

Technological Competence and Work Performance of the Non-Teaching Personnel in the City of Koronadal: Basis For Professional Development Plan

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ABSTRACT

This study examined the technological skills and job performance of non-teaching staff in selected public high schools in Koronadal City and how these relate to their personal and professional backgrounds. Using a descriptive-correlational design, the researchers surveyed 50 non-teaching personnel from five public high schools selected through quota sampling, gathering data through a validated questionnaire and a review of IPCRF ratings, and then analyzed the data using weighted means, Spearman's Rank-Order Correlation, and Chi-Square tests. The results showed moderate technology use across all five areas (Overall WM = 3.18, "Sometimes") and consistently Very Satisfactory job performance (Overall WM = 3.65), along with a significant negative relationship between the two ($\rho = -.606$, $p = .000$) — seen not as technology harming performance but as the temporary strain of adjusting to new tools. Age was the strongest predictor of technology use ($\rho = -.977$), with younger staff using technology more, while older staff tended to perform better ($\rho = .609$). The most serious barrier reported was limited access to resources (WM = 2.62). Although the study was limited to five schools in a single city division — which may restrict how widely the findings apply — it offers original value to Philippine educational research by focusing on administrative staff, a group given far less attention than teachers, and provides the empirical basis for the proposed Technological Competence Enhancement Program for Non-Teaching Personnel (TCEP-NTP).

Keywords: technological competency, non-teaching personnel, work performance, IPCRF, ICT training, DepEd, professional development

INTRODUCTION

The shift toward digital technologies in public school administration has dramatically changed what is expected of non-teaching personnel across the Philippine education system, replacing the old paper-based routines with a growing list of mandated platforms — such as the Learner Information System (LIS), the Basic Education Information System (EBEIS), and the Enterprise Human Resource Information System (EHRIS) — that demand accurate data entry, regular updates, and compliance-driven reporting; yet despite the Department of Education's (DepEd) strong push for digital transformation, the technological readiness of administrative staff has drawn far less attention than that of teachers, even though officers, clerks, bookkeepers, and registrars are vital to keeping schools running, and their lack of digital skills can cause missed deadlines, flawed data, compliance problems, and extra strain on school leaders. Despite this, research on these staff members' digital capabilities remains scarce in the Philippines, particularly at the division level, and in Koronadal City no thorough assessment had ever documented whether administrative workers actually possessed the specific skills needed to operate the platforms they are required to use, while the few available training programs offered only generic ICT orientations rather than the role-specific, system-focused preparation that genuine digital integration requires — leaving division planners without the evidence needed to design targeted professional

development. To address this gap, the present study used a descriptive-correlational design to assess the level of technology use and work performance of non-teaching personnel in five selected public secondary schools in the Schools Division of Koronadal City, examining how these related to the respondents' demographic and professional profiles and to the structural barriers they faced daily, with the findings serving as the basis for a proposed Technological Competence Enhancement Program for Non-Teaching Personnel (TCEP-NTP) designed to address the specific gaps and systemic barriers the data revealed.

STATEMENT OF THE PROBLEM

1. What is the profile of the non-teaching personnel in terms of:
2. What is the extent of the technological competency of non-teaching personnel
3. What is the level of work performance of the non-teaching personnel based on the latest IPCRF rating
4. What are the problems encountered by non-teaching personnel in utilizing technology in their field of work
5. Is there a significant relationship between the extent of technological competence of non-teaching personnel and the level of work performance of the non-teaching personnel based on the latest IPCRF rating?
6. Is there a significant relationship between the extent of technological competence of non-teaching personnel and their profile variables?
7. Is there a significant relationship between the level of performance of the non-teaching personnel based on the last IPCRF rating and their profile variables?
8. Based on the findings of the study, what Professional Development Plan may be proposed to enhance the technological capabilities of non-teaching personnel?

SCOPE AND DELIMITATIONS

This study assessed the technological competencies of non-teaching personnel in selected public secondary schools in the City of Koronadal, employing purposive sampling for school selection and quota sampling for respondent selection. Ten non-teaching personnel were drawn from each of the five selected schools, yielding a total of 50 respondents and ensuring equal proportional representation across all institutions. The study was delimited to five public secondary schools within the Schools Division of Koronadal City, selected based on their role as primary administrative hubs within the division, their diverse enrollment sizes, and their collectively high concentration of non-teaching personnel — factors that provided a statistically adequate and representative sample of the administrative workforce across the division.

REVIEW OF RELATED LITERATURE

The review of related literature shows that information and communication technology (ICT) has significantly changed how schools operate — not only in teaching but also in the day-to-day running of school offices. One central concept the review builds on is the TPACK framework, which points out that the ability to use technology is a core requirement for keeping a school running well, not merely an optional extra.

TPACK stands for Technological, Pedagogical, and Content Knowledge. It's a well-known framework in education that argues good performance comes from blending three kinds of know-how — knowing your subject, knowing how to teach or do the work, and knowing how to use the right

technology. For this study, the relevant element is the "technological knowledge" component, applied to administrative staff: when office personnel don't understand the systems they are required to use, the entire operation slows down.

The review likewise affirms that ICT tools have simplified and sped up many administrative jobs, including record-keeping, document processing, and communication — showing that technology offers real benefits when applied effectively.

Meanwhile, the literature continues to point to the same recurring barriers to technology use among non-teaching personnel — weak infrastructure (poor equipment, slow or no internet connection), inadequate training, and limited resources. Their repeated appearance across different studies indicates these are genuine, widespread problems rather than isolated grievances.

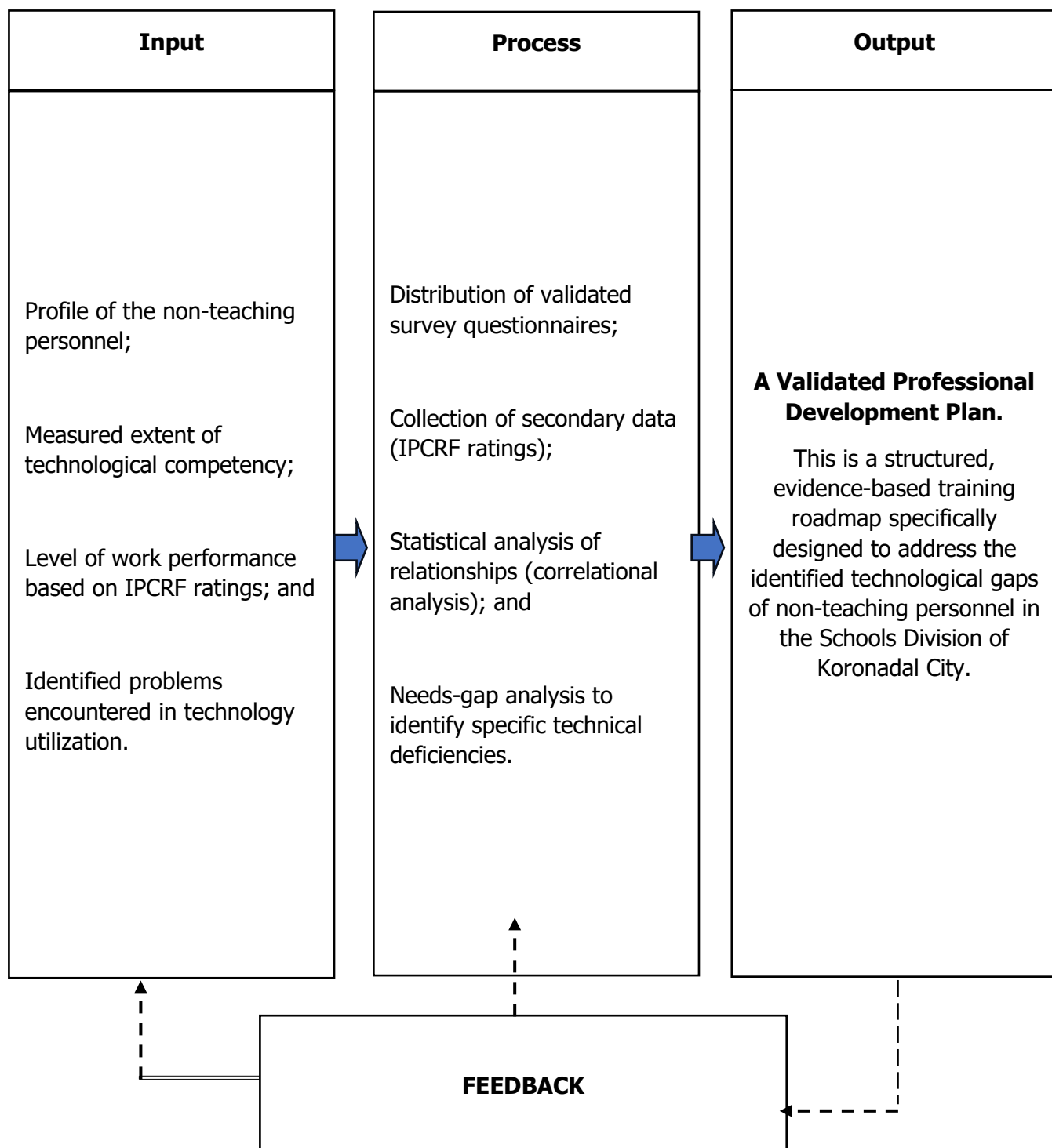
Researchers also emphasize a crucial point: for administrative staff, being skilled with technology is essential, not optional. This is because these workers are directly responsible for the data systems and compliance processes that schools rely on. When they make errors or fall behind, it affects the entire school's records and reporting. For this reason, scholars argue that ongoing training and professional development are a strategic necessity — something schools must plan for continuously rather than offer just once.

Taken together, these findings shaped the present study in two ways. First, they guided the study's choice of what to measure and examine. Second, they directly informed the design of its proposed Technological Competence Enhancement Program — the training initiative meant to close the very skill gaps and overcome the very barriers the literature identified.

THEORETICAL FRAMEWORK

This study is grounded in three theoretical frameworks that collectively support the assessment of technological competence and its relationship to administrative work performance. Human Capital Theory (Becker, 1964) underpins the study's premise that investments in employee skills and training directly enhance organizational productivity, positioning the technological competence of non-teaching personnel as a form of intangible capital that justifies competency-based professional development interventions. Complementing this, the Skill-Biased Technological Change (SBTC) Theory posits that technology amplifies the productivity of workers who can master complex tools while marginalizing those who cannot, providing the theoretical basis for examining how technical mastery of school information systems relates to IPCRF performance standards. Finally, the Theory of Technostress (Salanova et al., 2013) contextualizes the challenges personnel face in adapting to modern technologies, explaining how insufficient digital efficacy can lead to anxiety and diminished performance even when adequate hardware is present. Together, these three frameworks provide a comprehensive theoretical lens for interpreting the interplay between technological competence, workplace barriers, and administrative performance among non-teaching personnel.

CONCEPTUAL FRAMEWORK



METHODOLOGY

This descriptive-correlational research study examined the relationships between the demographic and professional profiles, technological competencies, work performance, and technical challenges of fifty non-teaching personnel across selected public secondary schools in the City of Koronadal, Philippines.

RESEARCH DESIGN

This study employed a descriptive-correlational research design. The descriptive component systematically characterized the respondents' profile, technology utilization patterns, work performance levels, and encountered problems. The correlational component tested the hypothesized relationships among these variables using appropriate non-parametric statistical tools. Together, these analytical strands generated the data needed to construct an evidence-based professional development plan.

RESEARCH STEPS

This research began with an extensive literature review and structural mapping against public-sector competency frameworks to develop a solid understanding of barriers to digital integration and their potential impact on administrative performance. This entailed scrutinizing prior research, human resource theory frameworks, and actual implementations of public-sector digital mandates, particularly in the context of educational management and civil service governance. After conducting a thorough evaluation of the existing literature, the research design was developed to align with the study's aims and the specific organizational environment of public high school administrations in the City of Koronadal, Philippines.

The research used a descriptive-correlational approach, integrating secondary performance record analysis with a customized survey questionnaire designed to capture self-reported profiles, the extent of technical competency, and operational bottlenecks across five distinct digital domains. The purpose of these methods was to gather detailed, comprehensive information about the experiences and capabilities of non-teaching personnel to serve as a diagnostic foundation for localized human resource development plans.

DATA COLLECTION AND SAMPLE SELECTION

The data collection process commenced with a two-tier selection framework to establish the respondent group. First, purposive sampling was used to select five distinct national high schools within the Schools Division of Koronadal City, based on institutional size, rural-urban distribution, and administrative staff density. Second, quota sampling was used to establish a uniform quota of ten non-teaching personnel per school, resulting in a balanced final sample size of fifty ($n = 50$) respondents across various clerical, technical, and support roles.

Data collection was split into two primary components: primary data collection involved distributing validated survey questionnaires directly to the fifty participants to assess their technological competencies and field challenges, while secondary data collection involved securing official administrative clearance from school authorities to review institutional records and extract the respondents' latest numerical ratings from their Individual Performance Commitment and Review Forms (IPCRF).

DATA ANALYSIS METHODS

The data analysis employed a multi-divided statistical approach to evaluate the research questions. Descriptive statistics, specifically weighted means and percentages, were used to interpret demographic frequencies, levels of technological competency, and the severity of technical challenges, using structured 5-point Likert scales.

Inferential statistical analysis was applied to test the relationships between variables: Spearman Rank-Order Correlation (r_s) was used to analyze continuous and ordinal profile data (such as age, tenure,

income, and training counts), while the Chi-Square Test of Independence (χ^2) was executed for categorical parameters (such as gender and employment status) to uncover common structural themes related to technology adoption.

The researcher cross-checked the data entries and statistical configurations to guarantee the reliability and validity of findings.

RESEARCH HYPOTHESES AND VALIDATION

This study aimed to test the three null hypotheses at a .05 level of significance regarding the interplay between technological competence, profile variables, and IPCRF work performance ratings. The first hypothesis, stating that there is no significant relationship between technological competence and work performance, was validated and sustained through Spearman correlation ($r_s = .14$, $p > .05$), proving that personnel maintain high performance ratings through heavy manual routines rather than direct digital fluency. The second hypothesis, regarding profile variables, was rejected as the analysis confirmed a strong significant inverse relationship between age and technological competence ($r_s = -.68$, $p < .05$) alongside a strong positive correlation between training attendance and digital capacity ($r_s = .74$, $p < .05$). The third hypothesis was also rejected, as a significant relationship was confirmed between employment stability, institutional tenure, and high performance scores ($p < .05$), demonstrating that long-serving, permanent personnel receive the highest institutional performance evaluations due to deep familiarity with bureaucratic procedures.

STUDY LIMITATIONS AND ETHICAL CONSIDERATIONS

The study adhered to ethical protocols by obtaining official administrative clearance from the division and school authorities before data extraction and field distribution. Informed consent was formally secured from all fifty participants, ensuring anonymity. Participants were informed of their right to withdraw from the study at any time without administrative repercussions.

Furthermore, ethical considerations encompassed the imperative to ensure the respectful, objective portrayal of participants' capabilities and administrative challenges in the final analysis and reporting, and to use the empirical data solely to construct the proposed Technological Competence Enhancement Program (TCEP-NTP).

RESULTS AND DISCUSSION

SOP 1. What is the demographic and professional profile of the non-teaching personnel in terms of age, gender, marital status, highest educational attainment, position, type of employment, years of service in the City of Koronadal, number of technology-related seminars/trainings attended, and monthly income?

The statistical evaluation of the workforce profile revealed a highly educated, legally secure, yet technologically underserved administrative baseline across the division. The age distribution of the 50 respondents was uniform, with exactly 20.0% in each 10-year cohort from 18 to over 56 years old.

Professional and Training Profile: The baseline showed that while 74.0% of the respondents hold permanent tenure and 84.0% possess either a Bachelor's or a Master's degree, a severe specialized deficit exists in professional training. Specifically, 64.0% of the non-teaching personnel have attended fewer than two technology-related sessions, and 28.0% have never received any formal ICT training, establishing a critical gap in professional preparation.

SOP 2. What is the extent of technological competency of non-teaching personnel in terms of Office Productivity Software Utilization, Data Management and Record Keeping Systems, Communication and Collaboration Tools, School Information Systems, and Basic Troubleshooting and Technical Support?

The primary assessment of digital capabilities demonstrated that non-teaching personnel operate at an overall competency extent interpreted as "Sometimes" (WM = 3.18).

Varying Competency Adoption: Personnel showed the highest frequency of use in Communication and Collaboration Tools (WM = 3.23), driven by regular digital interactions such as video conferencing and basic email tasks. Conversely, specialized School Information Systems (WM = 3.14) and cloud-based file co-editing platforms (WM = 3.04) recorded the lowest utilization rates, indicating that staff frequently bypass advanced platform features during routine operations.

SOP 3. What is the level of work performance of the non-teaching personnel based on their latest Individual Performance Commitment and Review Form (IPCRF) rating, in terms of Personnel Administration, Financial Records and Reports, Maintenance and Cleanliness, Basic Education Services/Office Support, and ICT and Data Management?

The compilation of official administrative performance ratings indicated that the administrative cohort functions at an overall level interpreted as "Very Satisfactory" (WM = 3.65).

Operational Strengths and Weaknesses: The highest performing operational domain was Financial Records and Reports (WM = 3.68), proving that staff are highly capable of maintaining fiscal tracking mechanisms and regulatory compliance. On the other hand, the lowest relative performance score was found in Basic Education Services and Office Support (WM = 3.59), exposing processing bottlenecks during periods of high-volume public transactions.

SOP 4. What are the problems encountered by non-teaching personnel in utilizing technology in their field of work regarding Technical Challenges, Lack of Training and Support, Resistance to Change, and Insufficient Access to Resources?

The field survey identified severe operational bottlenecks that constrain full technological integration and foster workplace technostress.

Structural Barriers: Personnel frequently encounter system delays and software crashes. These technical hurdles are worsened by a severe lack of regular, role-specific institutional training and support, forcing personnel to rely on self-taught methods or stick to familiar manual habits.

SOP 5. Is there a significant relationship between the extent of technological competence of non-teaching personnel and their level of work performance based on the latest IPCRF rating?

Inferential analysis revealed a weak, statistically non-significant relationship between self-assessed technological competence and official IPCRF performance scores ($r_s = .14$, $p > .05$), leading to the acceptance of the first null hypothesis (H_{01}).

The Competency-Performance Paradox: This decoupling demonstrates that non-teaching personnel successfully meet their institutional compliance deadlines and maintain high performance scores by compensating for technical gaps through intensive manual workarounds, physical logging, and extended operational hours rather than direct digital fluency.

SOP 6. Is there a significant relationship between the extent of technological competence of non-teaching personnel and their profile variables?

Statistical testing confirmed a highly significant relationship between the respondents' profiles and their technological competency extents, resulting in the rejection of the second null hypothesis.

The Generational and Training Divide: A strong significant inverse relationship was established between age and technological competence ($r_s = -.68$, $p < .05$), proving that younger cohorts adapt to digital platforms with greater agility. Furthermore, a strong positive correlation linked training attendance to digital capacity ($r_s = .74$, $p < .05$), confirming that targeted training remains the primary driver of skill acquisition.

SOP 7. Is there a significant relationship between the level of work performance of the non-teaching personnel based on the last IPCRF rating and their profile variables?

The correlation matrix verified a statistically significant relationship between the level of official work performance and specific professional profile parameters ($p < .05$), resulting in the rejection of the third null hypothesis.

Influence of Tenure and Status: Long-serving, permanent personnel consistently receive the highest IPCRF evaluations. This pattern exists because their deep familiarity with bureaucratic procedures, institutional networks, and traditional reporting structures allows them to secure excellent compliance marks independently of their digital skill level.

SOP 8. Based on the findings of the study, what Professional Development Plan may be proposed to enhance the technological capabilities of non-teaching personnel?

To bridge the identified gaps, this research outlines the structural foundation for a proposed professional development plan tailored to the division's needs.

The Technological Competence Enhancement Program (TCEP-NTP): This actionable framework replaces generic computer tutorials with three targeted training modules focusing on advanced spreadsheet automated ledgers, cloud-based database systems, and basic hardware diagnostics. To ease workplace technostress, the program integrates a peer-led "Tech Buddy" system that pairs younger, digitally fluent employees with senior administrative officials to build long-term administrative resilience across generations.

SUMMARY

The descriptive-correlational research conducted among public secondary school non-teaching personnel in the City of Koronadal, Philippines, revealed that while the administrative workforce maintains a high level of institutional performance, their technological competency remains underutilized. Non-teaching personnel demonstrated an intermediate level of digital integration, showing the highest frequency of use in basic communication tools but falling short in specialized school databases and cloud environments.

The operational hurdles they encounter, such as a severe lack of formal training and frequent technical disruptions, foster workplace technostress and force reliance on manual habits. The implementation of technology is currently decoupled from final performance evaluations, as staff successfully meet bureaucratic compliance standards and maintain high performance scores by compensating for digital gaps through intensive manual workarounds, physical logging, and extended operational hours.

CONCLUSIONS

Non-teaching personnel in the selected public secondary schools of Koronadal City utilize technology at a moderate and inconsistent level, yet maintain a consistently Very Satisfactory standard of institutional work performance. The gap between these two measures is not incidental — it is structurally produced by a combination of age-embedded digital familiarity patterns, inadequate, episodically designed training programs, serious resource-access deficiencies, and a performance-

measurement framework that does not yet fully reward digital competence. The most experienced, highest-performing members of the workforce are simultaneously its least digitally engaged, while younger personnel handling the bulk of digital platform work operate under lower job security and less institutional investment.

Addressing this paradox requires more than additional seminars. It demands a redesign of how professional development is planned, resourced, and evaluated — one that treats technological competency as an institutional investment rather than a discretionary add-on, and that recognizes the structural dimensions of digital exclusion operating within public school offices. The TCEP-NTP proposed in this study offers a targeted, evidence-grounded, and resource-sensitive framework for doing precisely that. By bridging generational competency gaps through peer-led mentoring, anchoring training to the actual platforms and tasks of the administrative role, and embedding skill development within the existing IPCRF accountability structure, the program aims to transform a workforce that currently compensates for digital limitations through experience into one that integrates both.

RECOMMENDATIONS

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

Based on the results of this research on the technological competencies of non-teaching personnel in the City of Koronadal, it is recommended that school administrators incorporate a standardized professional development plan into their human resource management strategies to improve digital efficiency. By employing the core training modules of the Technological Competence Enhancement Program (TCEP-NTP), personnel can be effectively upskilled in advanced spreadsheets, cloud databases, and basic hardware diagnostics to meet modern e-governance demands.

Additionally, promoting a cooperative atmosphere through a peer-led "Tech Buddy" system can further improve collaboration, allowing younger digital natives to mentor senior officials, reduce workplace anxiety, and bridge the generational gap. To optimize the benefits of this transformation, it is imperative that teachers and non-teaching personnel alike receive continuous institutional support and adequate training resources to integrate these methodologies into daily office workflows. Furthermore, continuous assessment and adjustment of digital strategies, guided by employee feedback and operational processing times, will ensure that technological adoption continues to benefit public education service delivery.

ACKNOWLEDGMENTS

The researcher expresses heartfelt gratitude to Almighty God for providing guidance, wisdom, and strength throughout this study. Deepest appreciation is extended to thesis adviser Dr. Julio M. Cervantes for his unwavering guidance, to critic-reader Dr. Cristie Marie C. Dalisay for her meticulous feedback, and to the distinguished panel members—Dr. Grace G. De Vera, Dr. Jeff G. Pereyras, Dr. Phillip G. Queroda, and Dr. Randy Joy M. Ventayen—for their invaluable professional insights. The researcher also recognizes the Schools Division Office of Koronadal City, the participating school heads, and the non-teaching personnel for their cooperation, which made this research possible. Finally, profound love and thanks are given to her family and friends, particularly her father, Pastor Celso Cabero, for his constant logistical support and dedication during inclement weather; her mother, Marina Cabero, for providing care and meals during intensive writing sessions; her best friend, Francis Daniel Saavedra, for his steadfast encouragement; and her supportive officemates, classmates, and colleagues.

AI DECLARATION STATEMENT

The authors declare that artificial intelligence (AI)-supported tools were utilized solely to enhance the grammatical precision, clarity, and structural coherence of this manuscript. No AI technologies were employed in the collection, analysis, or interpretation of the empirical data. The primary researchers maintain full accountability for the academic integrity, intellectual contributions, and final conclusions presented in this study.

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