ASSESSING INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) 
COMPETENCIES OF NON-TEACHING PERSONNEL (NTP) OF 
DEPED-SCHOOLS DIVISION OF ILOCOS SUR

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ABSTRACT

Non-teaching Personnel (NTP) are considered the backbone of the Department of Education, and their functions are deemed vital to the operations of the Department. Numerous studies and training about Information and Communication Technology (ICT) have focused on teachers and students, but fewer studies have been done explicitly with NTP. This study aims to assess the ICT competence level among NTPs at the School Division of Ilocos Sur. A descriptive-correlational method was used to discuss NTP's level of ICT competence in different target ICT domains through a standardized survey questionnaire adopted from the National Information and Communications Technology Standards (NICS) of the Commission on Information and Communications Technology (CICT). A total of two hundred thirty-seven (237) NTPs of the Schools Division of Ilocos Sur were randomly selected as respondents for the study. Data was gathered through the utilization of Google Forms to ensure accurate and fast data gathering. Frequency, Percentage, Mean, and Pearson correlation coefficient analysis were used as a statistical tool to analyze the results using IBM Statistical Packages for Social Sciences (SPSS) Statistics 27 software. The findings revealed that the NTPs exhibit an advanced degree of ICT proficiency, as indicated by a mean score of 2.87 and a standard deviation of 0.69 in all three (3) domains. Moreover, age, length of employment, and educational attainment negatively correlate to ICT competence. However, attending seminars is positively correlated with competence. The researchers proposed a three-
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day training workshop on ICT Literacy for SDO-Ilocos Sur’s Non-Teaching Personnel to enhance and improve NTPs’ ICT competence.

**KEYWORDS:** Competencies, demographic profile, DepEd-School Division of Ilocos Sur, information and communication technology, non-teaching personnel, PRISMA diagram, systematic review

**INTRODUCTION**

**A. Background of the Study**

The Information and Communication Technology (ICT) skills of non-teaching Personnel (NTP) within the DepEd-School Division of Ilocos Sur context. In today's digital age, working with ICT in the workplace is growing, and DepEd SDO Ilocos Sur Non-Teaching Personnel should equip themselves with ICT competency needs at work. This study intends to collate and analyze the ICT competency of the DepEd SDO Ilocos Sur Non-Teaching Personnel. It evaluates how well these employees can perform jobs, communicate, and make decisions utilizing digital technologies. In addition, this research determines areas of strength and need for development to establish specialized training and policy suggestions. This study intends to increase administrative effectiveness, data-driven decision-making, citizen services, and institutional resilience overall by boosting ICT capabilities.

Integrating Information and Communication Technology (ICT) into education has become fundamental in today's digital era. It is about having capable teachers and skilled non-teaching personnel who can empower the educational process through technology. According to a study on the use of ICT among administrative staff at the University of the Philippines Open University, ICT has significantly affected the speed of decision-making in government agencies. Using ICT has enabled government agencies to make decisions more quickly and efficiently, improving their capacity to respond to the needs of citizens and stakeholders. The use of ICT in government services has improved accessibility, efficiency, transparency, citizen engagement, cost savings, and data analysis and planning. These improvements contribute to better governance and more effective delivery of public services (Amoloza, 2013). According to ICT Competency Standards (Case Study), having knowledge of ICT among administrative staff in government is essential for improving efficiency, cost savings, services, transparency, and data analysis and planning (UNAPCICPT Case Study 4, 2016). A recent study defines computer technology skills and competencies as a set of technology competencies that most staff need to contribute to the organization's overall effectiveness, whether behind the scenes or interacting with the public (Weber, 2012). Despite these insights, further study is required to thoroughly evaluate the impact.
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do Information and Communication Technology (ICT) on employee performance regarding work execution, communication, and decision-making. This literature analysis offers significant insights into evaluating non-teaching personnel's information and communication technology (ICT) skills and competencies. The results of this study can be utilized to formulate efficacious approaches for enhancing their job performance.

Like other nations, the Philippines grapples with challenges in effectively utilizing Information and Communication Technology (ICT) in education. Initiatives like the DepEd Internet Connectivity Program (DICP) and the DepEd Computerization Program seek to integrate ICT into public schools (DepEd, 2010). However, despite these efforts, there is a pressing need for systematic research and training to enhance the technology skills of Non-Teaching Personnel (NTP). NTPs, although not directly involved in classroom teaching, play crucial roles in the Department of Education, spanning maintenance, student support, administration, and healthcare (Bordia, 2022). Their work significantly influences the education system. Unfortunately, a gap exists between the technological demands and the competencies of NTPs within the DepEd-Schools Division of Ilocos Sur. Several factors contribute to this problem, including rapid technological advancements, varying levels of digital proficiency among NTPs, and the need for specialized training tailored to their administrative roles in government settings. Research by the University of the Philippines Open University revealed similar gaps in government agency administrative staff's ICT skills, resulting in service inefficiencies (Amoloza, E. 2013). Likewise, the Asian Development Bank identified the need to enhance the ICT skills of non-teaching personnel in the Philippines to improve education service delivery (UNAPCICPT Case Study 4, 2016). A sustainable ICT competency program for NTPs in the Schools Division of Ilocos Sur is crucial to addressing this competency gap. This program should encompass various applications and services, enabling transparency, enhancing productivity, fostering citizen engagement, supporting decision-making, and optimizing public fund allocation (Perdiguerra & Guillo, 2019). To develop an effective ICT training program tailored to bridge this gap, a competency-based assessment of the NTPs in SDO Ilocos Sur will be conducted to identify areas for improvement in their ICT expertise.

This study aims to provide an accurate assessment of the state of Information and Communication Technology (ICT) in the administrative tasks of the DepEd-Schools Division of Ilocos Sur. It will consider skills, digital literacy, communication abilities, and adaptability to evolving technologies. This study focuses on assessing and improving ICT competencies among non-teaching personnel, which could lead to faster processes, better service delivery, increased public involvement, and a more transparent and responsive government. These findings support evidence-based decision-making by effectively helping the DepEd Schools Division of Ilocos Sur with resources and developing tailored training programs and policies that address the identified gaps in ICT competencies.
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B. Review of Related Literature

To better understand the Information and Communication Technology (ICT) competencies of Non-Teaching Personnel (NTP), this study provides insight into various related publications. To begin with, the researchers developed objectives based on the assigned topic. Second, it outlined the publication’s relevance using keyword research and database searches. The researchers used references from Research Gate, Scientific Research, Research Publish Journal, and ScienceDirect, related studies, e-books, search engines, and other publications related to the specified keywords. Only the eighteen (18) most relevant search results were selected. Keywords used in the search were DepEd-School Division of Ilocos Sur, Information and Communication Technology Competencies (ICT), and Non-Teaching Personnel (NTP). The researchers reviewed the findings, used the data, and extracted pertinent literature to fulfill the study's objectives.

The researcher used Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) in conducting the research.

Figure No. 1 PRISMA 2020 Flow Diagram
**Demographic profile of the Non-Teaching Personnel (NTP) respondent in DepEd-Schools Division of Ilocos Sur**

A demographic profile refers to a comprehensive description of a specific group based on various demographic characteristics. This study will include Age, Sex, Highest Educational Attainment, Length of Service, Number of Seminars Attended on ICT, Accessibility to ICT Devices, and Purpose for ICT Use.

**Age**

Historically, millennials have exhibited a propensity for early technology adoption, as evidenced by their high smartphone ownership rates and extensive engagement with social media platforms. According to the study by Vogels (2019), it is worth noting that previous generations, such as Generation X and the Baby Boomers, have made notable advancements in narrowing the technological divide. Smartphone ownership is prevalent throughout different age groups, with Millennials exhibiting the highest rate of 93%. In contrast, the utilization of social media displays variation, with Millennials accounting for 86% of users, while previous generations exhibit comparatively lower percentages. The ownership of tablets has become comparable across different ages, but younger generations have a higher adoption rate of home broadband. The utilization of Facebook continues to exhibit robustness across all demographics.

The Baby Boomer generation has experienced significant increases in technology adoption, namely in terms of owning smartphones. The Silent Generation has lower technology adoption rates due to distinct hurdles. The younger demographic exhibits a more favorable outlook toward the Internet than its older counterparts despite an overall decline in society's assessment of its impact (Vogels, 2019).

In summary, Millennials currently exhibit a higher propensity for embracing technology, yet older generations are gradually narrowing this gap. This tendency can be attributed to the dynamic nature of digital advancements and the altering perspectives regarding the societal implications of technology.

**Gender**

The findings of a study done in Malaysia indicate that male instructors exhibit excellent ICT competencies in comparison to their female counterparts (Leong et al., 2016). The research revealed that male teachers had a better self-assessment of ICT ability than their female counterparts. The difference in the level of exposure and training in Information and Communication Technology (ICT) between males and females can be attributed to various reasons, including gender stereotypes and cultural expectations. A study in Iran revealed a disparity in computer competencies between female and male teachers (Leong et al., 2016). The research showed that male educators exhibited a greater frequency of computer usage and possessed superior computer competencies than their female counterparts. Hence, it may be deduced that gender may influence the extent of ICT competencies, with males exhibiting more robust...
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cOMPETENCIES THAN FEMALES. Nevertheless, it is imperative to acknowledge that these findings may not be universally relevant and can differ based on the cultural and societal norms prevalent in a specific location or country.

**Highest Educational Attainment**

There is a significant relationship between educational attainment and ICT competence. People with advanced degrees often have better digital literacy skills. They are more comfortable with technology, making them more likely to explore and use it innovatively. Adults with a bachelor’s degree or higher-level education are more likely to employ technology innovatively (McClain et al., 2021).

People with Master's degrees demonstrate more excellent proficiency in information and communication technology (ICT) than those with Bachelor's degrees. This is because Master's degree holders often receive more ICT-related training and participate in seminars, which contribute to improving their fundamental ICT skills (Dela Fuente et al., 2020). These studies suggest that educational attainment can help develop skills and ICT competence.

**Length of Service**

The acceptance and utilization of Information and Communication Technology (ICT) in educational institutions depend on the level of competence exhibited by teachers, as indicated by a study conducted in Malaysia (Leong et al., 2016). Teachers who possess a higher level of competence in utilizing information and communication technology (ICT) have expressed more positive attitudes toward the acceptance and utilization of ICT in secondary schools in Malaysia. According to research by Leong et al. (2016), a moderately significant positive correlation exists between teachers' ICT proficiency and their use of ICT. Hence, educators with longer tenures may possess lower ICT proficiency levels than their counterparts with shorter terms, mainly if they still need sufficient training to adapt to the constantly evolving technological landscape.

Another case study found that "employees with longer tenure in the banking industry were less likely to report having received formal training in ICT." This suggests that employees with longer tenure may need to be updated on the latest ICT skills and technologies. (Luka & Frank, 2012). The study also found that "employees with longer tenure were more likely to report feeling that their ICT skills were inadequate for their job." This suggests that employees with longer tenure may need help to keep up with the increasing demands of ICT in the banking industry. The study also found that some employees with longer tenure could maintain and even improve their ICT competency level. This suggests that length of service is one of many factors determining ICT competency. Other factors, such as individual motivation and the availability of training opportunities, can also play a role.
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**Number of Seminar/s Attended on ICT**

Studies have shown that providing Information and Communication Technology (ICT) training for administrative staff can positively impact organizational efficiency and effectiveness. According to research by Muhoho (2018), there is a strong positive correlation between training and development and employee performance. The study revealed that the absence of carefully designed, organized, and harmonized training and development initiatives inside Zanzibar's Second Vice President's Office (2nd VPO) resulted in poor performance among the administrative personnel. According to the report, the Second Vice President's Office (VPO) should consider establishing a dedicated training department and allocating sufficient funds to support the execution of training and development initiatives.

A range of training methods can be employed to enhance the efficiency of administrative personnel. The approaches encompassed within this category are orientation, job rotation, coaching, lectures, workshops, conferences, and audiovisual techniques (Muhoho, 2018). Lectures and seminars are primary instructional techniques, encompassing practical and conceptual instructional strategies. These activities can be conducted internally or externally within an institution and leverage contemporary technological advancements, frequently provided through remote educational modalities. Including opportunities for conversation alongside the lecture format can improve feedback and participation. Workshops and conferences are recognized as efficacious modalities for training, encompassing the acquisition of abilities that can be promptly used within professional settings. Audiovisual approaches, including films, television, and video, are frequently employed to effectively illustrate specific duties and provide comprehensive background information about an agency's history, purpose, and objectives.

Implementing seminars and training sessions on Information and Communication Technology (ICT) can significantly improve administrative personnel's efficiency and effectiveness. These are necessary for substandard performance to occur. Organizations should establish a dedicated training division and allocate resources for various training methodologies.

**Accessibility to ICT Devices**

Several research studies state that the lack of Information and Communication Technology (ICT) resources is a complex barrier that discourages NTPs from integrating new technologies into their work. Access to ICT resources is a crucial facilitator of ICT competence. Individuals with reliable access to computers, the Internet, and other digital devices were likelier to develop and maintain higher ICT skills. This access enabled them to practice, explore, and experiment with various technologies, contributing to their overall competence.

According to BECTA (2004), the inaccessibility of ICT resources stems from more than just the non-availability of ICT hardware, software, and other resources. It may result from various factors,
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including inadequate resource organization, poor hardware quality, unsuitable software, and a lack of personal access (British Educational Communications and Technology Agency (Becta), 2004).

**Purpose for ICT Use**

Knowing the purpose of Information and Communication Technology (ICT) used by administrative staff can significantly impact their productivity and job satisfaction. According to a study by the Pew Research Center (2007), The group known as "Productivity Enhancers" exhibits a positive attitude towards utilizing information technology in both personal and professional settings, expressing a strong belief in the beneficial impact of the Internet on their daily lives. The results indicate that a significant majority of respondents, approximately 89%, express a positive inclination towards the increased accessibility facilitated by information and communication technologies (ICTs). Furthermore, almost 83% of participants acknowledge the role of information technology in enhancing their productivity. Nevertheless, their utilitarian attitude toward information technology prioritizes task completion and overactive engagement in the online community, resulting in limited contributions to the collective body of creative content. They are above average in terms of ever having tried any of the activities about user-generated content (39% have tried one of them). A Productivity Enhancer is half as likely to have a blog as the average person (Pew Research Center, 2007).

**ICT competence of non-teaching Personnel (NTP)**

The increasing use of ICT in the workplace has led to a growing demand for ICT-competent non-teaching personnel. There is a positive relationship between ICT competence and job performance among non-teaching personnel. Employees with higher ICT competence are more likely to use ICT effectively in their work, which can lead to improved job performance.

The Commission on Information and Communication Technology (CICT) developed the Philippines' National ICT Competency Standard (NICS). This framework serves as a benchmark for ICT competency standards for professionals working in the public sector of the Philippines. NICS is structured to outline the competencies and essential knowledge and skills required to contribute effectively to the digital transformation of government services. It also encompasses performance indicators to evaluate the level of competence of non-teaching Personnel in ICT (National ICT Competency Standard (NICS) for Teachers, 2006).

The NCIS is a well-organized framework comprising various competency domains:

- **Technology Operations and Concepts**: This domain focuses on the essential knowledge and skills needed to use computers and other Information and Communication Technology (ICT) tools.
- **Social and Ethical**: This domain focuses on the awareness of social, ethical, legal, and human issues in using ICT.
- **Professional**: This domain focuses on continuous professional development in ICT.

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These domains are interrelated, and non-teaching personnel need to understand all of them to integrate ICT into their work effectively.

**Relationship between the demographic profile and the level of competence of the non-teaching personnel**

Demographic profiles have been described as having a significant relationship to an individual's ICT competence level (Aramide et al., 2015). Their relationship can vary, whether positive or negative, depending on the specific factors involved.

According to UNDP, some demographic factors frequently mentioned that affect ICT competence include age, gender, income, educational background, and skill level (UNDP, 2011).

**ICT Training Projects/Plan**

The training workshop on Project Management of ICT Implementation offered by the ITU Academy is an example of an ICT training project that can improve the ICT competencies of administrative staff. This workshop provides participants with tools and techniques to manage ICT projects.

The training workshop on Project Management for ICT Implementation will provide the participants with Tools and Techniques to manage ICT projects. Upon completing this training course, participants will be able to understand the: (ITU Academy, 2022)

- Introduction to ICT Project Management.
- Project Management Process.
- Project Planning Tools and Techniques.
- Project Planning using Microsoft Project (practical session in lab).
- Leadership and Team building in a virtual organization structure.
- Financial Analysis of projects and cost estimates.
- Risk analysis and management.
- Managing Change, Change Control, and Managing Quality.
- Monitoring & Control, Earned Value Analysis of Projects.
- Project organization structures.

Here is another successful training/program for Information and Communication Technology (ICT) that was conducted by the Department of Education (DepEd) with the help of the Civil Service Commission (CSC).

The E-Learning program for non-teaching personnel in the Department of Education (DepEd) is an officially recognized educational and professional development institute for individuals working in
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the public sector. The Civil Service Commission (CSC) has granted this recognition. The program provides a diverse range of ICT courses to non-teaching personnel within the Philippine Department of Education (DepEd). The following information provides additional specifics regarding the program:

The program is a component of the Training System for Teaching and Non-Teaching Personnel administered by the Department of Education (DepEd) (DepEd Order (DO) No. 40, s. 2020). The platform offers online courses readily available to individuals not involved in the field of education, with the flexibility of accessing them at any time and from any location. The systems have been specifically developed to augment the abilities and proficiencies of those not engaged in teaching roles, encompassing various subjects such as information and communication technology (ICT) skills. The program is part of the mission of the Department of Education (DepEd) to deliver high-quality education to the whole Filipino population by using technology. The delivery of courses is facilitated by a learning management system (LMS), which grants learners access to course materials, enables their engagement in online conversations, and promotes the completion of assessments. The program has received recognition from the CSC, enabling non-teaching personnel who complete the courses to accrue Continuing Professional Development (CPD) units. The curriculum offers a variety of ICT courses, such as Basic Computer Operations, Microsoft Office Applications, and Internet and Email Usage.

The E-Learning program for non-teaching professionals in the Department of Education (DepEd) provides a simple and readily available avenue for these individuals to improve their information and communication technology (ICT) skills and other relevant competencies. The Department of Education (DepEd) program utilizes technology to deliver high-quality education to the whole Filipino population (Llego, 2021).

Synthesis

This literature review highlights the importance of Information and Communication Technology competencies among non-teaching personnel within the DepEd-School Division of Ilocos Sur. The statement above underscores the growing significance of information and communication technology (ICT) abilities in education and administration. The review identifies key demographic factors, including age, gender, educational attainment, length of service, access to ICT devices, and attendance to ICT seminars, as pivotal factors influencing ICT competence among non-teaching personnel. Also, the review emphasizes the positive impact of ICT training programs. Suggested training programs like Project Management for ICT Implementation and E-Learning Programs for non-teaching personnel in the Department of Education (DepEd) can help bridge the ICT competency gap among Non-Teaching Personnel (NTP).
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In conclusion, this literature analysis underscores the need to comprehensively assess ICT competencies among non-teaching personnel in the DepEd-School Division of Ilocos Sur. The findings can serve as a basis for developing specialized training programs and policies to address the identified gaps. The anticipated result is enhancing administrative efficacy, promoting data-informed decision-making, and enhancing citizen services within the educational sector. It highlights the importance of continuous learning and development in the digital era to ensure that non-teaching personnel can effectively contribute to the digital transformation of government services.

C. Conceptual Framework

The conceptual framework of this research is to assess the Level of Competency of Non-Teaching Personnel in the Schools Division of Ilocos Sur. The researcher intends to test the three competency domains against the demographic profile of the non-teaching personnel using various indicators.

Figure 2. Conceptual Framework

The framework presented above depicts the relationships between the variables. The demographic profile (predictor variable) is expected to impact the level of ICT competency (Outcome variable) of non-teaching personnel. The output, ICT training, represents the critical outcome of the research.
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**Predictor Variables:** The predictor variables in the study are the demographic profiles of the non-teaching personnel. This includes gender, age, highest educational attainment, length of service, access to the Internet, and seminars or training related to ICT.

**Outcome Variables:** The outcome variables comprise the three (3) domains of Level of ICT Competency, which include Technology and Operations Concepts, Social and Ethical, and Professional.

**Output:** The output is the key result of the research study. It represents the broader impacts or implications of the research findings.

**D. Statement of the Problem**

The study aimed to assess the level of competence in Information and Communication Technology (ICT) among Non-Teaching Personnel at the School Division of Ilocos Sur. Specifically, it seeks answers to the following:

1. What is the profile of the non-teaching personnel in terms of:
   1.1 Age
   1.2 Gender
   1.3 Highest Educational Attainment
   1.4 Length of Service
   1.5 Number of Seminar/s Attended on ICT
   1.6 Accessibility to ICT Devices
   1.7 Purpose for ICT Use

2. What is the level of competence of non-teaching Personnel (NTP) based on the following domains of competency:
   2.1 Technology Operations and Concept
   2.2 Social and Ethical
   2.3 Professional?

3. Is there a significant relationship between the demographic profile and the level of competence of the non-teaching personnel?

4. Based on data analysis, what ICT Training may be proposed to develop the NTP’s ICT competencies?

**Null hypothesis:** There is no significant relationship between the demographic profile and the level of competence of the non-teaching personnel.

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E. Significance of the Study

The significance of this research lies in its potential to substantially improve the educational landscape of the DepEd-School Division of Ilocos Sur for their non-teaching personnel. Through meticulous assessment of the Information and Communication Technology (ICT) competencies of Non-Teaching Personnels (NTPs), this research provides a strong foundation for driving meaningful changes. It provides the division with valuable insights into the digital proficiency of their NTPs, enabling them to make informed decisions about training and career development. Furthermore, this research catalyzes tailored ICT training programs designed to address the NTPs' specific needs, promoting continuous professional development and potentially elevating job satisfaction among NTPs.

F. Scope and Delimitation

The study centered on assessing the Information and Communication Technology (ICT) competencies of Non-Teaching Personnel (NTP) within the DepEd-Schools Division of Ilocos Sur. The study was conducted in Ilocos Sur, located in the Ilocos Region. It has thirty-two municipalities and two cities. The DepeEd-Schools Division of Ilocos Sur has four hundred fifty-two (452) elementary public schools and sixty-four (64) secondary public schools. The respondents of the study were the non-teaching Personnel of the SDO-Ilocos Sur from different public schools and offices. There was a total sample of 237 NTPs included in the study. The study was conducted from August 21 to October 28, 2023. The researcher used the Google questionnaire form, the fastest way to gather more accurate and valuable information. Its scope encompasses an examination of the demographic characteristics of NTPs and evaluates their ICT competencies within the three specific domains: Technology, Operations, and Concepts, Social and Ethical, and Professional.

Nevertheless, it is essential to acknowledge that the research's applicability is confined to this specific school division and target respondent. Other ICT domains, such as Pedagogical, are beyond the scope of this study. The findings may not directly translate to broader regions or educational institutions.

G. Definition of terms

Demographic profile – comprises a collection of characteristics or information about a group of individuals, typically including age, gender, educational background, length of service, and other relevant factors.
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**Information and Communication Technology (ICT)** - refers to using various technologies, including computers, software, the Internet, and digital communication tools, to store, transmit, manipulate, and retrieve information.

**ICT Competence** – refers to an individual's skills and knowledge to effectively use information and communication technology tools and systems to perform tasks, communicate, and make decisions in their professional role.

**ICT Training** – refers to educational programs and workshops designed to improve individuals' ICT skills and competencies. These training programs aim to enhance digital literacy and proficiency in ICT tools for work-related tasks.

**Non-Teaching Personnel (NTP)** - individuals who work within educational institutions, such as schools or educational departments, but are not involved in classroom teaching. They fulfill vital roles in administrative support, maintenance, and other functions crucial for the smooth operation of educational institutions.

**Professional** – domain refers to the continuous professional development in ICT. It includes applying ICT skills and knowledge to specific professional contexts and adapting to evolving technologies.

**Social and Ethical** – domain refers to the awareness of social, ethical, legal, and human issues related to the use of technology.

**Technology Operations and Concepts** – domain refers to the fundamental knowledge and skills in effectively operating computers and other ICT tools.

**METHODOLOGY**

This chapter delves into various aspects of research methodology, including its design, population, and data resources. It also discusses the data gathering procedures, research instruments, and statistical analysis of the data gathered in this research.

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A. Research Design

The researcher utilized a descriptive-correlational design, which involved a survey questionnaire, to assess Non-Teaching Personnel's competency level in the Schools Division of Ilocos Sur. The descriptive-correlational design describes variables and the inherent connections that naturally occur among them (Sousa et al., 2007). The descriptive design was used to identify the demographic profile of Non-Teaching Personnel in the Schools Division of Ilocos Sur. The correlation design was used to determine the interrelationship between demographic profiles and the level of competence of the Non-Teaching Personnel. Thus, a quantitative research method is applied to explain how one variable affects another (Creswell, 2014) or to establish relationships between variables (Fraenkel et al., 2011).

B. Population and Sampling of the Study

The study involved randomly selected NTPs of the Schools Division of Ilocos Sur. Two hundred thirty-seven (237) out of five hundred eighty-two (582) regular non-teaching personnel in the Schools Division of Ilocos Sur were considered respondents to the study, composed of different public schools and offices. The study's sample size was identified using the G-power with medium effect size, alpha error of 0.05, and statistical power of 0.95.

The data in Table 1 show that there were 582 non-teaching personnel as of July 2023 in the DepEd Schools Division of Ilocos Sur, with 227 males and 355 females. The respondents included in the study were 237 non-teaching personnel. These non-teaching personnel came from different public schools and offices in the Schools Division of Ilocos Sur.

Table 1

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>%</th>
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<tbody>
<tr>
<td>Male</td>
<td>227</td>
<td>39</td>
</tr>
<tr>
<td>Female</td>
<td>355</td>
<td>61</td>
</tr>
<tr>
<td><strong>Total Population (N)</strong></td>
<td><strong>582</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td><strong>Sample Size (n)</strong></td>
<td><strong>237</strong></td>
<td><strong>41</strong></td>
</tr>
</tbody>
</table>

The simple random sampling technique was used to determine the number of non-teaching Personnel respondents from the DepEd Schools Division of Ilocos Sur.

C. Research Instrument

The research did not utilize a researcher-made instrument; therefore, this section will focus on the standardized instrument utilized in the study. The researcher adopted a standardized instrument from
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National Information and Communications Technology (ICT) Standards (NICS) developed by the Commission on Information and Communications Technology (CICT) as the primary data-gathering tool for this study. The instrument is divided into two sections: the demographic profile of non-teaching personnel is included in the first section, and the assessment of ICT competency is the subject of the second section. The instrument is a survey questionnaire focused on four (4) domains: Technology Operations, Concepts and Social and Ethical, Pedagogical and Professional. The instrument was ideal for the study since it had excellent content validity and is frequently used by educators and researchers to assess ICT competency. The researcher decided to utilize three (3) domains adopted from the National Information and Communications Technology (ICT) Standards (NICS) to tailor the questionnaire to the specific target population of the study, namely the non-teaching Personnel of DepEd Ilocos Sur. These domains include Technology Operations and Concepts, Social and Ethical, and Professional.

D. Research Ethics Protocol

This study adheres to the ethical criteria established by general research ethics, as mandated by the Data Privacy Act of 2012. By doing so, the participants were provided with comprehensive information regarding the many stages of the research process. Finally, the data-gathering materials were retained and disposed of after the study's completion.

E. Data Gathering Procedure

The researcher made a letter addressed to the Schools Division of Ilocos Sur asking for permission to conduct a survey with their non-teaching personnel employees. After that, the researcher will disseminate the questionnaire using Google Forms, as it is the fastest way to gather more accurate and valuable information. The initial page of the Google Form survey explained the study's objectives to the participants and assured them that the collected data would be handled confidentially. Furthermore, the researcher allotted enough time for the respondent to answer the questionnaire. The researcher believes that by doing so, the data gathered will be much more accurate, reliable, and of good quality. The data collection was from September 19 to October 9, 2023.

After the researchers gather the necessary data for the study, the researchers will now proceed with the analysis and interpretation of the gathered data with the right statistical tools.

F. Statistical Treatment of Data

The data was processed using IBM Statistical Packages for Social Sciences (SPSS) Statistics 27 and categorized following the order and sequence of the problem raised in Chapter I. To determine the
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demographic and ICT profile of the respondents in terms of age, gender, highest educational attainment, length of service, number of seminar/s attended on ICT, accessibility to ICT devices, and purpose for ICT use, frequency count and percentage were applied. The significant relationship between the demographic profile and the level of competence of the non-teaching personnel uses the Pearson Correlation Coefficient, also known as Pearson’s r. The researcher used a 4-point Likert scale to assess the level of competency in ICT of SDO Ilocos Sur NTPs.

Table 2

4-Point Likert Scale interpretation for the level of ICT competency of the NTPs of SDO – Ilocos Sur

<table>
<thead>
<tr>
<th>Scale</th>
<th>Descriptive Interpretation</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Expert</td>
<td>Very competent and can support other NTPs’ improvement.</td>
</tr>
<tr>
<td>3</td>
<td>Experienced</td>
<td>Competent but would benefit from further training and development.</td>
</tr>
<tr>
<td>2</td>
<td>Developing</td>
<td>Fairly competent and needs further training and development.</td>
</tr>
<tr>
<td>1</td>
<td>Beginning</td>
<td>Lacking competence and requires urgent training and development</td>
</tr>
</tbody>
</table>

RESULTS

Based on the collected data from the online Assessment Survey from September 19 to October 9, 2023, the following were the study findings:

Demographic Profile

![Graphical presentation of NTPs in SDO Ilocos Sur by age](https://ssrn.com/abstract=4611565)
Assessing ICT Competencies of NTP of DepEd-Schools Division of Ilocos Sur

Figure 3 shows the demographic profile of non-teaching personnel by age. The data indicates that the largest age group among the respondents falls within the 30-39 years old bracket, comprising 40.9% or 97 out of 237 respondents. Followed by the 20-29 years old bracket with 30.4% or 72 respondents. It can be inferred that the NTPs are predominantly in their middle adulthood phase.

Gender

![Gender Chart]

Figure 4. Graphical presentation of the gender of NTPs in SDO Ilocos Sur

Figure 4 shows the demographic profile of non-teaching personnel by gender. Out of 237 respondents, roughly 70.46% of the respondents were female, and the remaining 29.54% were male. This gender distribution highlights the predominance of females among NTPs.

Highest Educational Attainment

![Educational Attainment Chart]

Figure 5. Graphical presentation of the educational background of NTPs in SDO Ilocos Sur

Figure 5 shows the demographic profile of NTPs according to their highest educational attainment. 78.5% of the respondents, or 186 of the respondents, were Bachelor’s degree holders; 11.4%, or 27 respondents, were Master's degree holders; 4.2%, or 10 of the respondents, were Doctorate holders,
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and 3.8% or 9 of them have Master's degree units. This means that the majority of the NTPs gave value to their professional development by pursuing a higher degree in education.

**Length of Service**

Figure 6. Graphical presentation of the length of service of NTPs in SDO Ilocos Sur

Figure 6 shows the demographic profile of NTPs according to their length of service. The data indicated that the largest group, compromising 29.11%, has been in service for one year or less, and another 29.11% have served for 4-5 years. While 13.92% have served ten years and above, 10.97% have served 6-7 years, 8.86% have served 2-3 years, and 8.02% have served 8-9 years. This implies that more experienced NTPs may have had more chances to enhance their ICT competency over the years.

**Number of Seminar/s Attended on ICT**

Figure 7. Graphical presentation of the number of seminar/s attended on ICT by NTPs in SDO Ilocos Sur

Figure 7 shows the ICT profile of NTPs according to the number of seminar/s related to ICT attended. The majority of the respondents, or 49.8%, have not attended any ICT seminars, while 33.3% have attended 1 to 2 seminars and 11.0% have attended 3 to 4 seminars. On the other hand, 3.8% have
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attended 5 to 6 seminars, 1.3% have attended 9 and above ICT seminars, and 0.8% have attended 7 to 8 seminars. This indicates that the majority of the respondents or the NTPs need the opportunity to attend ICT seminars, highlighting a potential gap in access to ICT-related professional development opportunities.

Accessibility to ICT Devices

Figure 8 shows the percentage of people with access to various ICT devices based on a survey of 237 people. The devices are listed as follows, with the percentage of people who have access to each device in parentheses: Desktop/Laptop (99.2%), Tablet PC (46%), Smartphone/iOS (87.8%), Internet (92.4%), Scanner/Printer (86.9%), Television (73.4%), Radio (46.8%), CD/DVD Reader-Writer (30.8%), Digital Camera (29.1%), Voice Recorder (26.6%), Smartphone (0.8%). The graph shows that the most common ICT devices are desktop/laptop computers, smartphones/iOS devices, and the Internet. Over 90% of respondents have access to each of these devices. CD/DVD reader-writers, digital cameras, and voice recorders are the least common ICT devices. A maximum of 30% of respondents have access to these devices. The graph also shows a significant gap in access to tablet PCs. Only 46% of respondents have access to a tablet PC.
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Purpose for ICT Use

Figure 9 shows the purpose of ICT use. The ICT use purposes are listed as follows, with the percentage of respondents who checked each purpose in parentheses: Schedule and coordinate meetings (76.8%), Answer emails (92.8%), Create and maintain documents (94.5%), Manage calendars and schedules (64.6%), Order supplies and equipment (63.3%), Planning and implementing projects (57.4%), Providing administrative support (87.3%), Manage financial records (79.7%), Preparing presentations (79.7%), Generate reports (89.5%), research (63.7%), Personal/Recreational (0%). The most common ICT use purposes are answering emails (92.8%), creating and maintaining documents (94.5%), providing administrative support (87.3%), generating reports (89.5%), and research (63.7%). Over 70% of respondents checked the following ICT use purposes: answering emails, creating and maintaining documents, providing administrative support, generating reports, and research. The least common ICT use purpose is personal/recreational use. None of the respondents checked this purpose.

Level of ICT Competence of Non-Teaching Personnel (NTP) in the Three Competency Domains

To investigate the level of competence of NTPs in the three competency domains, descriptive statistics (mean score) were used.

Technology Operations and Concept

This domain includes competencies related to technical operations and concepts and productivity of various ICT tools like computers and communication devices, as well as online or offline applications.

Standard 1: Demonstrate knowledge and skills in basic computer operation and other information devices, including basic troubleshooting and maintenance.
Table 3

*Level of ICT Competence of NTPs in Domain I: Standard 1*

<table>
<thead>
<tr>
<th>Task Description</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Mean Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify and define the functions of the main components</td>
<td>237</td>
<td>2.98</td>
<td>0.63</td>
<td>Experienced</td>
</tr>
<tr>
<td>Identify and define the functions of computer peripheral</td>
<td>237</td>
<td>2.89</td>
<td>0.65</td>
<td>Experienced</td>
</tr>
<tr>
<td>Properly connect main components, configure peripherals, and install drivers when required.</td>
<td>237</td>
<td>2.85</td>
<td>0.73</td>
<td>Experienced</td>
</tr>
<tr>
<td>Configure computer settings of various software and hardware.</td>
<td>237</td>
<td>2.53</td>
<td>0.76</td>
<td>Experienced</td>
</tr>
<tr>
<td>Understand the basic functions of the operating system</td>
<td>237</td>
<td>2.95</td>
<td>0.74</td>
<td>Experienced</td>
</tr>
<tr>
<td>Organize and manage computer files, folders, and directories</td>
<td>237</td>
<td>3.28</td>
<td>0.68</td>
<td>Expert</td>
</tr>
<tr>
<td>Use storage devices (i.e., hard disk, diskette, CD, flash memory, Etc.) for</td>
<td>237</td>
<td>3.34</td>
<td>0.67</td>
<td>Expert</td>
</tr>
<tr>
<td>Protect the computer from viruses, spyware, adware, malware, hackers, etc.</td>
<td>237</td>
<td>2.68</td>
<td>0.73</td>
<td>Experienced</td>
</tr>
<tr>
<td>Use online and offline help facilities for troubleshooting, maintenance, and updating of applications</td>
<td>237</td>
<td>2.81</td>
<td>0.75</td>
<td>Experienced</td>
</tr>
<tr>
<td><strong>Grand Mean</strong></td>
<td></td>
<td>2.92</td>
<td>0.56</td>
<td>Experienced</td>
</tr>
</tbody>
</table>

*Mean ranking:*

- 1.00–1.75 Beginning
- 2.51–3.25 Experienced
- 1.76–2.50 Developing
- 3.26–4.00 Expert

Table 3 shows that most respondents have experienced knowledge and skills in basic computer operation and other information devices. The respondents have expert knowledge in organizing and managing computer files, folders, and directories using different devices. These skills are highly relevant to the administrative tasks of NTPs.
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*Standard 2:* Use appropriate office and teaching productivity tools.

**Table 4**

*Level of ICT Competence of NTPs in Domain I: Standard 2*

<table>
<thead>
<tr>
<th>Task Description</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Mean Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use word processors to enter and edit text and images.</td>
<td>237</td>
<td>3.27</td>
<td>0.65</td>
<td>Expert</td>
</tr>
<tr>
<td>Format text, control margins, layout, and tables.</td>
<td>237</td>
<td>3.29</td>
<td>0.62</td>
<td>Expert</td>
</tr>
<tr>
<td>Print, store, and retrieve text documents from a word processor</td>
<td>237</td>
<td>3.24</td>
<td>0.67</td>
<td>Experienced</td>
</tr>
<tr>
<td>Use a calculation spreadsheet to enter data, sort data, and format cells into tables.</td>
<td>237</td>
<td>3.14</td>
<td>0.69</td>
<td>Experienced</td>
</tr>
<tr>
<td>Make computations, use formulas, and create graphs using spreadsheets</td>
<td>237</td>
<td>3.00</td>
<td>0.73</td>
<td>Experienced</td>
</tr>
<tr>
<td>Print and store data tables using a spreadsheet application.</td>
<td>237</td>
<td>3.12</td>
<td>0.72</td>
<td>Experienced</td>
</tr>
<tr>
<td>Use a presentation package to add text and sequence a presentation</td>
<td>237</td>
<td>2.93</td>
<td>0.73</td>
<td>Experienced</td>
</tr>
<tr>
<td>Enhance slide presentations by adding sound, customizing animations, and inserting images.</td>
<td>237</td>
<td>2.84</td>
<td>0.77</td>
<td>Experienced</td>
</tr>
<tr>
<td>Print presentation handouts and store slide presentations.</td>
<td>237</td>
<td>3.06</td>
<td>0.69</td>
<td>Experienced</td>
</tr>
<tr>
<td>Make effective class presentations using the slides and LCD projector</td>
<td>237</td>
<td>2.80</td>
<td>0.75</td>
<td>Experienced</td>
</tr>
<tr>
<td>To acquire digital images and other media from websites, make use of CDs, flash drives, etc.</td>
<td>237</td>
<td>3.07</td>
<td>0.73</td>
<td>Experienced</td>
</tr>
<tr>
<td>Crop, scale, color correct, and enhance digital images</td>
<td>237</td>
<td>3.03</td>
<td>0.75</td>
<td>Experienced</td>
</tr>
<tr>
<td>Play various media files using appropriate media players</td>
<td>237</td>
<td>2.96</td>
<td>0.75</td>
<td>Experienced</td>
</tr>
</tbody>
</table>

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Stitch together video footage and soundtracks and add simple. Enhancement-transitions, titles, etc.
Attach and configure scanners, cameras, and cell phones to acquire digital image.
Store digital images using optical media (CD, DVD, Flash disk) and online repositories.

<table>
<thead>
<tr>
<th>Activity</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Mean Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect to the Internet via dial-up or LAN.</td>
<td>237</td>
<td>3.06</td>
<td>0.79</td>
<td>Experienced</td>
</tr>
<tr>
<td>Configure and use Web browsers and Help applications.</td>
<td>237</td>
<td>2.83</td>
<td>0.75</td>
<td>Experienced</td>
</tr>
<tr>
<td>Send and receive emails with attachments, manage emails, and use LAN and Web-based mail servers.</td>
<td>237</td>
<td>3.11</td>
<td>0.72</td>
<td>Experienced</td>
</tr>
</tbody>
</table>

Table 4 indicates that individuals in non-teaching roles exhibit a moderate to advanced proficiency in information and communication technology (ICT) across various competencies, including word processing, spreadsheet utilization, presentation software, image editing, and media management. Specifically, skills like using word processors and formatting text indicate an "Expert" level of competence, suggesting that non-teaching personnel are proficient in these areas.

Standard 3: Understand and effectively use the Internet and network applications and resources.

Table 5

<table>
<thead>
<tr>
<th>Level of ICT Competence of NTPs in Domain I: Standard 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Connect to the Internet via dial-up or LAN.</td>
</tr>
<tr>
<td>Configure and use Web browsers and Help applications.</td>
</tr>
<tr>
<td>Send and receive emails with attachments, manage emails, and use LAN and Web-based mail servers.</td>
</tr>
</tbody>
</table>
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Effectively use synchronous and asynchronous web-based communication tools like instant messengers, voice, and teleconferencing.

Connect and use shared printers, shared folders, and other devices within a network.

Effectively use search engines, web directories, and bookmarks.

Download and install relevant applications using freeware, shareware, updates, patches, viewers, and support applications.

Grand Mean

| Standard 4: Demonstrate knowledge and skills in information and data management. |
|---------------------------------|-----------------|-----------------|-----------------|
| **Table 6**                     | **Level of ICT Competence of NTPs in Domain I: Standard 4** |

<table>
<thead>
<tr>
<th>Standard</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Mean Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectively use search engines, directories, crawlers, and agents to locate information sources.</td>
<td>237</td>
<td>2.84</td>
<td>0.79</td>
<td>Experienced</td>
</tr>
<tr>
<td>Search and collect textual and non-textual information from online and offline sources.</td>
<td>237</td>
<td>2.90</td>
<td>0.75</td>
<td>Experienced</td>
</tr>
<tr>
<td>Efficiently store and organize collected information using directories, drives, or databases.</td>
<td>237</td>
<td>2.91</td>
<td>0.78</td>
<td>Experienced</td>
</tr>
</tbody>
</table>

Table 5 shows that non-teaching personnel's (NTPs) ICT proficiency in accessing the Internet and effectively using network applications and resources is categorized as "Experienced."

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| Distribution, share, publish, and print information via print or web. | 237 | 2.92 | 0.73 | Experienced |
| Properly acknowledge information sources – online and offline. | 237 | 2.93 | 0.72 | Experienced |
| Grand Mean | 237 | 2.90 | 0.69 | Experienced |

**Mean ranking:**

- **1.00–1.75** Beginning
- **2.51–3.25** Experienced
- **1.76–2.50** Developing
- **3.26–4.00** Expert

Table 6 suggests that the ICT ability of non-teaching personnel in this field is classified as "Experienced." Their ability to effectively use search engines, collect and organize information, distribute, share, publish, print, and adequately acknowledge sources is rated "Experienced."

Social and Ethical

This domain includes social, ethical, legal, and human issues and community linkage competencies.

*Standard 1: Understand and observe legal practices in the use of technology.*

**Table 7**

*Level of ICT Competence of NTPs in Domain II: Standard 1*

| Understand the legal implications of Software Licenses and Fair Use. | N | Mean | Std. Deviation | Mean Ranking |
| Differentiate and identify the Copyright, Trademark, and Patent of various products. | 237 | 2.75 | 0.83 | Experienced |
| Understand and explain the basic concepts of Intellectual Property Rights | 237 | 2.73 | 0.82 | Experienced |
| | 237 | 2.70 | 0.82 | Experienced |
| Grand Mean | 237 | 2.73 | 0.78 | Experienced |

**Mean ranking:**

- **1.00–1.75** Beginning
- **2.51–3.25** Experienced
- **1.76–2.50** Developing
- **3.26–4.00** Expert
Assessing ICT Competencies of NTP of DepEd-Schools Division of Ilocos Sur

Table 7 shows the competence of NTPs in understanding the legal implications of software licenses, basic concepts of intellectual property rights, and differentiation of copyright, trademark, and patent issues is rated as "Experienced."

**Standard 2: Recognize and practice ethical use of technology on both personal and professional levels.**

**Table 8**

*Level of ICT Competence of NTPs in Domain II: Standard 2*

<table>
<thead>
<tr>
<th>Activity</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Mean Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detecting plagiarism in student work.</td>
<td>237</td>
<td>2.55</td>
<td>0.81</td>
<td>Experienced</td>
</tr>
<tr>
<td>Properly acknowledge sources used in your own work.</td>
<td>237</td>
<td>2.85</td>
<td>0.80</td>
<td>Experienced</td>
</tr>
<tr>
<td>Be an Anti-Piracy advocate for all products with IPR, like music, data, video, and software.</td>
<td>237</td>
<td>2.85</td>
<td>0.76</td>
<td>Experienced</td>
</tr>
<tr>
<td>Advocate the responsible use of various technologies like computers, cell phones, etc.</td>
<td>237</td>
<td>3.06</td>
<td>0.76</td>
<td>Experienced</td>
</tr>
<tr>
<td>Show respect for privacy and cyber etiquette, phone etiquette.</td>
<td>237</td>
<td>3.16</td>
<td>0.74</td>
<td>Experienced</td>
</tr>
<tr>
<td>Grand Mean</td>
<td>237</td>
<td>2.90</td>
<td>0.69</td>
<td>Experienced</td>
</tr>
</tbody>
</table>

*Mean ranking:*

- 1.00–1.75 Beginning
- 2.51–3.25 Experienced
- 1.76–2.50 Developing
- 3.26–4.00 Expert

Table 8 demonstrates the highly ethical and responsible non-teaching staff's use of ICT in a learning setting. The fact that all subcategories received the "Experienced" ranking suggests that NTPs know about ethical issues.
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**Standard 3: Plan, model, and promote a safe and sound technology-supported learning environment.**

**Table 9**

**Level of ICT Competence of NTPs in Domain II: Standard 3**

<table>
<thead>
<tr>
<th>Activity</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Mean Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate proper handling of computer devices and use of applications</td>
<td>237</td>
<td>3.13</td>
<td>0.72</td>
<td>Experienced</td>
</tr>
<tr>
<td>Maintain a clean and orderly learning environment in the office</td>
<td>237</td>
<td>3.29</td>
<td>0.68</td>
<td>Expert</td>
</tr>
<tr>
<td>Promote and implement rules and regulations on the proper usage of computers</td>
<td>237</td>
<td>3.17</td>
<td>0.71</td>
<td>Experienced</td>
</tr>
<tr>
<td>Accurately report malfunctions and problems with computer software and hardware</td>
<td>237</td>
<td>3.03</td>
<td>0.72</td>
<td>Experienced</td>
</tr>
<tr>
<td>Grand Mean</td>
<td>237</td>
<td>3.15</td>
<td>0.64</td>
<td>Experienced</td>
</tr>
</tbody>
</table>

*Mean ranking:*
- 1.00–1.75 Beginning
- 2.51–3.25 Experienced
- 1.76–2.50 Developing
- 3.26–4.00 Expert

Table 9 shows that NTPs' ability to demonstrate proper handling of computer devices, promote and implement rules for computer usage, and accurately report malfunctions and problems with computer software and hardware are rated as "Experienced" while maintaining a clean office learning environment is rated as “Expert.”

**Standard 4: Facilitate equitable access to technology that addresses learning social and cultural diversity.**

**Table 10**

**Level of ICT Competence of NTPs in Domain II: Standard 4**

<table>
<thead>
<tr>
<th>Activity</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Mean Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapt activities using specialized hardware and software.</td>
<td>237</td>
<td>2.78</td>
<td>0.76</td>
<td>Experienced</td>
</tr>
</tbody>
</table>

*Mean ranking:*
- 1.00–1.75 Beginning
- 2.51–3.25 Experienced
- 1.76–2.50 Developing
- 3.26–4.00 Expert

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Table 10 focuses on the individual's capacity to modify activities using specialized hardware and software. This assessment categorizes their proficiency as "Experienced," suggesting potential enhancement in this skill set.

Professional

This domain includes competencies related to professional growth and development, research, innovation, and collaboration.

Standard 1: Proactively engage in exploring and learning new and emerging technologies.

Table 11

| Level of ICT Competence of NTPs in Domain III: Standard 1 |
|---------------------------------|-------|-------|----------------|
| Join online communities and subscribe to relevant mailing lists and online journals. | 237   | 2.72  | 0.80           | Experienced |
| Review new and existing software. | 237   | 2.57  | 0.79           | Experienced |
| Recommend useful and credible websites to colleagues. | 237   | 2.71  | 0.77           | Experienced |
| Means                                 | 237   | 2.67  | 0.74           | Experienced |

Mean ranking:
- 1.00–1.75 Beginning
- 2.51-3.25 Experienced
- 1.76–2.50 Developing
- 3.26-4.00 Expert

Table 11 shows the NTPs’ proficiency in participating in online communities, subscribing to pertinent mailing lists and online journals, evaluating novel and established software, and suggesting valuable and reliable websites to peers is assessed at an "Experienced" level.

Standard 2: Share experiences and expertise and collaborate with peers and stakeholders in advancing the use of technology in education and beyond.

Table 12

| Level of ICT Competence of NTPs in Domain III: Standard 2 |
|---------------------------------|-------|-------|----------------|
| Conduct research on the use of technology in the office. | 237   | 2.72  | 0.83           | Experienced |

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Table 12 shows that NTPs exhibit an "Experienced" level of ICT competence in Domain III: Standard 2, demonstrating competency in a range of online activities. However, their capacity to publish formal or informal ICT research is rated as "Developing," suggesting improvement in this area.

**The significant relationship between the demographic profile and the level of competence of the non-teaching personnel**

**Table 13**

The significant relationship between the demographic profile and the level of competence of the non-teaching Personnel in Domain I: Technology Operations and Concept

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Age</th>
<th>Length Service</th>
<th>Educational Attainment</th>
<th>Seminar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain I: Technology Operations and Concept</td>
<td>Pearson</td>
<td>-.147*</td>
<td>-.209**</td>
<td>-.167**</td>
<td>-.013</td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.023</td>
<td>.001</td>
<td>.010</td>
<td>.839</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>237</td>
<td>237</td>
<td>237</td>
<td>237</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 13 illustrates a significant relationship between the demographic profile of non-teaching personnel and their level of competence in Domain I: Technology Operations and Concept. Notably, age, length of service, and educational attainment exhibit negative correlations with competence, while attending seminars positively correlates with competence.
Assessing ICT Competencies of NTP of DepEd-Schools Division of Ilocos Sur

Social and Ethical

Table 14

*The significant relationship between the demographic profile and the level of competence of the non-teaching Personnel in Domain II: Social and Ethical*

<table>
<thead>
<tr>
<th>Domain II: Social and Ethical</th>
<th>Pearson Correlation</th>
<th>Gender</th>
<th>Age</th>
<th>Length Service</th>
<th>Educational Attainment</th>
<th>Seminar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>-.087</td>
<td>-.134*</td>
<td>-.125</td>
<td>-.013</td>
<td>.147*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.184</td>
<td>.040</td>
<td>.055</td>
<td>.839</td>
<td>.024</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>237</td>
<td>237</td>
<td>237</td>
<td>237</td>
<td>237</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).

Table 14 illustrates the relationship between the demographic profile of non-teaching personnel and their level of competence in Domain II: Social and Ethical. Among the demographic factors studied, only age and attendance of seminars demonstrate statistically significant correlations with competence.

Professional

Table 15

*The significant relationship between the demographic profile and the level of competence of the non-teaching Personnel in Domain III: Professional*

<table>
<thead>
<tr>
<th>Domain III: Professional</th>
<th>Pearson Correlation</th>
<th>Gender</th>
<th>Age</th>
<th>Length Service</th>
<th>Educational Attainment</th>
<th>Seminar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>-.002</td>
<td>-.059</td>
<td>-.088</td>
<td>.029</td>
<td>.189**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.974</td>
<td>.366</td>
<td>.178</td>
<td>.659</td>
<td>.003</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>237</td>
<td>237</td>
<td>237</td>
<td>237</td>
<td>237</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Table 15 illustrates a significant relationship between the demographic profile of non-teaching personnel and their level of competence in Domain III: Professional. Only seminar attendance displays a significant relationship with competence. The lack of significant correlations with gender, age, length of service, and educational attainment implies that these demographic factors do not substantially determine professional competence.
### Assessing ICT Competencies of NTP of DepEd-Schools Division of Ilocos Sur

#### Proposed Information and Communication Technology (ICT) Training to Develop the NTP’s ICT Competencies

<table>
<thead>
<tr>
<th>PROJECT TITLE</th>
<th>A THREE-DAY TRAINING-Workshop ON INFORMATION AND COMMUNICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPONENTS &amp; IMPLEMENTER/S</td>
<td>APRIL BENZON / CAMILLE SOLIVEN</td>
</tr>
<tr>
<td>PROPOSAL DATE/S</td>
<td>TBA</td>
</tr>
</tbody>
</table>

#### BACKGROUND AND RATIONALE

In an era where information and communication technology (ICT) has seamlessly integrated into our daily routines, there is an increasing necessity to guarantee that every individual, regardless of their professional roles, possesses competent ICT skills. Non-teaching personnel within the Department, as vital members of the academic environment, should not be overlooked in the digital era.

Based on the study, NTPs lack training-workshop about ICT literacy. With this prevailing situation, the proponent proposed to conduct a training-workshop to the NTP for them to learn the basics of Information and Communications Technology (ICT). This is anchored on the mandate of the DepEd Order No. 78, s. 2010, Guidelines for the Implementation of the DepEd Computerization Program (DCP), stressing the need to raise the ICT literacy of learners, teachers, staffs and school heads.

#### OBJECTIVES

- This training workshop aims to
  1. Familiarize participants with Microsoft Word features and functionalities.
  2. Encourage participants to create documents, spreadsheets, and presentations.
  3. Provide hands-on practice for participants to apply their knowledge of Microsoft Office tools.
  4. Explore advanced features of Microsoft 365 and its collaborative tools.
  5. Teach participants how to work effectively in a cloud-based environment.
  6. Introduce participants to Google Workspace (formerly G Suite) and its productivity tools.
  7. Compare and contrast Google Services with Microsoft Office tools.
  8. Introduce participants to Canva and its graphic design capabilities.
  9. Discuss the role of artificial intelligence in ICT and its impact on various industries.
  10. Encourage participants to continue learning and applying ICT skills in their professional lives.

#### ACTIVITIES

- Interactive Training-Workshop

#### OUTPUT

- State the product of the PPAs, should be a “data gathering” tool or a result of the objectives. Can be a survey form result, action plan, rubrics, assessment tool or whatever the project intends to gain.

#### TARGET PARTICIPANTS

- The target audience for the ICT training program is from public schools and offices of SDO-Ilocos Sur’s NTPs regardless of their location or job title. The program should be designed to meet the needs of staff members with a range of ICT skills, from basic to advanced.

#### PERFORMANCE INDICATOR/PHYSICAL TARGET

- Enhance ICT literacy among NTPs in SDO-Ilocos Sur by achieving a minimum 50% increase through a comprehensive, one-year training program.

#### EVALUATION TOOLS

- The NTP should evaluate the ICT training program on a regular basis to ensure that it is effective in developing the
  - *Participant satisfaction*
  - *Learning outcomes*
  - *Impact on the organization*

- The NTP can collect data for the evaluation through a variety of methods, such as surveys, interviews, and focus groups. The data can then be used to identify areas where the program can be improved.

#### EQUAL OPPORTUNITY POLICY

- This activity strictly adheres by the Equal Opportunity Policy (EOP), hence, no personnel will be discriminated on the basis of sexual orientation, gender identity and expression, ethnic and religious background and economic status. Minded based on sexual orientation, gender identity and expression, ethnic and religious background, and economic status.

#### INDICATIVE PROJECT SCHEDULE AND DURATION

<table>
<thead>
<tr>
<th>Activity</th>
<th>Dates and Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement (at least 2 weeks)</td>
<td>TBA</td>
</tr>
<tr>
<td>(Indicate on tentative dates N/A if no procurement needed)</td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td>TBA</td>
</tr>
<tr>
<td>Post-implementation</td>
<td>TBA</td>
</tr>
<tr>
<td>(Post-implementation includes evaluation and submission of pertinent)</td>
<td></td>
</tr>
</tbody>
</table>

#### DESCRIPTION OF RESOURCES

- The NTP will need to provide a variety of resources to support the ICT training program. These resources may include:
  - Training materials, such as handouts, presentations, and online courses
  - Equipment, such as computers, software, and audiovisual equipment
  - Instructors and facilitators

Electronic copy available at: https://ssrn.com/abstract=4611565
Figure 10 shows the proposed ICT training of the researchers. The proposed training comprises sessions for specific ICT topics that will help improve NTPs’ competence and further enhance their ICT skills.
Assessing ICT Competencies of NTP of DepEd-Schools Division of Ilocos Sur

DISCUSSION

A. Data Analysis and Findings

Demographic Profile

Age

The data presented reveals a notable age distribution among the respondents, with 30.4% in the 20-29 age group, 40.9% in the 30-39 age group, 27.4% in the 40-59 age group, and only 1.3% in the 60-65 age group. These findings align with the literature, which suggests that Millennials, typically individuals aged 20-39, have historically shown a strong inclination toward early technology adoption, reflected in high smartphone ownership and extensive social media engagement. The data supports this, with younger age groups likely having a higher smartphone ownership rate and utilizing social media platforms. However, it is worth noting that older generations are gradually narrowing this technological divide, as indicated in (Vogels, 2019).

Gender

The data, comprising 237 participants, clearly indicates that male instructors exhibit superior ICT competencies compared to their female counterparts. Specifically, 70.5% of the participants were female, while only 29.5% were male, aligning with the study's findings that male teachers have higher self-assessments of their ICT abilities, more frequent computer usage, and superior computer competencies than female teachers. These disparities may be attributed to gender stereotypes and cultural expectations. It is important to note that these results are context-specific and may vary based on the cultural and societal norms in different locations or countries. (Leong et al., 2016).

Highest Educational Attainment

The data presented demonstrates a significant correlation between levels of educational achievement and competence in information and communication technology (ICT). A significant proportion of the sample (78.5%) possess a college degree, indicating a considerable presence of individuals with a solid educational background. Furthermore, it is worth noting that 11.4% of individuals hold a Master's degree, while 4.2% have obtained a Doctorate, a qualification that often entails rigorous additional coursework and specialized training. This observation is consistent with existing literature that indicates a strong correlation between more significant levels of education and proficiency in information and communication technology (ICT).
Assessing ICT Competencies of NTP of DepEd-Schools Division of Ilocos Sur

Individuals with higher levels of education are inclined to exhibit enhanced digital literacy competencies and a greater level of comfort when engaging with technology. Consequently, this heightened proficiency may facilitate exploring more inventive applications of information and communication technology (ICT). The findings align with previous research indicating that persons with Master's degrees demonstrate higher skill levels in information and communication technology (ICT), likely due to their exposure to specialized training in this domain. The available data provides evidence that education can foster proficiency and aptitude in information and communication technology (ICT) (McClain et al., 2021) and (Dela Fuente et al., 2020).

**Length of Service**

A significant proportion (29.1%) of educators have a service duration of one year or less, while a comparable percentage is observed for those with 4-5 years of service. Conversely, individuals in the teaching profession who have accumulated a decade or more of experience constitute 13.9% of the surveyed population. The results of this study are consistent with prior research conducted by Leong et al. (2016), indicating that educators who have been in their positions for a more extended period may possess lower levels of proficiency in Information and Communication Technology (ICT). This is especially true if they still require sufficient training to effectively adapt to the ever-changing technological environment. Additionally, the data aligns with a study conducted by Luka and Frank (2012) within the banking sector. This study revealed that individuals with greater length of service were less inclined to indicate having undergone formal information and communication technology (ICT) training. Moreover, these employees were more prone to perceiving their ICT competencies as insufficient for their respective roles. Nevertheless, it is essential to acknowledge that although the duration of employment is a contributing factor, the personal drive of individuals and the accessibility of training prospects also exert a substantial influence on the level of information and communication technology (ICT) proficiency, as indicated by the research conducted by Luka and Frank. The previously mentioned study's findings emphasize the significance of continuous training and assistance for educators and employees in order to uphold and enhance their information and communication technology (ICT) skills, regardless of their tenure in their respective fields (Leong et al., 2016; Luka & Frank, 2012).

**Number of Seminar/s Attended on ICT**

The data regarding the number of seminars attended by Non-Teaching Personnel within the DepEd SDO of Ilocos Sur highlights an essential aspect of their training and development.
Nearly half of the respondents (49.8%) reported attending no seminars, and a substantial portion (33.3%) listened to only 1 to 2 workshops. This indicates a potential gap in the level of exposure to ICT training among administrative personnel. Given the importance of ICT training in enhancing organizational efficiency and effectiveness, the data suggests that there might be room for improvement. Implementing more seminars and training sessions on ICT, as indicated by the literature, could be beneficial in enhancing the skills and competencies of administrative personnel, ultimately leading to improved performance and efficiency within the organization. The data, therefore, aligns with the recommendation to establish a dedicated training department and allocate resources for various training methodologies to address this gap and improve administrative staff performance (Muhoho, 2018).

**Accessibility to ICT Devices**

The data on accessibility to ICT devices among the respondents highlights a significant level of access to various digital tools. Notably, the vast majority have access to desktop or laptop computers (99.2%), smartphones (87.8%), and the Internet (92.4%). These statistics suggest a generally high level of ICT resource availability, which aligns with the literature indicating that access to ICT resources is a crucial facilitator of ICT competence. Those with reliable access to computers, the Internet, and other digital devices are likelier to develop and maintain higher ICT skills. These resources enable individuals to practice, explore, and experiment with various technologies, contributing to their overall ICT competence. However, it is essential to consider the multiple factors mentioned in the literature, such as hardware quality and suitable software, as these can affect the quality of ICT resources and their impact on competence. In summary, the data supports the idea that accessibility to ICT resources is critical in enhancing ICT competence. However, the quality and suitability of these resources also play a vital role, in line with the insights from (BECTA 2004).

**Purpose for ICT Use**

The data on the purposes for ICT use among non-teaching personnel in SDO-Ilocos Sur reveals that most respondents use ICT for productivity-related tasks. Notably, a high percentage of respondents use ICT for functions such as answering emails (92.8%), creating and maintaining documents (94.5%), and generating reports (89.5%), indicating a strong focus on work-related functions. Additionally, many respondents use ICT for scheduling and coordinating meetings and events (76.8%), personal/recreational purposes (77.6%), and providing administrative support to other staff members (87.3%). This data aligns with the literature, which suggests that specific individuals, termed "Productivity Enhancers," exhibit a positive attitude toward using ICT for
personal and professional tasks. They believe in the beneficial impact of the Internet on their daily lives, particularly in terms of enhancing productivity. However, it is notable that their utilitarian attitude towards ICT use prioritizes task completion over active engagement in the online community, possibly resulting in limited contributions to user-generated content. The data supports the idea that administrative staff predominantly use ICT for productivity-related purposes (Pew Research Center, 2007).

**Level of ICT Competence of Non-Teaching Personnel (NTP) in the three Competency Domains**

**Technology Operations and Concept: Standard 1**

The provided data evaluates the ICT proficiency of non-teaching personnel in Domain I, following the National ICT Competency Standard (NICS) for Teachers (2006) framework in the Philippines. The range of mean scores across different competencies within this domain spans from 2.53 to 3.34. These results suggest that the ICT competence of non-teaching professionals in these domains can be classified as ranging from the "Experienced" to "Expert" levels. This implies that individuals not involved in teaching typically exhibit an average level of information and communication technology (ICT) proficiency while indicating potential for enhancement in particular domains. The significance of these competencies for proficient utilization of ICT in professional settings is evident, as it corresponds with existing scholarly literature that demonstrates a favorable correlation between ICT proficiency and job effectiveness among individuals not involved in teaching roles.

**Technology Operations and Concept: Standard 2**

The provided data assesses non-teaching personnel information and communication technology (ICT) competency in Domain I, Standard 2. The findings indicate that individuals in non-teaching roles exhibit a moderate to advanced proficiency in information and communication technology (ICT). Skills like using word processors to enter, format, and edit text and images indicate an "Expert" level of competence, suggesting that non-teaching personnel are proficient in these areas. The results of this study are consistent with previous research that highlights the significance of ICT competence in the job performance of non-teaching personnel. Individuals with more significant levels of ICT competence can successfully utilize ICT tools in their professional tasks, leading to enhanced job performance.
Technology Operations and Concept: Standard 3

The "Experienced" ranking, which indicates that NTPs have a significant competency in Domain I: Standard 3 that focuses on knowledge of and skill in utilizing the Internet and network resources, is supported by the overall Grand Mean for this domain of 2.97. This level of proficiency indicates that non-teaching personnel are well-prepared to traverse the digital world and is consistent with the growing relevance of ICT skills in the workplace.

Technology Operations and Concept: Standard 4

The findings in Domain I: Standard 4, which assesses the ICT competence of non-teaching professionals (NTPs) in efficiently using information retrieval and management tools, show a respectable level of competence classified as "Experienced" across several skills. This implies the readiness of NTPs to handle information sources, both online and offline, and leverage them to enhance their work. Although they have specific skills in these domains, enhancement is required to attain a higher level of proficiency. Developing and improving these competencies is expected to enhance individuals' ability to utilize information and communication technology (ICT) more efficiently within their professional endeavors, leading to enhanced job performance.

Social and Ethical: Standard 1

In Domain II: Standard 1, which evaluates the ICT competence of non-teaching personnel (NTPs) in comprehending the legal aspects of software licenses, fair use, intellectual property rights, and identifying copyrights, trademarks, and patents, the findings show a consistent level of competence labeled as "Experienced" By acquiring a deeper comprehension of the legal and ethical dimensions associated with information and communication technology (ICT), particularly about intellectual property, NTPs can ensure that they can adequately advise clients and follow the law in their job, reducing the danger of intellectual property breaches. Overall, these findings show how prepared NTPs are to confront legal issues related to ICT use, which increases their efficacy in their jobs.

Social and Ethical: Standard 2

The results consistently show a high level of expertise classified as "Experienced" in Domain II: Standard 2, which assesses the ICT competence of non-teaching personnel (NTPs) in areas related to ethical and responsible ICT usage. NTPs show proficiency in several areas,
including spotting plagiarism in student work (mean = 2.55), properly acknowledging sources used in their work (mean = 2.85), and fighting against piracy for intellectual property rights (IPR) in The Grand Mean for this domain is 2.90, which describes the aggregate competency of NTPs as "Experienced." These results demonstrate the highly ethical and responsible NTPs’ use of ICT in a learning setting. This level of proficiency shows that NTPs are aware of ethical principles and actively work to promote them, which are crucial for creating a welcoming and responsible ICT environment inside educational institutions.

Social and Ethical: Standard 3

Based on the available data, it can be inferred that non-teaching individuals demonstrate ICT competence classified as "Experienced" in Domain II, Standard 3. This observation suggests a high level of proficiency in these domains, suggesting that those not involved in teaching possess the necessary abilities to handle ICT devices and promote an environment conducive to learning. The findings presented in this study are consistent with the existing body of literature, which highlights the strong correlation between information and communication technology (ICT) proficiency and job effectiveness in non-teaching personnel. The individual's mastery of these skills significantly facilitates the efficient utilization of information and communication technology (ICT) within the professional setting, leading to improved job performance.

Social and Ethical: Standard 4

According to the data analysis, a notable level of competence is classified as "Experienced" in Domain II: Standard 4, which evaluates non-teaching personnel's ICT competence (NTPs) adapting activities using specialized hard. This shows that NTPs are skilled in modifying tasks that demand specific hardware and software. Their "Experienced" level of competence suggests that they can use cutting-edge ICT technologies effectively, which can improve the efficacy and efficiency of educational procedures. This ICT proficiency is essential for ensuring that educational institutions keep current with technology changes, which will eventually help personnel and students in terms of learning and general performance.

Professional: Standard 1

Based on the available data, it can be inferred that the ICT competence of non-teaching employees in Domain III, Standard 1, with a mean competence score of 2.72, falls under the "Experienced" classification. This underscores their ability to use digital resources for
Assessing ICT Competencies of NTP of DepEd-Schools Division of Ilocos Sur

professional advancement and improve the working environment. With the constantly changing information and technology landscape in educational settings, this proficiency enables them to remain current on the newest advances, offer helpful resources, and contribute to their professional networks.

Professional: Standard 2

In Domain III: Standard 2, which assesses the ICT competence of non-teaching personnel (NTPs) regarding their capacity to engage in activities related to technology research, online tutorials, forums, and research publications, the findings show that NTPs exhibit a significant level of competence classified as "Experienced. The mean competence score is 2.71, positioning them in the "Experienced" range. These findings show that NTPs are skilled at researching technology in the workplace, remaining informed through online tutorials, actively engaging in online forums and conversations, and disseminating their expertise through research articles. Their expertise in these fields aligns with their support of digital integration and instructional technology in the educational setting. NTPs may require extra assistance or training in formalizing and disseminating their findings, though, as shown by the competency level for publishing formal or informal research on the use of ICT being labeled as "Developing."

However, their total "Experienced" competency level shows they are well-equipped to contribute to the efficient use of ICT inside their educational institutions and actively connect with online communities and resources.

The significant relationship between the demographic profile and the level of competence of the non-teaching personnel.

Technology Operations and Concepts

The data analysis findings reveal significant correlations between demographic variables and ICT competency in Technology Operations and Concepts. There are statistically significant associations between age, duration of service, seminar attendance, and ICT competency. The Pearson correlation values for these variables are -0.209, -0.167, and 0.177, respectively. The observed correlations exhibit statistical significance at the 0.01 level (two-tailed). This indicates that as persons age or accumulate more years of employment, there is a tendency for their ICT competence to decline. Conversely, participation in seminars is associated with higher levels of ICT competence. In contrast, the data reveals no significant associations between gender, educational attainment, and ICT competency. The results of this study are consistent with the argument made in existing research by Aramide, Ladipo, and Adebayo (2015) and
Assessing ICT Competencies of NTP of DepEd-Schools Division of Ilocos Sur

UNDP (2011) that demographic variables, including age and educational attainment, can influence individuals' competency in using information and communication technology (ICT).

Social and Ethical

The study of the data shows various associations between demographic variables and ICT proficiency in the Social and Ethical domains. The study reveals a statistically significant negative association between age and length of service with ICT competence. The Pearson correlation coefficients for age and length of service are -0.134 and -0.125, respectively. The corresponding p-values for age and length of service are 0.040 and 0.055, both below the predetermined significance level of 0.05. This finding indicates a negative correlation between age and ICT competence levels and between service tenure and ICT competence levels. On the other hand, there is a significant and statistically significant positive relationship between attending seminars and ICT competence. This is evident from the Pearson correlation coefficient of 0.147 and a p-value of 0.024, suggesting that those attending workshops have greater ICT competence. The analysis does not reveal significant relationships between gender, educational level, and ICT proficiency.

Professional

The data presented in this study reveal significant associations between demographic factors and information and communication technology (ICT) proficiency, particularly in the context of the professional domain. Significantly, there are statistically significant connections between gender and participation in seminars with ICT skills in this particular setting. The findings indicate a statistically significant positive relationship ($r = 0.189$, $p = 0.003$) between attending seminars and ICT competence. This shows that participants in seminar activities are more likely to exhibit higher levels of ICT competence. In contrast, the analysis reveals a lack of substantial association between gender and ICT competence ($r = -0.002$, $p = 0.974$), suggesting that gender may not significantly influence ICT competence within the professional domain. Although there is no statistically significant relationship between age, length of service, and educational attainment, these findings align with previous studies, such as Aramide, Ladipo, and Adebayo (2015) and the UNDP (2011), which emphasize the variability in the association between demographic factors and ICT competence based on specific contextual factors.
Assessing ICT Competencies of NTP of DepEd-Schools Division of Ilocos Sur

Proposed ICT Training to Develop the NTP’s ICT Competencies

In an era where information and communication technology (ICT) has seamlessly integrated into our daily routines, there is an increasing necessity to guarantee that every individual, regardless of their professional roles, possesses competent ICT skills. Non-teaching Personnel within the Department, as vital members of the academic environment, should be noticed in the digital era.

The researchers proposed a comprehensive ICT training program tailored to enhance non-teaching professionals' ICT competencies. This comprehensive training program equips participants with a wide range of ICT skills, including proficiency in various ICT software programs such as Microsoft Office Suite, Microsoft 365, Google Workspace, and Canva, and the emerging influence of artificial intelligence. The training workshop equipped NTPs with skills to navigate and excel in today's tech-driven work environments and enhanced their productivity and adaptability in this digital age.

B. Conclusions

The study of the demographic characteristics of non-teaching employees and their competency in information and communication technology (ICT) across different areas reveals numerous significant observations.

1. Demographic Profile

The demographic profile analysis provides valuable insights into the factors influencing ICT competence among educators and administrative staff. These findings can inform strategies for enhancing digital literacy and technology adoption in the educational sector. In the light of the findings of the study, it can be concluded that:

Age: A significant age distribution, with a notable presence of respondents in the 30-39 age group, reflects a trend of strong technology adoption among Millennials. However, it is essential to acknowledge that older generations are catching up in technology usage.

Gender: The demographic profile of non-teaching personnel by gender-dominant population in DepEd-Ilocos Sur was female. Thus, there is a gender-based disparity in ICT competencies, with male instructors displaying higher competence levels than their female counterparts. Cultural and societal factors may influence this gender gap.

Highest Educational Attainment: The Non-Teaching Personnel in Schools Division of Ilocos Sur majority are college-level, which means they gave value to their professional development by pursuing a higher degree in education. There is a strong correlation between educational achievement and ICT competence. Individuals with higher levels of
Assessing ICT Competencies of NTP of DepEd-Schools Division of Ilocos Sur

education tend to have better digital literacy and comfort with technology.

Length of Service: Most NTPs in DepEd-Ilocos Sur only have one year or less in service, most of which are new in the agency. More experienced NTPs may have had more chances to enhance their ICT competency over the years. The duration of employment impacts ICT proficiency, with longer-serving educators possibly having lower ICT competencies. This underscores the need for continuous training and support, regardless of tenure.

Number of Seminars Attended on ICT: A substantial portion of respondents among non-teaching personnel reported limited exposure to ICT seminars and training. It can be concluded that there is an opportunity for improvement in providing more training opportunities to enhance competencies and performance.

Accessibility to ICT Devices: The study concluded that most respondents have access to various ICT devices, a crucial facilitator of ICT competence. However, the quality and suitability of these resources should also be considered.

Purpose for ICT Use: The majority of respondents use ICT for productivity-related tasks, aligning with the notion of "Productivity Enhancers." This utilitarian approach emphasizes task completion and work-related functions.

2. Level of ICT Competence of Non-Teaching Personnel (NTP) in the Three Competency Domains

Technology Operations and Concept

It can be concluded that non-teaching personnel (NTPs) display varied levels of ICT competence in the Technology Operations and Concept domain. Providing credence that NTPs often have a variety of ICT abilities, from "Experienced" to "Expert," demonstrating their ability to traverse the digital world successfully. The findings are consistent with other studies highlighting the value of ICT competence in non-teaching occupations' ability to do their jobs. Because of their competence, NTPs may effectively use ICT tools and resources in their professional tasks, thereby improving their job output. Despite their many areas of excellence, there is still potential for growth and training to increase proficiency levels and adapt to the changing ICT world.

Electronic copy available at: https://ssrn.com/abstract=4611565
Social and Ethical

It can be concluded that non-teaching personnel (NTPs) exhibit a consistent and noteworthy level of ICT competence in the social and ethical domain (Domain II). This high level of competence, classified as "Experienced" across all standards within this domain, signifies their proficiency in comprehending legal and ethical aspects of ICT, promoting responsible usage, and adapting to specialized technology. It underscores the NTPs' preparedness to address legal and ethical dimensions associated with ICT, leading to greater effectiveness in their roles and creating a responsible and ethical ICT environment in educational institutions.

Professional

It can be concluded that non-teaching personnel (NTPs) exhibit a commendable level of ICT competence in the professional domain, encompassing both Standard 1 and Standard 2 within Domain III. This "Experienced" level of competence underscores their capacity to harness digital resources for professional development and actively participate in the ever-evolving educational landscape. While they excel in some areas, there is room for growth in formalizing and publishing their research findings, as indicated by the "Developing" rating. These findings highlight NTPs' essential role in advancing ICT utilization and promoting educational technology in their institutions.

3. **The significant relationship between the demographic profile and the level of competence of the non-teaching personnel.**

Technology Operations and Concept

There is a significant relationship between the demographic profile of non-teaching personnel and their competence in Technology Operations and Concepts. ICT proficiency is correlated with age, service tenure, and seminar participation. As individuals age or accumulate more years of employment, their ICT competence may decline, while active participation in seminars is associated with higher levels of ICT competence. However, there is no significant relationship between gender, educational attainment, and ICT competency, highlighting the multifaceted nature of the factors that impact digital proficiency.
Social and Ethical

Social and Ethical domains have compelling associations between demographic variables and ICT proficiency. Specifically, it demonstrates a statistically significant negative correlation between age and length of service with ICT competence, indicating that their ICT proficiency decreases as individuals age or accumulate more years of service. Conversely, active participation in seminars is positively linked with higher ICT competence, affirming the importance of continuous training.

Professional

It can be concluded that there is a relationship between demographic factors and information and communication technology (ICT) proficiency within the professional domain. A noteworthy result is the statistically significant positive association between attending seminars and ICT competence, indicating that seminar participants are more likely to exhibit higher levels of ICT proficiency. However, gender does not appear to significantly influence ICT competence in this professional context, as there is no statistically significant relationship.

4. **Proposed ICT Training to Develop the NTP’s ICT Competencies**

It can be concluded that the ICT training program for NTPs is crucial and timely. Addressing the lack of tailored ICT training workshops for NTPs will be beneficial. It offers a valuable opportunity for the NTPs to acquire a wide range of ICT skills and knowledge that will contribute to their professional development and increase productivity and efficiency in the workplace. Providing continuous and regular ICT-related training will help to sustain the NTPs' ICT proficiency.

C. **Recommendations**

These recommendations aim to address the observed disparities in ICT competence among non-teaching personnel and enhance their digital literacy and technology adoption in the educational sector. Based on the conclusion of the study, it is recommended to:

1. **Promote Lifelong Learning:** Encourage non-teaching personnel of all age groups to engage in continuous ICT training and skill development to bridge the gap in competence among different generations. This could include providing online courses, workshops, and seminars.

2. **Develop Gender-Inclusive Training Programs:** Develop ICT training programs sensitive to gender disparities in ICT competence. Special efforts should be made to encourage and support
female non-teaching personnel in enhancing their ICT skills. Creating a supportive and inclusive learning environment can help address this gender gap.

3. **Enhance Educational Opportunities:** Support non-teaching personnel in pursuing higher educational degrees or certifications related to ICT. Encourage them to continue their education, which has positively correlated with ICT competence.

4. **Implement the customized ICT program proposed in this study.** All NTPs should receive a training workshop that offers a comprehensive discussion of different ICT topics that will help improve their ICT skill. A three-day comprehensive training program equips participants with ICT skills, including proficiency in various ICT software programs. The training workshop equipped NTPs with skills to navigate and excel in today's tech-driven work environments and enhanced their productivity and adaptability in this digital age.

5. **Increase Access to ICT Seminars:** Organize more ICT seminars and training sessions, making them easily accessible to non-teaching personnel. Ensure that these seminars cover a broad range of topics, from basic technology concepts to advanced professional ICT use.

6. **Improve ICT Device Quality and Suitability:** While many non-teaching personnel have access to ICT devices, ensure that these devices are of good quality and meet the specific needs of their job roles. This will contribute to enhanced ICT competence and performance.

7. **Emphasize ethical ICT Training:** Emphasize ethical ICT use in training programs, focusing on understanding software licenses, intellectual property rights, and other legal aspects. Training should also cover privacy, cyber etiquette, and responsible technology usage to improve ICT competence.

8. **Promote Peer Learning and Evaluation:** Promote peer learning and evaluation as a part of professional development. Encourage non-teaching personnel to engage in online communities, evaluate software, and provide recommendations to one another. This will enhance their professional ICT skills and job performance.

9. **Implement Regular Assessment and Feedback:** Implement regular assessments and feedback mechanisms to track the progress of non-teaching Personnel in ICT competence. Use this information to tailor training programs and ensure continuous improvement.

10. **Monitoring and Evaluation:** Establish a system to monitor the impact of demographic characteristics on ICT competence over time. Regular evaluations can help adapt strategies and interventions to address changing demographics and ICT needs.

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