutional Year 2025-2026.

Teacher's Profile

Table 1 presents the teacher's profile in terms of teaching position and years of experience, and was evaluated through various indicators, each with its respective frequency and percentage (%).

Table 1. *The teacher's profile in terms of teaching position and years of experience*

Teaching Position	*f*	*%*
Teacher 1	131	61.2
Teacher 2	66	30.9
Teacher 3	17	7.9
Master Teacher	0	0
Total	214	100.0

The distribution of teachers in Table 1 reveals that the majority hold the rank of Teacher 1 (61.2%), followed by Teacher 2 (30.9%). Only a small fraction is Teacher 3 (7.9%), with no Master Teachers represented. This demographic suggests that the ICT teaching force in East District 2 is primarily composed of early-career professionals. This aligns with the need for robust institutional support, as less experienced teachers often require more structured guidance to build professional competence.

Table 2. *The teacher's profile in terms of years of experience*

Years of Experience	*f*	*%*
1 – 3 Years	57	26.6
4 – 6 Years	83	38.8
7 – 10 Years	49	22.9
More than 10 Years	25	11.7
Total	214	100.0

Table 2 shows that the largest group has 4–6 years of experience (38.8%). Combined with those having 1–3 years of experience, over 65% of the respondents have less than six years of service. This suggests a relatively young workforce that is likely more open to digital tools but may still be developing the high-level self-efficacy required for complex technical troubleshooting and advanced ICT

integration.

Level of Institutional Support

Table 3 presents the level of Institutional Support provided to ICT teachers in terms of professional development, administrative support, technical assistance, and a conducive work environment.

Table 3. *Level of Institutional Support provided to ICT teachers*

Indicator	*Mean*	*SD*	*Interpretation*
Professional Development	4.92	0.295	Very High level
Administrative Support	4.81	0.391	Very High level
Conducive Work Environment	4.79	0.504	Very High level
Technical Assistance	4.76	0.472	Very High level
Infrastructure/Resources	4.74	0.535	Very High level
Total	4.80	0.180	Very High level

Legend: 5 (4.20–5.00) – Very High – Very High Level; 4 (3.40–4.19) – High – High Level; 3 (2.60–3.39) – Moderately High – Moderate Level; 2 (1.80–2.59) – Low – Low Level; 1 (1.00–1.79) – Very Low – Very Low Level

Table 3 shows a "Very High level" of perceived Institutional Support. The indicator for Professional Development received the highest mean (4.92), suggesting that administrators prioritize training. However, the slightly lower mean for Infrastructure (4.74) aligns with findings from JIPP Publication (2025), which noted that while administrative backing is often strong, environmental constraints like internet connectivity still pose challenges. Overall, the total mean (4.80) indicates a strong institutional commitment to providing a supportive environment, which Eisenberger (1986) argues is crucial for fostering teacher loyalty and performance.

Level of Self-Efficacy of ICT Teachers

Table 4 presents the level of self-efficacy of ICT teachers in using ICT tools in terms of integrating technology, troubleshooting, and adapting to emerging technologies.

Table 4. *Level of self-efficacy of ICT teachers*

Indicator	*Mean*	*SD*	*Interpretation*
Integrating technology in instruction	4.97	0.165	Very High Self-efficacy
Using basic ICT tools/software	4.86	0.487	Very High Self-efficacy
Adapting to emerging technologies	4.79	0.449	Very High Self-efficacy
Troubleshooting technical problems	4.76	0.451	Very High Self-efficacy
Resilience in technical glitches	4.76	0.430	Very High Self-efficacy
Total	4.83	0.171	Very High Self-efficacy

Legend: 5 (4.20–5.00) – Very High – Very High Self-Efficacy; 4 (3.40–4.19) – High – High Self-Efficacy; 3 (2.60–3.39) – Moderately High – Moderate Self-Efficacy; 2 (1.80–2.59) – Low – Low Self-Efficacy; 1 (1.00–1.79) – Very Low – Very Low Self-Efficacy

Table 4 indicates a "Very High level" of self-efficacy. Teachers feel most confident in integrating technology in instruction (4.97). Notably, the indicators for Troubleshooting (4.76) and Resilience (4.76) are the lowest, suggesting a "confidence gap" when faced with technical failures. This supports Bandura's (1997) assertion that self-efficacy is a predictor of resilience; while teachers are highly confident in usage, the mastery of technical troubleshooting remains a secondary growth area.

Level of Institutional Competence

Table 5 presents the level of institutional competence of ICT teachers in planning, delivering, and assessing ICT-integrated lessons.

Table 5. *Level of instructional competence of ICT teachers*

Indicator	*Mean*	*SD*	*Interpretation*
Planning ICT-integrated lessons	4.93	0.297	Very High Competence
Delivering digital instruction	4.91	0.285	Very High Competence
Managing ICT resources	4.89	0.310	Very High Competence
Assessing digital learning outcomes	4.73	0.484	Very High Competence
Problem-solving in the ICT classroom	4.62	0.496	Very High Competence
Total	4.82	0.152	Very High Competence

Legend: 5 (4.20–5.00) – Very High – Very High Competence; 4 (3.40–4.19) – High – High Competence; 3 (2.60–3.39) – Moderately High – Moderate Competence; 2 (1.80–2.59) – Low – Low Competence; 1 (1.00–1.79) – Very Low – Very Low Competence

The results in Table 5 show a "Very High level" of teacher competence (Total Mean = 4.82). The highest proficiency is found in Planning (4.93). This high level of competence suggests that teachers are not merely using technology but are synthesizing it into the pedagogy, reflecting the deep learning concepts discussed by Zimmerman and Moylan (2018).

Relationship Between Variables

Table 6 presents the significant relationship between Institutional Support, Self-Efficacy, and ICT Teachers' Competence.

Table 6. *Test of the significant relationship between the Independent and Dependent Variables*

Variable	*r*	*p - value*	*Interpretation*
Institutional Support	.168	.033	Significant
Self-Efficacy	.133	.042	Significant
Overall	.188	.006	Significant

Table 6 demonstrates a substantial association between the variables. The relationship between Institutional Support and Competence ($r = .168$, $p = .033$) is significant, leading to the rejection of the null hypothesis. This confirms that when the school provides resources and training, teachers' competence directly improves. Similarly, Self-Efficacy ($r = .133$, $p = .042$) shows a significant link to competence, validating Ho2.

Overall, the total correlation ($r = .188$, $p = .006$) is significant. This indicates that internal belief systems (Self-Efficacy) and external environments (Institutional Support) work synergistically to define the professional competence of ICT teachers in East District 2. This confirms Bandura's (1997) triadic reciprocal causality, where environmental and personal factors collectively shape performance outcomes.

Conclusions

Based on the results of the study, several key conclusions are drawn regarding the professional landscape of ICT teachers. First, because the majority of teachers are in the early stages of their careers, professional competence is highly dependent on external guidance and institutional systems rather than long-term pedagogical intuition, making the role of experience critical. Second, a disconnect exists between Infrastructure and Advocacy; while school administrations are successful in fostering a supportive culture and providing training, the actual physical infrastructure, such as internet stability and hardware, lags behind the administrative "will," creating a bottleneck for full ICT integration. Furthermore, the findings reveal a "Usage-Troubleshooting" gap, where high self-efficacy in using digital tools does not automatically translate to technical resilience. Teachers are competent users of technology but remain vulnerable to technical failures, which can hinder the flow of digital instruction. Ultimately, the study serves as a validation of the theoretical framework, confirming Bandura's Triadic Reciprocal Causality by demonstrating that the competence of an ICT teacher is not an isolated trait but a dynamic outcome of the interaction between the school environment and the teacher's internal confidence.

In light of the findings and conclusions, the following recommendations are proposed to enhance the ICT teaching environment. School Administrators should move beyond traditional seminars and prioritize the modernization of ICT labs, perhaps by establishing a "Quick-Response Technical Team" to alleviate the troubleshooting burden on teachers, allowing them to focus purely on instruction. Simultaneously, DepEd Policymakers are encouraged to develop a specialized "Technical Resilience" training module specifically for early-career teachers (Teachers 1-3) that focuses on basic hardware repair and network troubleshooting to bridge the identified confidence gap. To foster internal growth, ICT Teachers should adopt a "Lead-Teacher" Mentorship Model where experienced Teacher 3 practitioners facilitate peer-coaching sessions to share practical problem-solving strategies with newer faculty members. Finally, it is recommended that future researchers conduct follow-up studies focusing on "Technostress" as a potential moderator, investigating how infrastructure deficiencies impact the mental well-being of highly efficacious teachers to provide deeper insights into the digital education ecosystem.

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