

# LEVEL OF TECHNOLOGICAL COMPETENCE OF NON-TEACHING PERSONNEL

Jessica Cadater Baniaga  
Graduate School  
St. Louis College of Bulanao  
Bulanao, Tabuk City, Kalinga

**Abstract**— The study aimed to identify and determine the technological competence of non-teaching personnel in the Western & Eastern Tabuk District of Schools Division of Tabuk City as a basis for an enhancement program. It utilized the Mixed method. The respondents of the study were the Non- Teaching Personnel of Western & Eastern District of Tabuk City Division identified through total enumeration. Overall, the non-teaching employees of the two districts of School Division of Tabuk City are highly competent in terms of computer/ ICT skills, written skills and innovation. The emerging themes in line with the challenges and issues encountered are technological barriers and skill deficiencies, complicated software and user difficulties, and lack of reliable internet and connection struggles. Based on the findings of this study the following proposed program is anchored on technology modernization and skills training, technology empowerment and skill advancement, and technology-driven productivity enhancement.

**Keywords**— *Information and Communication Technology (ICT), Non- Teaching, Innovation*

## I. INTRODUCTION

In recent years, technology has become an essential component of education, demanding that non-teaching personnel stay updated to carry out their responsibilities effectively. Globally, non-teaching staff play a crucial role in managing operational, technical, and administrative tasks that ensure the safety and success of students (Lee & Kim, 2022). However, studies conducted in Vietnam and Africa identified significant gaps in digital skills among these personnel, with approximately 82.5% requiring training in areas such as digital literacy and cybersecurity (Vaezi & Lai, 2022). Additionally, many emphasize the need for improved communication tools and institutional investment in employee training to keep pace with technological advancements (Rizvi & Hussain, 2020).

In the Philippine public service, non-teaching personnel are tasked with providing quality, standardized, and sustainable services. Within the Department of Education (DepEd), the efficiency of educational institutions heavily relies on the professional development of non-teaching staff. The transition away from traditional, outdated methods is necessary to enhance service delivery. Development programs tailored to the characteristics, competencies, and work performance of non-teaching staff are critical for ensuring high-quality public services. However, these personnel face several

technological challenges, such as limited access to technology, insufficient training, cybersecurity threats, integration difficulties, and maintenance issues. Addressing these challenges through training, resource allocation, cybersecurity awareness, and technical support can improve both their efficiency and the overall performance of educational institutions (Greenberg & Coatsworth, 2019).

According to Department of Education Memorandum No. 007, s.2023, non-teaching positions are defined as roles that support basic education services and agency goals but do not involve teaching or instructional duties. To enhance their efficiency and productivity, non-teaching personnel must receive adequate training in technology, gain access to updated tools, and develop cybersecurity awareness (Anandarajan & Simmers, 2022). De Castro (2021) highlighted that the performance of these staff has a direct impact on the success of educational institutions and the students they serve.

While numerous studies examine the effects of training and development on employee performance, limited research focuses on the technological needs of non-teaching personnel, particularly in government educational institutions. Addressing these gaps can improve the quality of education in the Philippines. By equipping non-teaching personnel with updated technological tools and resources, they can better fulfill their administrative duties, directly contributing to the success of schools and their students (Chakraborty, 2021).

In the Schools Division of Tabuk City, non-teaching personnel are increasingly using laptops and computers for tasks such as document encoding, record management, salary computation, and report preparation. However, some personnel lack basic computer skills. As observed by the researcher, technological tools have the potential to boost productivity and efficiency, but a sustainable computer literacy program is necessary. Additionally, poor ICT backup strategies often lead to data loss, further underscoring the need for technical support and resources.

This research focuses on non-teaching personnel in elementary and secondary schools within the Western and Eastern Tabuk Districts. Its goal is to identify and enhance their technological skills through a quality improvement program.

Unlike previous studies that primarily targeted teaching staff, this research addresses gaps in understanding the specific technological needs of non-teaching personnel. By conducting a comprehensive needs assessment and proposing an enhancement program, the study aims to improve the efficiency and effectiveness of non-teaching staff, ultimately supporting the success of educational institutions.

## II. METHODS

This study employed a multimethod research design to examine the technological competencies of non-teaching personnel in the Western and Eastern Districts of the Tabuk City Division and their impact on personal and professional skills development and efficacy. The findings were intended to serve as a basis for the design of an enhancement program. The descriptive method was used to determine the levels of technological competence among the respondents, while basic qualitative analysis explored the challenges and issues they encountered in using technology, as well as proposed programs to improve their technological skills.

The respondents were selected through total enumeration, including the entire population of non-teaching personnel from the Western and Eastern Districts of the Tabuk City Division. Participants consisted of Administrative Officers (AO II) and Administrative Assistants (ADAS II and ADAS III) deployed across various schools within these districts. In total, 47 respondents participated in the study, with 22 from the Eastern Tabuk District and 25 from the Western Tabuk District.

Data were collected using a survey questionnaire adapted from the Individual Performance Commitment Review Form (IPCRF) used by the Department of Education. The questionnaire consisted of three sections. The first section collected demographic information, including gender, age, position, marital status, length of service, type of school deployment, highest educational attainment, and trainings attended related to technology within the last three years. The second section assessed technological competence in three areas: Computer/ICT Skills, Written Communication, and Innovation. These competencies were derived from the core skills and behavioral competencies of Part II of the IPCRF-Result Based Performance Management System for non-teaching personnel, with responses scored on a four-point Likert scale. The third section included open-ended questions to gather information on challenges encountered in using technology and proposed enhancement programs to address these challenges.

Permission to conduct the study was obtained from the City Schools Division Superintendent. After approval, the researcher personally delivered the questionnaires to the respective schools or workplaces of the respondents and closely supervised the data collection to ensure maximum retrieval. Respondents were informed of their rights and assured that all data would be treated with strict confidentiality in compliance with the Data Privacy Act. Collected data were carefully

recorded, organized, analyzed, and interpreted to ensure accurate and reliable results.

For data analysis, descriptive statistics such as frequency counts and percentages were used to describe the respondents' demographic profile, while the weighted mean was applied to determine levels of technological competence. Inferential statistics, specifically One-Way ANOVA, were used to test for significant differences among identified variables. For the qualitative data on challenges and proposed enhancement programs, thematic analysis was conducted to identify recurring patterns and insights.

## III. RESULTS

Table 1. Frequency and Percentage Distribution of the Respondents According to their profile.

| <b>Gender</b>                                 | Frequency | Percentage |
|---|-----------|------------|
| Male  | 8         | 17.00      |
| Female  | 39        | 83.00      |
| <b>Age</b>                                    |           |            |
| 20-25   | 2         | 4.00       |
| 26-30   | 6         | 13.00      |
| 31-35   | 25        | 53.00      |
| 36-40   | 4         | 9.00       |
| 41- onwards                                   | 10        | 21.00      |
| <b>Marital status</b>                         |           |            |
| Single  | 12        | 25.00      |
| Married                                       | 25        | 75.00      |
| <b>Position</b>                               |           |            |
| ADAS II                                       | 14        | 30.00      |
| ADAS III                                      | 8         | 17.00      |
| AO II   | 25        | 53.00      |
| <b>Type of School Deployment</b>              |           |            |
| Cluster                                       | 42        | 89.00      |
| Implementing Units (IU's)                     | 5         | 11.00      |
| <b>Length of Service</b>                      |           |            |
| Below one year                                | 5         | 11.00      |
| 1 -5 years                                    | 32        | 68.00      |
| 6- 10 years                                   | 8         | 17.00      |
| 11-15 years                                   | 2         | 4.00       |
| <b>Highest Educational Attainment</b>         |           |            |
| College Graduate                              | 41        | 87.00      |
| Master's Degree                               | 6         | 13.00      |
| <b>Trainings Attended(Technology Related)</b> |           |            |
| None  | 42        | 89.00      |
| Basic computer Literacy                       | 5         | 11.00      |

From the data presented, it could be gleaned that most of the respondents are female. In terms of age most of them are 31- 35 years old. Most of them are married and as to position AOs have a great portion of the respondents. As to deployment, few were only are in IU's. Most of them were deployed in cluster schools. For length of service there are more

respondents who belong to 1 year to 5 years while there was few in 11-15 years. In terms of highest educational attainment most of them are college graduates. Few are in Master's degree level. Lastly, as to trainings attended relevant to technology integration most of them have no trainings.

Table 2. Level of Technological Competence of the Non-Teaching Personnel in the two districts of Schools Division of Tabuk City in terms of Computer/ICT Skills

| Indicators  | Weighted Mean | Qualitative Description |
|---|---------------|-------------------------|
| 1. Prepares basic compositions e.g., letters, reports, spreadsheets and graphics presentation using Word Processing and Excel.  | 3.43          | Highly competent        |
| 2. Identifies different computer parts, turns the computer on/off, and work on a given task with acceptable speed and accuracy and connects computer peripherals (e.g. printers, modems, multimedia projectors, etc). | 3.45          | Highly competent        |
| 3. Prepares simple presentation using PowerPoint.   | 3.51          | Highly competent        |
| 4. Utilizes technologies to: access information to enhance professional productivity, assists in conducting research and communicated through local and global professional networks.                                 | 3.36          | Highly Competent        |
| 5. Recommends appropriate and updated technology to enhance productivity and professional practice.   | 3.40          | Highly competent        |
| Average Weighted Mean   | 3.43          | Highly Competent        |

As presented above, respondents under this indicator of competence obtained an average weighted mean of 3.43 which means that the non-teaching personnel of the two district of Schools Division of Tabuk City are highly competent. In this indicator, Item 3 had the highest weighted mean of 3.51 which is prepares simple presentation using powerpoint. Item 4, on the other hand, obtained a weighted mean of 3.36 respondents are still highly competent in Utilizing technologies to: access information to enhance professional productivity, assists in conducting research and communicated through local and global professional networks.

Table 3. Level of Technological Competence of the Non-Teaching Personnel in the two districts of Schools Division of Tabuk City in terms of Written skills

| Indicators  | Weighted Mean | Qualitative Description |
|---|---------------|-------------------------|
| 1. Knows the different written business communication formats used in the DepEd.  | 3.06          | Competent               |
| 2. Writes routine correspondence/communications, narrative and descriptive report based on readily available information data with minimal spelling or grammatical error/s (e.g., memos, minutes, etc.) | 3.36          | Highly competent        |
| 3. Secures information from required references (i.e., Directories, schedules, notices, instructions) for specific purposes.  | 3.45          | Highly competent        |
| 4. Self-edits word, numbers, phonetic notation and content, if necessary.   | 3.34          | Highly Competent        |
| 5. Demonstrates clarity, fluency, impact, conciseness and effectiveness in his/her written communications.  | 3.15          | Competent               |
| Average Weighted Mean   | 3.27          | Highly Competent        |

Table 3 shows the level of technological competence of the non-teaching personnel in the two districts of Schools Division of Tabuk City in terms of Written skills. It can be gleaned from the table shown above that the non-teaching personnel of the two districts of Schools Division of Tabuk City are highly competent in terms of written communication skills with an average weighed mean of 3.27. Item 3 obtained the highest weighted mean. On the other hand, Item 1 obtained a weighted mean of 3.06 which implies that respondents are competent in Knowing the different written business communication formats used in the DepEd.

Table 4. Level of Technological Competence of the Non-Teaching Personnel in the two districts of Schools Division of Tabuk City in terms of Innovation

| Indicators   | Weighted Mean | Qualitative Description |
|--|---------------|-------------------------|
| 1. Examines the root cause of problems and suggests effective solutions. Fosters new ideas, processes, and suggests better ways to do things (cost and/or operational efficiency). | 3.17          | Competent               |
| 2. Demonstrates an ability to think "beyond the box".  | 3.28          | Highly competent        |

|   |      |           |
|---|------|-----------|
| Continuously focuses on improving personal productivity to create higher value and results.   |      |           |
| 3. Promotes creative climate and inspires co-workers to develop original ideas or solutions.  | 3.19 | Competent |
| 4. Translates creative thinking into tangible changes and solutions that improve the work unit and organization.                          | 3.23 | Competent |
| 5. Uses ingenious methods to accomplish responsibilities. Demonstrates resourcefulness and the ability to succeed with minimal resources. | 3.21 | Competent |
| Average Weighted Mean   | 3.22 | Competent |

Table 4 shows the level of technological competence of the non-teaching personnel in the two districts of Schools Division of Tabuk City in terms of Innovation. It is reflected that respondents are competent in the field of innovation, with a average weighted mean of 3.22. In this, indicator, it is also revealed that respondents are highly competent in demonstrating an ability to think “ beyond the box” and continuously focus on improving personal productivity to create higher value results. In addition, with a weighted average of 3.17 which implies that respondents are competent in examining the root cause of problems and suggests effective solutions. Fosters new ideas, processes, and suggests better ways to do things (cost and/or operational efficiency).

Table 5. Overall Level of Technological Competence of the Non-Teaching Personnel in the two districts of Schools Division of Tabuk City

| Indicators              | Weighted Mean | Qualitative Description |
|-------------------------|---------------|-------------------------|
| 1. ICT/ Computer Skills | 3.43          | Highly Competent        |
| 2. Written Innovation   | 3.27          | Highly competent        |
| 3. Innovation           | 3.22          | Competent               |
| Average Weighted Mean   | 3.31          | Highly Competent        |

Table 5 summarizes the level of technological competence of non-teaching personnel of the two districts of School Division of Tabuk City from all the indicators of competence of non-teaching personnel. Overall, 47 non-teaching employees of the two districts of School Division of Tabuk City are highly competent with an average weighted mean of 3.31. This means that they demonstrate a favorable level of technological competence and productivity which could result in the desired organizational outcomes. In summary, indicators obtained a “Highly Competent” mark from the scale of level of competence in ICT/ Computer Skills has weighted mean of

3.43;3.27 for written communication; and Innovation with 3.22 which obtained a “ competent” mark from the scale of level of technological competence.

Table 6. Results of the Test of Significant Difference in the Level of Technological Competence of the Respondents in terms of ICT/ Computer Skills, Written Skills and Innovation when grouped according to their profile

| Profile                        | p-value | Interpretation  |
|--------------------------------|---------|-----------------|
| Gender                         | 0.11    | Not Significant |
| Age                            | 0.59    | Not Significant |
| Marital Status                 | 0.21    | Not Significant |
| Position                       | 0.22    | Not Significant |
| Type of School Deployment      | 0.42    | Not Significant |
| Length of Service              | 0.00    | Significant     |
| Highest Educational Attainment | 0.37    | Not Significant |
| Training/s Attended            | 0.02    | Significant     |

The results show that gender ,age, marital status, position, type of school deployment , and Highest Educational Attainment did not significantly influence the respondent’s ICT/Computer skills, written skills, and innovation as their respective p-values exceeded the significance at a 0.05 level of significance.

Table 7. Post-Hoc Test – Level of Technological Competence

|            |                 | 1-5years | 6-10years | 11-15years |
|------------|-----------------|----------|-----------|------------|
| 1-5years   | Mean difference | —        | 0.212     | 0.374 ***  |
|            | p-value         | —        | 0.280     | <.001      |
| 6-10years  | Mean difference |          | —         | 0.162      |
|            | p-value         |          | —         | 0.435      |
| 11-15years | Mean difference |          |           | —          |
|            | p-value         |          |           | —          |

Note. \* p < .05, \*\* p < .01, \*\*\* p < .001

On the length of service and training attended related to technology within the last three years were found to have a significant impact, with p-values of 0.00 and 0.02, respectively.

### Challenges/ Issues encountered by the Non-Teaching Personnel in the use of Technology

These themes provide a detailed analysis of the technology challenges or issues encountered by the non-teaching personnel deployed in schools. This exploration

reveals how non-teaching personnel deal with these difficulties while contributing to the school system in a constantly changing technological environment. The study highlights the often overlooked role of their experiences with technology. The main themes are Technological Barriers and Skill Deficiencies, Complicated Software and User Difficulties, and Lack of Reliable Internet and Connection Struggles.

### Theme 01: Technological Barriers and Skill Deficiencies

This study looks into how technology challenges and skill gaps affect the productivity and abilities of non-teaching personnel in schools. It explores how the presence or absence of technological tools impacts their efficiency and work performance. It also examines whether current technology meets their needs, the problems they face in using it, and how their tech skills influence their overall job success. This means that while technology issues can affect performance and skill growth, using technology effectively can boost productivity and support professional development. It highlights the need for effective training programs and easy-to-use technology in schools to help address these challenges.

ADAS 01: “*Aghahang wenu aglalag dagitoy newly issued nga laptop me karu nu nabayag nga maus usar, awan gamin laptop fan na.*” (Newly issued laptop experiencing laptop lagging especially if in use for a long hours maybe due to no laptop fan.)

AO 02: Yes, I have experienced a technology related issue while working on a report. When I was working on a report that required me to use Microsoft outlook, that software tool was not functioning properly, and I was unable to complete the task on time.

ADAS 02 : “*Nu usarek phone ko gapu ta adu ti ma download nga format ti report excel man wenu PDF file ket bassit lang ti storage na daytoy cellphone ko ket ag pop-up en nga insufficient space.*” (Using my mobile phone in downloading report format such as excel or PDF file , my mobile phone hangs due to insufficient space.)

ADAS 06: “*Awan laptop nga naissue kinyak ta newly hired nak pati pay ti school ta usarek kuma kasano nak ngay ngarod maka liquidate nu kastoy*” (I don’t have issued laptop because I am newly hired even the school have no laptop I don’t have equipment to do my liquidation report.)

AO 04: “*Nu agdardaras nak nga mangprint ti reports ko santo pay agpaper jam kada haan agprint, nadanun na jay dapat nga number ti maiprint sunga innak makiprint daduma nga printer tapnu lang makaisubmit nak on time nga mapan division agsubmit ti reports ko.*” (Sometimes when I am in a hurry to print my reports my printer malfunctions like for instance paper jam and had reach its maximum number of printing in order to for me to travel earlier to submit my reports at the Division office I will ask favor from my colleagues.)

ADAS 07: “*Ipapascan da amin nga documents tapnu paperless transaction ngem awan met scanner jay school nga usarek.*” (They required us to scan documents for the paperless transaction but the school had no scanner.)

AO 07: “*Nalaka nga malowbat ti battery na daytoy laptop ko sunga nu maminsan nakasaksak ladtan tapnu lang malpas ko ti ubraek.*” (My laptop battery is drains fast so my remedy in order to finished my work is to pluggin the charger while in use.)

AO 12: “*Dagiyay laptop nga nafaceout ket maus usar da ladta ngem nagbuntug lng jay processor na anusan palang a ta isu ngarod ti adda habang mausar pay.*” (Faceout laptop is still in use to maximize its usage.)

ADAS 09: “*Awan ti naiturn-over nga files kadakami nga sumukat nga ADAS ta haan pulos maopen dagiyay old nga issue nga laptop ket agbiruk da softcopies ti previous years reports ket awan maited mi.*” (No soft copy of files were turned over to the new ADAS because old version laptop can’t open totally.)

### Theme 02: Complicated Software and User Difficulties

The issue of complicated software and user difficulties focuses on the challenges and benefits of using technology in educational institutions by non-teaching personnel. It covers obstacles like technical problems, resistance to change, and lack of proper training, while also highlighting advantages such as improved efficiency, better communication, and access to useful tools and resources. This theme reflects the experiences of non-teaching staff as they adopt and use technological solutions.

AO 14: “The complexity of features with in a software system like the eSF7 template you cannot add or edit some data because it has already formula that are restricted”.

ADAS 09: “*Idi irequire ti Division nga usaren jy Microsoft outlook, ni school head agsubmit ta openen na sabali kanu met password.*” (Division office requires us to use Microsoft outlook to submit report then when the school head open her account she experienced incorrect password.)

AO 04: “*Outdated jay software ti laptop masapol mapan pa update idjay visionnet computers tapos bayadan mi nga personal.*” (My laptop software is outdated and I need to go to a technician outside to update and pay through personal resources.)

ADAS10: “*Haan nga compatible jy laptop idjay printers.*” (Laptop incompatibility with the printers.)

AO 08: “*Kanayun ko problemaen jay microsoft office ti laptop ko nu after 6 months expire manen*” (My laptop Microsoft office expires every after 6 months.)

ADAS 11: “*Kurang ti Division IT orientation nu maminsan kagadiyay newly naissue nga equipment.*” (Sometimes lack of Division IT orientation on the use of the newly issued equipment.)

AO 12: Internal and external laptop problems.

ADAS 12: “ *Hanak familiar idjay microsoft 365 nagrigat nga usaren.*”(I am not familiar with the latest software apps Microsoft 365 its hard for me to use.)

AO 19: “*Idi agcoconsolidate nak ti reports, ket makitak jay daduma nga document nga naisend ket ag file error gapu gayam ta sabali ti specs ti hardware nga us usarek.*” ( While consolidating reports some documents that sent to me appears with a note “error” due to different specification of hardware I am using.)

AO21: “ *Nu ag upload kin agdownload nak ti documents ket nu open ko ket data is no available kunanamet.*”( The uploading and downloading of some documents that when opened the data is not available)

ADAS 22: “ *Habang madamak nga aramiden financial reports ko adda jy virus threat nga ag ap appear jy screen, tapos icancel ko idi open ko ulit jy files na awan karga nan.*”(While doing my financial report there is a malicious software that appears on my screen. I always press the cancel button and when I open again the file it has no data already)

AO18: “ *Nu anya ladtan jay nakasanayan nga gamiten nga microsoft ket isu ladtan ah usaren atleast ket expert nakon idjay ken sanay na sanay.*”( It’s just what I’m used to and expert with)

### **Theme 03: Lack of Reliable Internet and Connection Struggles**

On the other hand, the lack of reliable internet presents a major challenge for non-teaching personnel in using technology. Stable internet is crucial for effective communication, smooth data handling, and completing administrative tasks. However, problems like weak connections, poor infrastructure, and network overload can slow down work, create delays, and lower productivity. Solving these issues requires improving infrastructure, managing network usage better, and offering technical support. By addressing these connectivity problems, schools can help non-teaching staff work efficiently in a technology -driven workplace.

ADAS 01: “ *Awan internet ditoy school mi.*”( No available internet connectivity in the school location.)

AO02: “ *Adda ti inpaconnect mi nga internet ngem kanayun met poor intenet connection awan pulos masagap na.*”( We have intenet connectivity but has poor internet connection.)

AO18: “ *Pirmi kapsut na jay internet mi ditoy skwilaan sunga kanayun nak maladaw agsend ti online reports.*”(Slow internet connection which cause delay in submitting my online reports.)

ADAS06: I don’t have encountered any privacy issues but there are some issues in the technology privacy specifically in personal data stored in the cloud or shared online that becomes poor in security and prone for hacking or unauthorized access.

ADAS07: “ *Nu cellphone usaren nga agsubmit report ket naghassle dagiyay verification code wennu*

*dagiyay authentication code.*”(Sometime when using mobile phone in submitting our report, we encounter hassle in verification code or in the authentication measures”)

ADAS11: “ *Ditoy skul nga nadeploy ak ket as in awan masagap nga signal pati ti mobile data ti cellphone ket santok lang maamuan updates from the Division nu adda nakon jay area nga adda masagap nga signal.*”( I was assigned in this far flung school where there is no signal available as I reach area that has mobile data signal that is the only time that I can read updates from the division office.)

## **IV. DISCUSSION**

The respondent's ability to prepare a simple PowerPoint presentation is reflected in their clear organization, basic design skills, and proficiency with the software. Its impact on their school deployment includes enhancing communication, streamlining reports, and presenting ideas effectively, ultimately improving administrative and academic collaboration. Respondents also are still highly competent in Utilizing technologies to: access information to enhance professional productivity, assists in conducting research and communicated through local and global professional networks. It implies that you are efficient, resourceful, and connected. As a non-teaching personnel, the ability to utilize technology enhances your productivity, supports research efforts, and fosters collaboration with local and global professionals, making it a valuable asset to the institution. As affirmed in the studies of Stiglbauer et al. (2022) explores how shared work values across generations contribute to organizational success. It highlights that when employees align their personal goals with organizational values, it fosters a sense of belonging and enhances their competence and motivation. Here as concluded by Zhijun & Kee (2024) study which examines the relationship between organizational support and employee competence. It concludes that when organizations value employees' personal goals and well-being, it leads to higher competence and better performance.

As interpreted, the non-teaching staff from both districts in the Schools Division of Tabuk City have above-average competencies in preparing and finalizing written documents. The written articulation of ideas and other thoughts is executed proficiently and persuasively. It indicates their degree of skill in preparing formal documents, reports, and correspondence, all of which are essential for accurate organizational communication and administration. Improvement in communication, productivity, activity flows, and organizational performance and success may result from this. The non-teaching staff from the two districts of the Schools Division of Tabuk City are above average in their abilities to obtain information from listed references. This means that these staff members are able to find, gather, and use information that is relevant to their job and that is needed for them to accomplish their tasks in a timely manner. This also means that they are responsive to the demands of the

organization and are available for their workgroup when these team members need help and support. On the other hand, the respondents are still competent in Knowing the different business communication formats utilized in the DepEd, but this score is the lowest. This extends as verification to Lacsamana et al. (2019), where they highlighted written communication as one of the areas of focus in professional development. The non-teaching staff possessing high-level written communication skills proved to be more productive in reporting and administrative work which, in turn, enhanced organizational productivity. DepEd Memorandum No. 035, s. 2024 emphasizes the importance of advanced oral and written communication skills training for non-teaching personnel. It highlights that enhancing these skills improves the accuracy and professionalism of official documents, contributing to better administrative efficiency.

In addition, it is reflected that respondents are competent in the field of innovation. In this indicator, it is also revealed that respondents are highly competent in demonstrating an ability to think “beyond the box” and continuously focus on improving personal productivity to create higher value results. In addition, respondents are competent in examining the root cause of problems and suggests effective solutions. Fosters new ideas, processes, and suggests better ways to do things (cost and/or operational efficiency). Such competencies demonstrate how well an individual can adapt to challenges, incorporate new concepts, and boost the efficiency and effectiveness of their role. Many studies on Results-Based Performance Management Systems (RBMPMS) underline that innovation among the non-teaching staff, such as clerical staff, significantly improves work stream planning, utilization of resources, and other ancillary services relevant to teaching. All non—teaching staff contribute, through their innovations, to the smooth running of the institution, which enhances the learning and working environment within the institution. This is important in meeting the emerging changes in the education sector and organizational functions. Wanjiku (2021) discusses the role of non-teaching staff development strategies in performing technological innovation in the educational institution setting. As the study noted, this focus emphasizes training at the basic level for each individual in technology or innovation, which is an organizational requirement for problem-solving, change, and adaptation to current organizational issues and changes. DepEd Guidelines on Conducting a Project for Innovation in Schools (2023) focuses on the innovation of organizational non-teaching staff as a response to the gaps identified in the school system's administration and systematic school governance. This improves the learning-teaching process through the non—teaching personnel's efficient and effective administrative functions, supportive activities correlating to the educational system, and other essential administrative activities.

The not significant difference in Technological Competence in terms of ICT/Computer Skills, Written Skills and Innovation between gender affirmed by the study of

Mijares (2022), who noted that gender does not play a critical role in Incompetency among teachers and suggested that both male and female respondents have equal opportunities and exposure to technology in their professional environments; the non-significant relationship between age and ICT/Computer Skills is consistent with the study of Samonte & De Guzman (2019), which highlighted that age does not necessarily determine technological competence but instead an access to training and resources that plays a more important role; and non-significant of marital status and position similarly to the findings of Monserate (2020), that were not significant predictors of ICT competence and indicates that these demographic factors do not inherently affect one's ability to develop or utilize ICT skills.

However, the non-teaching personnel in the two districts of School Division of Tabuk City differ in their competency level when grouped by length of service and trainings related to technology for the last three years. The study findings of Mijares (2022) emphasized not length of service but, that higher education qualifications often correlated with greater exposure to advanced technological tools and concepts. Respondents with higher educational attainment such as master's degree or doctor's degree are likely to have undergone in challenging academic training that incorporates ICT. Moreover, the significant impact of training attended for the last three years aligned with the conclusions of Tria et al., (2020), emphasized the importance of continuous professional development in enhancing ICT competencies. Training programs provide respondents with updated knowledge and practical skills, enabling them to adapt to evolving technological demands. Additionally, professional development aimed to improved employee performance deficiencies as emphasized by Rebore (2019). However, professional development has become a significant factor connecting employees to their workplace and promoting group cohesiveness and sense of community. Employees with high levels of employee engagement, training and professional development are connected with the organizational social capital.

Building on these findings, Lawler & Mohrman (2021) emphasize the need to explore how various technology training programs enhance the digital skills of non-teaching personnel. Their study focuses on understanding how such initiatives influence staff productivity and overall job performance. Likewise, Pfeffer's (2020) research emphasizes the importance of investigating how the technological skills of non-teaching staff influence their efficiency in carrying out administrative tasks. This study attempts to understand the barriers that prevent practical application of technology in different jobs. Moreover, it also seeks to find out how schools can help solve these problems to enhance the use of technology. It is also worth noting, as Buot (2022) investigates that fulfilling non-teaching personnel's needs within educational institutions is accompanied by the need for substantial technology policies that counter connection issues. The need for specific training

bet,ter productivity, and efficiency-wide infrastructure was emphasized. Perdiguerra & Guillo (2019) also address the gap concerning the application of ICT competencies and the work performance of non-teaching staff. Apart from identifying the lack of connectivity as part of the technological barriers to performance, the inability to realize optimal performance was recognized as one of the barriers.

## V. CONCLUSION AND RECOMMENDATIONS

Based on the findings, the study concludes that the non-teaching personnel from the two districts within the Schools Division of Tabuk City exhibit a generally high level of technological competence. Their ICT and computer skills, written communications, and creative works all demonstrate effectiveness and innovation. The results suggest that the personal characteristics of the employees seem to have a great impact on their overall competence, stressing the personal attributes which enhance their professional skills. The study noted three issues regarding technology by non-teaching personnel: technological barriers and skill deficiencies, complicated software and user difficulties and lack of reliable internet connection. Such results emphasize the need for multifaceted approaches, including customizable training modules, defined statements, sharp-focus unobscured statements required or desired aid objectives framed tools, unambiguous target statements, and goal descriptors assigned toward meeting adaptive objectives aids paraphrased goals, specialized aids, and clear statements defining target aims. These results indicate the need for blended efforts with a contemporary advanced technology approach toward non-teaching staff in education to optimize their performance and redefine their role within the educational setting.

Hence, in this study, the necessity of creating a sustainable upskilling program to preserve the current level of technological competence among non-teaching personnel is emphasized. The proposed enhancement program outlines key initiatives such as Technology Modernization and Skills Training, Technology Empowerment and Skill Advancement, and Technology-Driven Productivity Enhancement, aimed at improving digital skills, efficiency, and adaptability. By addressing these challenges, educational institutions can ensure continuous growth and optimal performance among non-teaching personnel, contributing significantly to the success of the Department of Education.

## REFERENCES

Akanni, Abimbola A. (2019). Organizational Climate and Gender Differences in Work Engagement Among Non-Teaching Staff in a Nigerian University. *European Review of Applied Sociology*, 12(19), 1-5. DOI: 10.1515/eras-2019-0006.

Anandarajan, M., & Simmers, C.A. (2019). Technology Adoption in non-teaching roles: A Study of Administrative Staff in higher education. *Journal of Education and Human development*, 8(2), 35-47.

Bachore, M. M. (2022). English Language Literacy Skills and Academic Achievement of Urban and Rural Secondary Schools: The Case of High and Low Achievers. *Education Research International*, Article ID 2315426.

Baluyos, G. R., Rivera, H. L., & Baluyos, E. L. (2019). Teachers' job satisfaction and work performance. *Open Journal of Social Sciences*, 07(08), 206–221.

Banzon, April, Soliven, Camille, Vigonte, Florinda, & Abante, Marmelo V. (2023). Assessing Information and Communication Technology (ICT) Competencies of Non-Teaching Personnel (NTP) of DepEd-Schools Division of Ilocos Sur: A Literature Review. SSRN. DOI: 10.2139/ssrn.4573544.

Borgonovi, F., Han, S. W., & Greiff, S. (2023). Gender differences in collaborative problem-solving skills in a cross-country perspective. *Journal of educational psychology*, 115(5), 747.

Buot, Hilarion T. (2022). Technology Issues Of Non-Teaching Personnel: A Qualitative Study. Vol. 4, No. 1 ISSN:2815-1445.

Bynjolfsson, E., & Hitt, L. M. (2021). Beyond computation: Information technology, organizational transformation and business performance. *Journal of Economic perspectives*, 14(4), 23-48.

Carter, Paul A. (2019). PC Assembly Language.

Constantino, R., Vigonte, F. G., & Abante, M. V. (2023). Impact Of Collaborative Work Skills In The Individual Work Performance Of Non-Teaching Personnel In An Educational District Office. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4623824>.

Culderon, M. G., & Pérez, P. (2021). Academic patents and entrepreneurial intention. *Journal of evolutionary studies in business*, 6(2), 126-150.

Chakraborty, S. K. (2021). Technology adoption by non-teaching staff in indian universities: a study of individual and organizational factors. *International Journal of Information Management*, 37(6), 624-634.

Cruz Cordero, T., Wilson, J., Myers, M. C., Palermo, C., Eacker, H., Potter, A., & Coles, J. (2023). Writing motivation and ability profiles and transition during a technology-based writing intervention. *Frontiers in Psychology*, 14, 1196274.

Davis, F. D. (2021). "Perceived Usefulness, Percieved Ease of Use, and User Acceptance of Information Technology."

David, N., Liu, Y., Kumah, K. K., Hoedjes, J. C., Su, B. Z., & Gao, H. O. (2021). On the power of microwave communication data to monitor rain for agricultural needs in Africa. *Water*, 13(5), 730.

De Castro, R. (2021). Instructional Decision Involvement Of Teaching Personnel As Basis For Strengthened School Improvement Commitment. *IOER International Multidisciplinary Research Journal*, VOL. 3, NO. 4.

Department of Education. (2020). DepEd Order No. 40, s. 2020: Implementation of learning and development for non-teaching personnel in the Department of Education in view of the COVID-19 pandemic.

Department of Education. (2017). DepEd Memorandum Order No. 35, s. 2017: Revised guidelines on the implementation of the Basic Educational Facilities Fund.

Department of Education. (2023). DepEd Administrative Positions Overview: Roles and responsibilities of administrative positions within DepEd.

Department of Education. (2024). DepEd Order No. 002, s. 2024: Immediate removal of administrative tasks of public school teachers.

DeSanctis, G., & Poole, M. S. (2020). Capturing the complexity in advanced technology use: Adaptive structuration theory. *Organization science*, 5(2), 121-147.

Flores, M. A., Barros, A., Veiga Simão, A. M., Pereira, D., Gago, M., Fernandes, E. L., Ferreira, P. C., & Costa, L. (2023). Remote teaching in times of COVID-19: Teachers' adaptation and pupil level of participation. *Technology, Pedagogy and Education*, 32(1), 1-16.

Flores, M. A., & Cruz, H. G. M. (2023). Technology in education: A case study on the Philippines. Background paper prepared for the 2023 Global Education Monitoring Report: Technology and Education, Southeast Asia. UNESCO.

- Greenberg, R. J., & Coathsworth, J.D. (2019). Technology and the non-teaching workforce: the implications of technological change for the future of work in education. *Journal of education and Work*, 32(4),327-342
- Gotian, Ruth. (2025). Worried About Losing Employees? Mentorship And Training Can Help. Forbes.
- Guerrero, R. B. (2024). Level Of Competence And Performance Of Non-Teaching Personnel In The City Division Of Ilagan: A Basis For An Upskilling Program. *Ignatian International Journal for Multidisciplinary Research*, 2(8), 1387–1443. <https://doi.org/10.5281/zenodo.13371291>.
- Herd, Pamela, & Moynihan, Donald. (2025). Administrative Burdens in the Social Safety Net. *Journal of Economic Perspectives*, 39(1), 129–150. DOI: 10.1257/jep.20231394.
- Lacsama, Crystal Eufemarie (2019). Literacy Training Service (LTS) program proposal.
- Lawler, E. E., & Mohrman, S. A. (2021). HR as a strategic partner: What does it take to make it happen? Center for Effective Organizations, Mars Hill School of Business, University of Southern California.
- Lee, S.H., & Kim, H.J (2019). Digital competency ,work engagement, and job satisfaction of non-teaching personnel on higher education institutions. *Computers in Human Behavior*, 96,1-9.
- Lopez, E. S. (2023). Language-Learning Strategies and Writing Performance of Grade 12 HUMANITIES and Social Science Learners. *Psychology & Education: A Multidisciplinary Journal*, 14, 821-829. DOI: 10.5281/zenodo.10036449.
- Llego, Mark Anthony(2023).Developing Effective Action Research Proposals for DepEd Personnel.
- Maaz Ud Din, Waqar Aslam, Muhammad Hafeez, Ahmad Khawar Shahzad, & Ashfaq Ahmad. (2020). Evaluating the Impact of Marital Status on Employees' Job Performance: *Moderating Role of Gender*. *ResearchGate*. DOI: 10.2139/ssrn.4573544.
- Mercado, R.K.C (2013). Work performance of selected DEPED sub-offices non-teaching employees: An initiative for institutional training scheme. EPRA *International Journal of Multidisciplinary Research (IJMR)*. Laguna State Polytechnic University-Santa Cruz Main Campus,Philippines.
- Mijares, Benjamin (2022). Teachers' Information and Communication Technology Competencies. *American Journal of Education and Technology (AJET)*, Volume 1, Issue 3, 2022.
- Monserate, C. A. (2020). Impact of technology on the academic performance of students and teaching effectiveness [Master's thesis, Nabalao National High School]. *Research Publish Journals*.
- Nacor, Andrea. (2023). Job Satisfaction of Non-Teaching Personnel and Their Relationship to University Policies and Leadership Styles. *International Journal for Research in Applied Science & Engineering Technology (IJRASET)*, 11(3), 485-494. DOI: 10.22214/ijraset.2023.48594.
- Ogunleye, Isaac Olugbemiga. (2019). ICT Literacy Competence of Staff Members of Colleges of Education in Kano State, Nigeria. *Information and Knowledge Management*, 9(2), 66-75. DOI: 10.7176/IKM/9-2-0818.
- Patulin, Elvis P. (2023). Trend Analysis of Admission, Enrollment, and Completion in SNSU Graduate Programs. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(2).
- Peppard and Wards, (2020). Worklife Balance and Technological Competence of Non-teaching Personnel.
- Perdigueria, L. A., & Guillo, R. M. Jr. (2019). Computer Competencies and Work Performance Among Non-Teaching Personnel in the Schools Division Office of Rizal. *International Journal of Advanced Research and Publications (IJARP)*, 3(8), 123-130.
- Pfeffer, J. (2020). The role of the general manager in the new economy: Can we save people from technology dysfunctions? (pp. 67-92). *Springer International Publishing*.
- Ramirez, A. (2020). Challenges in the design and implementation of an English placement test for a Colombian public university. *GIST–Education and Learning Research Journal*, 21, 191-208.
- Ramirez, E. J., & LaBarge, S. (2020). Ethical Issues with Simulating the Bridge Problem in VR. *Science and Engineering Ethics*, 26(6), 3313–3331.
- Rebore, K.E. (2019). The effect of training and development on employee attitude as it relate to training and work proficiency. \*Sage Publication.doi:101177/2158244011433338.
- Saamonte, K., & De Guzman, P. (2019). ICT competencies among public secondary school MAPEH teachers: An assessment [Master's thesis, Nueva Ecija University of Science and Technology]. *Philippine EJournals*.
- Siemens, George, & Tittenberger, Peter (2019). Handbook of emerging technologies for learning (p. 65). Manitoba: University of Manitoba.
- Smith,Peter, & Gravelle, Karen (2021). The Power of Digital Learning: Integrating Technology Into Curriculum. Corwin.
- Ndiritu, G. (2020). Influence of career development on the engagement of non-academic staff at Kenyatta University.
- Ramirez, J. M., & Santos, R. D. (2021). Technological Pedagogical Content Knowledge (TPACK) in Action: Application of Learning in the Classroom by Pre-Service Teachers. *Social Sciences & Humanities Open*, 3(1), Article ID 100110.
- Rizvi, S., & Hussain, A. (2020). Investigating the impact of technology on the work performance of non-teaching staff in higher education institutions. *International Journal of Human resources studies*,10(2),96-109.
- Santos, R. (2020). Output-based approach in media and information literacy toward 21st century skills development in the Philippines. *International Journal of Research Studies in Education*, 9(7), 13-29.
- Soliven, H. E., Bacus, M. S., Quijano-Pagutayao, A. S., Uchang, J. T., Beronio, A. B., & Cosrojas, K. D. J. (2023). Impact Assessment on the Capability Building of Personnel Working on Violence Against Women and Children in Bukidnon, Philippines. *Seybold Report Journal*, 18(08), 90-111. DOI: 10.5110/77.1026.
- Stiglbauer, B., Penz, M., & Batinic, B. (2022). Work values across generations: Development of the New Work Values Scale (NWVS) and examination of generational differences. *Frontiers in Psychology*, 13, Article 1028072.
- Can, L. N., & Uy, E. R. (2021). Effects of Diametric Motivational Approach on Filipino Students' Academic Writing Proficiency: A Mediation Analysis. *The Journal of AsiaTEFL*, 19(3), 797-817.
- Taylor, Simon, & Jones, Ben. (2020). Tackling Climate Science Learning Through Futures Thinking.
- Uria, D., Alghorbany, A., Muhamad, A. I. B., & Alam, M. M. (2020). Government policies, financial scopes and technological usages for agricultural development and post-harvest loss reduction in Algeria. *International Journal of Postharvest Technology and Innovation*, 7(4), 335-352.
- Wahyuningsih, E., Giri Suchayo, Y., & Gandhi, A. (2021, April). Driving factors for MSMEs in Indonesia to adopt information technology on culinary. In *Proceedings of the 5th International Conference on E-Commerce, E-Business and E-Government* (pp. 79-84).
- Udeh, I. E. (2023). Strategic Management Practices and Performance of Non-Teaching Staff of State-Owned Universities in South East, Nigeria. *Global Journal of Finance and Business Review*, 6(3), 14-34. DOI: <https://doi.org/10.5281/zenodo.8229109> .
- Vaezi, R., & Lai, J. Y (2022). Exploring the factors influencing technology adoption among non-teaching staff in higher education institutions. *Journal of Educational Computing Research*, 55(3),323-343.
- Wanjiku, W. G. (2021). Factors affecting non-teaching staff development in Kenyan Universities. School of Business, Department of Human

- Resource, Karatina University, Kenya. doi: 10.6007/IJARBS/2024/15/2120.
- Zangmo, N. K. (2024). Job Satisfaction among Sherubtse Staff: A Comparative Analysis of Teaching and Non-Teaching Staff. *Sherub Doenme the Research Journal of Sherubtse College*, 17, 61–71. <https://doi.org/10.17102/sherubdoenme.17.2024.05>.
- Zhang, Y., & Kee, C. L. (2024). The Relationship Between Organizational Support and Employee Competence: A Systematic Review of the Literature. *International Journal of Educational Research and Development*, 12(5), 45-67.

---

The author/s retain the copyright to this article, with IJAESSI granted first publication rights. This article is distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0>), allowing for open access.