EduHeart Knowledge Network and Publishing, Inc.

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 3

DOI: https://doi.org/10.66206/eduheart.2026.339

Teachers' Competence and Attitude Toward Information and Communications Technology Integration In The New Normal

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ABSTRACT

This study investigated the teachers' competence and attitude toward Information and Communication Technology (ICT) integration in the teaching-learning process in the new normal education among Junior and Senior High School teachers in Infanta District, Pangasinan. Specifically, it determined the respondents' demographic profile, level of ICT competence, attitude toward ICT integration, and the significant relationships among these variables. A descriptive-correlational research design was employed, using a structured survey questionnaire administered via Google Forms to 74 teacher respondents from Bayambang National High School, Cato National High School, and Infanta Integrated School. Frequency counts, percentages, weighted means, Spearman's rank correlation, and Eta coefficient were used to analyze the data. Findings revealed that teachers were generally competent in integrating ICT in the teaching-learning process, obtaining an overall weighted mean of 3.36. Teachers showed higher competence in using productivity tools, social media applications, messaging applications, and video conferencing tools, while lower competence was observed in interactive online tools and open educational resources. Results further showed that teachers had a positive attitude toward ICT integration, with an overall weighted mean of 3.70. Significant relationships were found between ICT competence and variables such as age, length of service, number of ICT-related seminars attended, civil status, and specialization. Moreover, teachers' attitudes toward ICT integration were significantly correlated with their ICT competence. The study concluded that teachers are competent and have favorable attitudes toward ICT integration; however, ongoing ICT training and professional development programs remain necessary to further enhance their competencies.

Keywords: *- Information and Communication Technology (ICT), ICT Integration, Teachers' Competence, Teachers' Attitude, New Normal Education, Learning Management System, Digital Literacy, Educational Technology, Secondary School Teachers, Teaching-Learning Process*

INTRODUCTION

The COVID-19 pandemic transformed education by forcing schools worldwide to shift from face-to-face teaching to alternative modes of instruction. The Department of Education (DepEd) responded with the Basic Education Learning Continuity Plan (BE-LCP), ensuring quality education continued through online, modular, blended, TV-radio, and other distance-learning methods (DepEd, 2020). Under Sulong Edukalidad, DepEd strengthened teacher training through targeted sessions on Information and Communication Technology (ICT) and digital learning platforms.

As education evolves with globalization and digitalization, ICT is now essential in teaching and learning. Programs such as the Digital Rise Program and the DepEd Computerization

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Program emphasize digital literacy and ICT-assisted teaching and learning, helping teachers and learners adapt to Education 4.0. Online platforms and tools, such as Learning Management Systems, video conferencing, messaging, and interactive applications, now facilitate both synchronous and asynchronous learning.

The rapid integration of ICT in education underscores the need for teachers to develop competence and positive attitudes toward technology. As mentioned by Lawrence, J. E., & Tar, U. A. (2018) ICT integration improves instructional delivery and enhances collaboration, engagement, accessibility, and learning. This study assessed teachers' competence and attitudes toward ICT integration in the teaching and learning process during the new normal.

Statement of the Problem

This study aimed to determine teachers' competence and attitudes towards Information and Communications Technology (ICT) integration in the teaching and learning processes of Junior and Senior High School Teachers in the Infanta District.

Specifically, it sought to answer the following questions:

1. What is the demographic profile of respondents in terms of?
   a. Age;
   b. Sex;
   c. Civil Status
   d. Length of Service;
   e. Teaching Position;
   f. Highest Educational Attainment;
   g. Specialization;
   h. Devices Available for Teaching;
   i. Means of Internet Connectivity;
   j. Speed of Internet and Level of Satisfaction; and
   k. Number of Seminars Attended related to ICT
2. What is the level of Teacher's Competence in integrating ICT in the teaching-learning process in terms of the following?
   a. Learning Management System
   b. Video Conferencing Tool
   c. Messaging Applications
   d. Social Media Applications
   e. Interactive Online Tools
   f. Open Source OER
   g. Productivity Tools
3. What is the attitude of teachers towards the use of ICT in the teaching and learning process in the new normal?
4. Is there a significant relationship between the level of teachers' competence in integrating ICT and the profile of the respondents?
5. Is there a significant relationship between the level of teachers' competence and attitudes towards the use of ICT in the teaching and learning process?
6. What action plan can be proposed to enhance the teachers' competence and attitude towards ICT?

Scope and Delimitations

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This study aimed to determine teachers' levels of ICT competence and attitudes towards Information and Communication Technology Integration in the teaching-learning process in the new normal education. This study focused on Infanta District, where the researcher served as a substitute teacher at a Junior High School. The respondents are Junior and Senior High School Teachers from Bayambang National High School, Cato National High School, and Infanta Integrated School. The researcher focused on these schools because they offer a TVL-ICT Program. Pita Integrated School was not included due to the demographic area where it is located. Elementary Teachers were not included because the researcher is a Secondary Teacher and found it appropriate to focus mainly on Secondary Teachers, where ICT integration is highly expected.

Review of Related Literatures

Information and Communication Technology (ICT) refers to technologies that provide access to information through telecommunication systems (Ratheeswari, 2018). It encompasses digital and communication tools such as computers, mobile devices, the internet, and online platforms that facilitate access to, management of, sharing of, and exchange of information. In the educational sector, ICT has become an essential component in improving the teaching and learning process.

The integration of ICT in education provides greater opportunities for both teachers and students to function effectively in today's digital and globalized environment. Lawrence and Tar (2018) emphasized that ICT has significant potential to improve the quality of teaching and learning by enabling educators and learners to make the most of technological resources in the classroom. Similarly, Chand (2018) explained that digital tools such as Google Docs, blogs, forums, and wikis promote active participation, collaboration, and knowledge construction among learners. These findings support the idea that ICT should not replace teachers but should instead serve as a supportive platform that enhances meaningful and collaborative learning experiences.

The relevance of ICT in education became more evident during the COVID-19 pandemic, when educational institutions worldwide shifted to remote and flexible learning modalities. In the Philippines, educational platforms such as Google Classroom, Zoom, Google Meet, Facebook, Quipper School, and Schoology enabled the continuity of instruction and communication between teachers and students. According to Pultoo et al. (2020), ICT serves as a catalyst for communication, collaboration, problem-solving, discovery, and creative expression. Through effective ICT integration, teachers are able to design meaningful learning experiences while students actively participate in knowledge construction.

Despite the advantages of ICT integration, its successful implementation largely depends on teachers' competence, readiness, and attitudes toward technology. Teachers remain central agents in implementing technology-based instruction. Avidov-Ungar and Shamir-Inbal (2017) emphasized that teachers must be prepared to embrace the paradigm shift in teaching and learning brought about by the integration of technology. Their confidence, motivation, digital competence, and perceptions toward ICT significantly influence the extent to which technology is meaningfully utilized in classroom instruction.

Ramirez-Montoya, Mena, and Rodriguez-Arroyo (2017) highlighted that teachers' preparedness and digital competence are essential in developing effective pedagogical

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knowledge that enhances students' learning outcomes. Likewise, Hero (2020) noted that teachers' acceptance of ICT contributes significantly to the successful integration of technology in education. Effective ICT integration, therefore, requires not only teachers' willingness to adopt innovative instructional approaches but also continuous professional development and adequate technical support. Roblin et al. (2018) further emphasized that the successful integration of technology in education depends on the collaborative efforts of educators, school administrators, policymakers, and the community.

Teacher training programs also play a crucial role in strengthening ICT integration. Basargekar and Singhavi (2017) stressed that training programs are necessary in developing teachers' competencies and positive attitudes toward ICT utilization. These programs should be designed according to teachers' proficiency levels, teaching experience, age, and subject specialization. Since ICT promotes self-directed learning, teachers are encouraged to shift from traditional instruction to a more facilitative role in the learning process. Moreover, training programs should focus not only on technical skills but also on fostering positive attitudes toward technology integration.

However, several barriers continue to hinder the effective implementation of ICT in education. Basargekar and Singhavi (2017) identified inadequate ICT resources, low teacher confidence, insufficient competence, lack of motivation, and negative attitudes as major challenges in ICT utilization. In a study of Filipino teachers, Caluza et al. (2017, as cited in Mella, 2021) found that many teachers have only basic ICT knowledge, which negatively affects their classroom performance and confidence in using technology. This lack of competence may lead to anxiety and resistance toward ICT integration (Kanvaria & Kanvaria, 2018). Teachers who perceive themselves as less competent in ICT often feel intimidated when using technology in front of students whom they believe are more technologically skilled. Consequently, this anxiety may result in reluctance or unwillingness to integrate ICT into teaching practices.

Teachers' attitudes and confidence toward ICT strongly influence its adoption and utilization in education. Ghavifekr et al. (2015) explained that teachers' confidence in integrating technology is closely associated with the quality of training they receive. Teachers with minimal ICT training often lack confidence in utilizing digital tools even when technological resources are available (Muweesi et al., 2021). To address this issue, professional development programs should go beyond technical training and emphasize pedagogical applications of ICT to ensure its effective integration into classroom instruction.

Furthermore, Kalogiannakis and Papadakis (2019) emphasized that ICT integration requires not only technical competence but also an understanding of the relationship among technology, pedagogy, and content knowledge. This concept is reflected in the Technological Pedagogical Content Knowledge (TPACK) framework, which guides teachers in developing effective ICT-enhanced learning experiences. However, many existing training programs fail to incorporate comprehensive approaches such as TPACK, thereby limiting the transformative potential of ICT in education.

Anchored on the Technology Acceptance Model (TAM), this study aims to determine teachers' competence in integrating ICT into the teaching-learning process and examine how demographic profile, ICT competence, and attitudes influence ICT integration in education. The findings of the study may serve as a basis for developing an action plan to strengthen ICT utilization in the teaching-learning process.

Theoretical Framework

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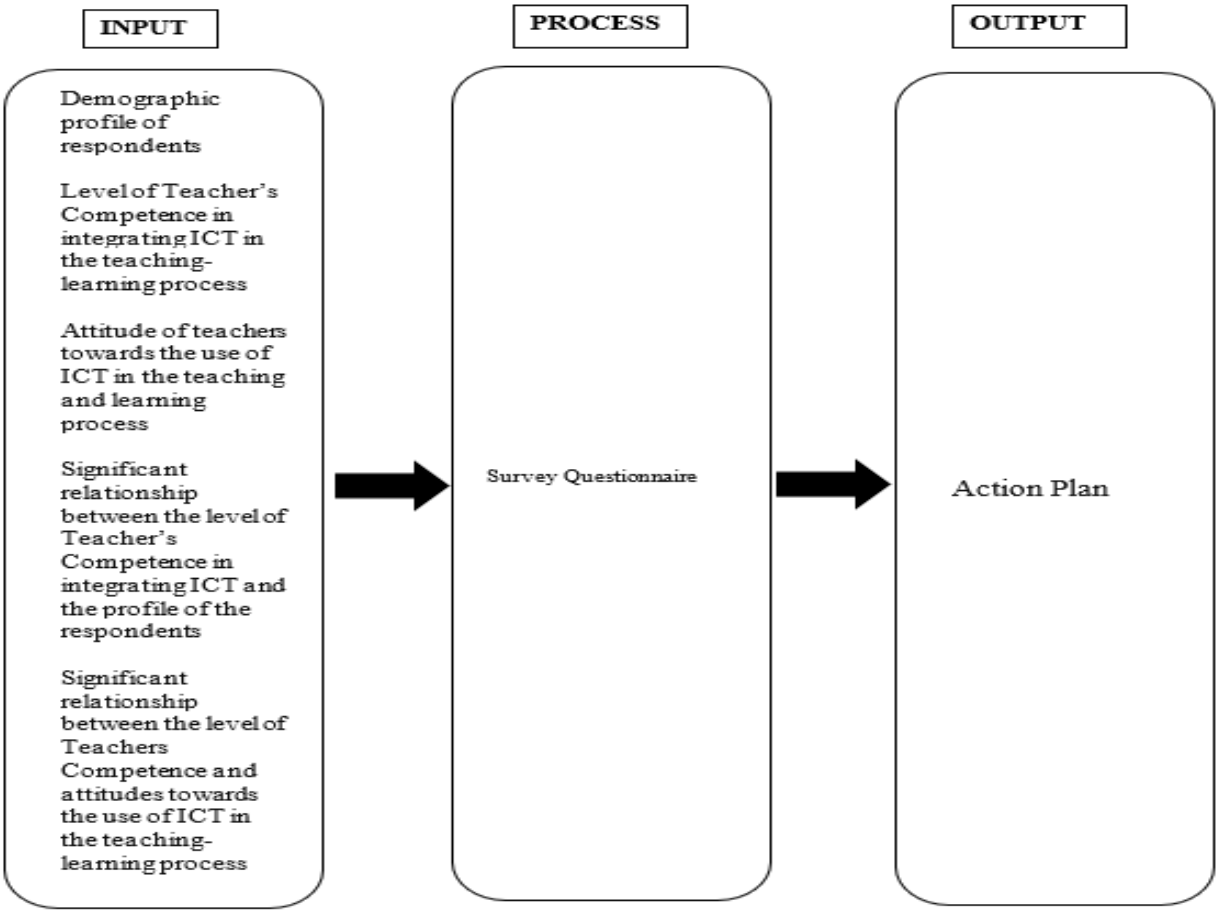
This study is anchored on the **Technology Acceptance Model (TAM)** developed by Fred D. Davis in 1986 and later refined in 1989. The model was adapted from the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) to explain and predict users' acceptance and utilization of technology. TAM has been widely recognized as a reliable theoretical framework for understanding technology adoption and user behavior (Legris & Ingham).

The Technology Acceptance Model posits that an individual's intention to use technology is primarily influenced by two key beliefs: perceived usefulness and perceived ease of use. Perceived usefulness refers to the degree to which a person believes that using a particular system or technology will enhance job performance, while perceived ease of use pertains to the extent to which a person believes that using the technology will require little effort. These two factors significantly influence users' attitudes toward technology, which in turn affect their intention and actual behavior in using technological tools.

In the context of education, TAM provides a relevant framework for understanding teachers' acceptance and integration of ICT in the teaching-learning process. Teachers are more likely to adopt and utilize ICT when they perceive it as beneficial in improving instructional delivery and when they find it easy and convenient to use. Furthermore, attitudes play a crucial role in shaping teachers' competence and willingness to integrate technology in education. As emphasized by Azliza Yacob et al. (2020), attitudes are essential components of competency, particularly during periods of sudden environmental changes such as the COVID-19 pandemic, where uncertainty and continuous adaptation became part of the educational landscape**.**

Conceptual Framework



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METHODOLOGY

This study aimed to determine teachers' competence and attitudes towards Information and Communications Technology (ICT) integration in the teaching and learning processes of Junior and Senior High School Teachers in the Infanta District.

Research Design

The study employed a descriptive-correlational research design using a survey method with a structured questionnaire. This design was deemed appropriate for examining teachers' competence and attitudes toward Information and Communication Technology (ICT) integration in the teaching-learning process within the context of new-normal education. Specifically, the study sought to determine the relationship between respondents' demographic profiles and their competence in integrating ICT into instruction. Furthermore, it aimed to examine the relationship between teachers' competence in ICT integration and their attitudes toward the utilization of ICT in the teaching-learning process.

Descriptive-correlational research is a non-experimental quantitative research design that determines the extent and direction of relationships among variables without manipulating them. According to Creswell (2012), correlational research applies statistical techniques to measure and describe the degree of association among variables or sets of scores. Similarly, Marczyk et al. (2005) explained that correlational studies attempt to identify relationships between respondents' characteristics and their reported behaviors, perceptions, and opinions. In this study, the descriptive aspect provided a comprehensive overview of teachers' demographic characteristics, ICT competence, and attitudes, while the correlational aspect examined whether significant relationships existed among the variables identified.

Research Steps

Prior to conducting the study, the researcher obtained permission from the Schools Division Office to administer the study in the selected schools within the district. Approval was likewise obtained from the district office and the respective school heads of the participating secondary schools. After the necessary permissions were granted, the respondents were informed of the study's purpose and asked to voluntarily participate in the data-gathering process via Google Forms.

The primary instrument used for data collection was a descriptive survey questionnaire comprising three parts. The first part gathered the demographic profile of the respondents, which included age, sex, civil status, length of service, area of specialization, teaching position, highest educational attainment, devices used for teaching, means and speed of internet connectivity, level of satisfaction with internet access, and the number of ICT-related seminars attended.

The second part of the questionnaire was developed by the researcher to determine teachers' competence in integrating ICT in the teaching-learning process. The instrument was validated by ICT experts and educational supervisors to ensure its content validity and reliability. This section assessed teachers' competence in utilizing various ICT tools and platforms, including Learning Management Systems (e.g., Moodle, Edmodo, Google Classroom, Microsoft Teams, and Quipper), Video Conferencing Tools (e.g., Google Meet, Zoom, Skype, and Messenger Rooms), Messaging Applications (e.g., Messenger, Gmail, Viber, and WhatsApp), Social Media Applications (e.g., YouTube, Facebook, Instagram, and Twitter), Interactive Online Tools (e.g., Kahoot, Mentimeter, Jamboard, Padlet, and ClassPoint), Open Educational Resources (OER),

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and Productivity Tools such as Microsoft Office 365 and Google Apps for Education.

The third part of the questionnaire, entitled "Computer Attitude Scale (CAS)," was adapted and modified from Papapnastasiou and Angeli (2008). Certain terms in the original instrument were revised to align with the context of online and virtual learning in the new normal education. Some statements were removed due to redundancy, while additional items relevant to online learning and virtual classroom experiences were incorporated. The statements were categorized according to personal attitudes, attitudes toward students' learning, and attitudes toward teachers' teaching in relation to ICT utilization. A five-point Likert scale was used to measure responses, with the following interpretations: 5 – Strongly Agree, 4 – Agree, 3 – Neutral, 2 – Disagree, and 1 – Strongly Disagree. The modified instrument consisted of fifteen (15) items. To facilitate efficient and safe data collection, the researcher used Google Forms to administer the survey questionnaire to the respondents.

Data Collection and Sample Selection

The respondents were 74 Junior and Senior High School teachers from Infanta District. The distribution was as follows: 18 teachers from Bayambang National High School, 27 from Cato National High School, and 29 from Infanta Integrated School. The researcher used a structured survey questionnaire consisting of three parts: demographic profile, ICT competence, and attitude toward ICT integration. The competence portion included Learning Management Systems, video conferencing tools, messaging applications, social media applications, interactive online tools, Open Educational Resources, and productivity tools. The attitude portion was adapted and modified from the Computer Attitude Scale of Papapnastasiou and Angeli (2008).

Data Analysis Methods

Frequency and percentage were used to describe the demographic profile of the respondents. Frequency counts and weighted means were utilized to determine the level of teachers' ICT competence and attitudes toward ICT integration in the teaching-learning process. Furthermore, Spearman's Rank Correlation and Eta Coefficient were employed to determine the significant relationships between the respondents' demographic profile, teachers' ICT competence, and attitudes toward ICT integration.

Research Hypotheses and Validation

The study tested the null hypotheses that there is no significant relationship between teachers' demographic profile and their ICT competence, and that there is no significant relationship between teachers' competence and their attitude toward ICT use. The hypotheses were tested at the 0.05 level of significance using the appropriate correlation measures.

Study Limitations and ethical considerations

This study was limited to Junior and Senior High School teachers from selected secondary schools in the Infanta District, Pangasinan, during the research. The findings of the study were based solely on participants' responses and may not generalize to all teachers in other districts or educational settings. In addition, the study focused only on teachers' competence and

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attitudes toward ICT integration in the teaching-learning process in the new normal education and did not include other variables that may influence ICT integration.

Prior to conducting the study, permission was obtained from the Schools Division Superintendent, the Public Schools District Supervisor, and the school heads of the participating schools. Participation of the respondents was entirely voluntary, and informed consent was obtained before data collection. Respondents were assured that all information gathered would be treated with utmost confidentiality and used strictly for academic and research purposes only. The identities of the participants were not disclosed, and all data collected were handled in accordance with ethical research standards to ensure privacy, anonymity, and protection of the respondents' rights.

RESULTS AND DISCUSSION

The findings are presented in accordance with the statement of the problem.

SOP 1: What is the demographic profile of the respondents?

The respondents were mostly 30-39 years old (45.9%), female (66.2%), and married (66.2%). Most had 6-10 years of teaching experience (48.6%), held Teacher III positions (51.4%), and held master's degrees (47.3%). In terms of specialization, the largest group was Social Studies teachers (20.3%). Most respondents had attended 1-5 ICT-related seminars (91.9%). For teaching devices, 97.3% had laptops and 86.5% had smartphones. Most respondents used their own mobile data for internet access (93.2%), and the largest group reported being satisfied with their internet connection (43.2%).

SOP 2: What is the level of the teacher's Competence in integrating ICT in the teaching-learning process

The teachers were generally competent in ICT integration, with an overall weighted mean of 3.36. By category, teachers were competent in Learning Management Systems (2.85), interactive online tools (2.64), and Open Educational Resources (3.01). They were somewhat competent in video conferencing tools (3.78), messaging applications (3.73), social media applications (3.92), and productivity tools (4.28). The results indicate that teachers are familiar with many ICT tools, but further training is needed, particularly in interactive online tools, OER, and selected Learning Management Systems.

SOP 3 What is the attitude of teachers towards the use of ICT in the teaching and learning process in the new normal?

Teachers showed a positive attitude toward ICT integration, with an overall weighted mean of 3.70, interpreted as Agree. The highest rated statement was that the use of different online platforms helps improve teachers' technical competencies (4.24). The lowest-rated statement was that the use of a virtual classroom stresses teachers out (2.70), interpreted as Neutral. These findings suggest that teachers recognize the value of ICT in improving instruction, increasing accessibility, and supporting student learning, although some concerns remain about technical issues and the digital divide.

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SOP 4: Is there a significant relationship between the level of teachers' competence in integrating ICT and the profile of the respondents?

Spearman's rank correlation results revealed significant relationships between teachers' ICT competence and age, length of service, and number of ICT-related seminars attended. Eta coefficient results also showed that civil status and specialization were statistically correlated with ICT competence. These findings suggest that both demographic factors and professional development experiences may influence teachers' competence in integrating ICT.

SOP 5 Is there a significant relationship between the level of Teachers Competence and attitudes towards the use of ICT in the teaching and learning process?

The relationship between teachers' competence and attitudes toward ICT integration was significant overall. Significant correlations were found in video conferencing tools, messaging applications, social media applications, and productivity tools. These results imply that teachers' attitudes may influence the extent to which they use and develop competence in ICT tools. Positive attitudes can encourage greater use of technology, while negative attitudes may lead to resistance or limited integration.

SOP 6 What action plan can be proposed to enhance the teachers' competence and attitude towards ICT?

Program	Specific Objective	Strategies	Time Frame	Performance Indicator	Persons Involved	Budget Source
Seminar-workshop on emerging technologies	Enhance teachers' competence in LMS, OER, Microsoft 365, and Google Apps for Education	Conduct school-based and district-based ICT seminars and hands-on workshops	Year-round	Teachers attend trainings and create or design their own LMS or ICT-assisted learning materials	Principal, head teachers, master teachers, teachers	School MOOE and personal funds
Community-based project on ICT literacy	Support students and parents who need assistance in digital technologies	Strengthen school-stakeholder partnership and conduct ICT literacy orientation sessions	Year-round	Students and parents demonstrate basic use of ICT for learning	School personnel, parents, students, stakeholders	School funds, partner support, personal funds
Techno Pantry	Provide access to ICT equipment and internet connectivity for teachers, learners, parents, and stakeholders	Establish an accessible school-based ICT support area with available devices and internet access	Year-round	Teachers, parents, students, and stakeholders access ICT infrastructure when needed	School heads, teachers, parents, students, LGU, NGO partners	DepEd funds, LGU, NGO, and personal support

SUMMARY

This study examined teachers' competence and attitude toward ICT integration in the new

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normal education. 74 Junior and Senior High School teachers from the Infanta District participated in the study via a survey questionnaire administered through Google Forms. The study found that most respondents were 30-39 years old, female, married, had 6-10 years of service, were Teacher III, and had master's degrees. Most had attended 1-5 ICT-related seminars, owned laptops, used their own mobile data, and were satisfied with their internet connection.

The teachers were generally competent in ICT integration, with an overall weighted mean of 3.36. They also showed a positive attitude toward ICT integration, with an overall weighted mean of 3.70. Significant relationships were found between teachers' ICT competence and selected profile variables, including age, length of service, number of ICT-related seminars attended, civil status, and specialization. Teachers' competence was also significantly related to their attitudes toward ICT use, particularly in video conferencing tools, messaging applications, social media applications, and productivity tools.

CONCLUSIONS

The findings of the study revealed that Junior and Senior High School teachers in Infanta District were generally competent in integrating Information and Communication Technology (ICT) in the teaching-learning process during the new normal education. This implies that teachers were able to adapt to the rapid transition toward digital and flexible learning modalities brought about by the COVID-19 pandemic. The results further imply that teachers possess the necessary technological knowledge and skills to use various ICT tools and platforms to deliver instruction. However, despite the respondents being generally competent, there are still areas that require continuous improvement to meet the increasing demands of Education 4.0 and technology-driven instruction. As emphasized by Daling (2017), teachers' ICT competence significantly contributes to the effectiveness and efficiency of education.

Moreover, the study showed that teachers manifested a positive attitude toward ICT integration in education. This implies that teachers recognized the importance of technology in improving student engagement, learning accessibility, and instructional delivery in the new normal setting. Their positive perception toward ICT suggests openness and willingness to adopt emerging technologies and innovative teaching practices in classroom instruction. The findings support the studies by Chun-Mei et al. (2018) and Japhet and Usman (2018), which found that teachers' attitudes strongly influence their use and acceptance of technology in education.

The study further revealed a significant relationship between teachers' competence in ICT integration and their demographic profile, particularly age, length of service, civil status, specialization, and attendance at ICT-related seminars. This implies that teachers' professional experiences, educational background, and exposure to ICT-related training opportunities greatly influence their ability to integrate technology effectively in the teaching-learning process. The findings suggest that schools and educational institutions should provide differentiated and continuous professional development programs tailored to the varying needs and backgrounds of teachers. Basargekar and Sighavi (2017) emphasized that teachers' competence is influenced by both demographic and professional factors.

Furthermore, the significant relationship between teachers' competence and their attitudes toward ICT integration implies that positive attitudes toward technology contribute to higher levels of ICT competence. Teachers who perceive ICT as beneficial and useful are more likely to utilize digital tools effectively in instruction. This further implies that fostering positive attitudes toward ICT through training, institutional support, and exposure to technological innovations can improve teachers' confidence and effectiveness in integrating technology into their teaching practices. Raper (2018) emphasized that teachers' technological competence and positive outlook toward technological advancements serves as an indicator of successful

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technology integration in the teaching-learning process.

Lastly, although teachers were found to be competent in using various ICT tools and platforms, the findings revealed that there were still areas needing improvement, particularly in the utilization of Interactive Online Tools and Open Educational Resources (OER). This implies that some teachers may still encounter difficulties in maximizing advanced digital platforms and interactive technologies in instruction. Therefore, there is a need for continuous professional development programs, sustainable ICT support, and institutional interventions that will further strengthen teachers' technological skills and readiness in the evolving educational landscape. UNESCO (2018) emphasized that digitally literate and well-trained teachers are better equipped to promote meaningful, engaging, and inclusive learning experiences among students.

RECOMMENDATIONS

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

Based on the study's findings and conclusions, it is recommended that teachers continuously engage in professional development activities, such as seminars, training, webinars, workshops, and graduate studies related to Information and Communication Technology (ICT) integration. Continuous exposure to emerging technologies and digital teaching strategies will help teachers further enhance their competence, confidence, and adaptability in delivering instruction in the new normal education. Teachers should also be encouraged to explore and maximize the use of Interactive Online Tools, Open Educational Resources (OER), and other innovative digital platforms to improve student engagement and learning outcomes.

School administrators and education leaders should strengthen the implementation of ICT-related capability-building programs that focus on improving teachers' technological competence and attitudes toward ICT integration. They may organize regular training sessions, mentoring programs, and technical assistance activities that are responsive to teachers' varying needs, specializations, and levels of competence. Furthermore, schools should establish monitoring and evaluation mechanisms to assess the effectiveness of ICT training and determine whether teachers can apply the skills learned in classroom instruction.

The Department of Education and other educational stakeholders should continue providing adequate ICT infrastructure, stable internet connectivity, digital devices, and accessible learning resources to support effective ICT integration in schools. Since the study revealed that teachers' competence is influenced by seminars attended and access to technology, it is important to ensure equitable access to technological resources and opportunities for all teachers. Strengthening school-community partnerships and stakeholder collaboration may also help improve the availability of ICT resources and support systems for both teachers and learners.

In addition, programs and interventions that promote positive attitudes toward ICT integration should be implemented in schools. Teachers should be motivated and supported in recognizing the value of technology in improving instructional delivery, student engagement, and educational accessibility. Encouraging a positive digital culture in schools can help reduce resistance to technology integration and increase teachers' willingness to utilize ICT effectively in the teaching-learning process.

Lastly, future researchers are encouraged to conduct similar studies involving a wider scope, larger sample size, and additional variables related to ICT integration in education.

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Further studies may also focus on the effectiveness of ICT training programs, the challenges teachers encounter in technology integration, and the impact of ICT competence on students' academic performance and engagement. Such studies may provide additional insights that can contribute to the continuous improvement of ICT integration in the educational system.

ACKNOWLEDGMENTS

The researchers express sincere gratitude to the school officials, administrators, teachers, advisers, and respondents who supported and participated in this study. Appreciation is also extended to the researchers' family, colleagues, and friends for their encouragement, patience, and support throughout the research process.

AI DECLARATION STATEMENT:

AI-supported tools helped with grammar and structure in creating this article. No AI tools were used to collect, analyze, or interpret data; all authors are credited for their academic contributions.

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Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 3
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