

**Technology acceptance and utilization in school administration:  
Evidence from public schools in Legislative District 5, Isabela**

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**ABSTRACT**

Technology has become an essential component of school administration as educational institutions increasingly rely on digital systems to improve efficiency, transparency, and service delivery. However, despite its growing importance, limited evidence exists on the extent of technology utilization and the challenges affecting its implementation in the administrative functions of public schools in Legislative District 5, Isabela. This study assessed the utilization, perceived effects, challenges, and acceptance of technology in school administration as the basis for an improvement plan. The study employed a descriptive-normative research design involving 48 administrative officers and teachers with administrative assignments selected through purposive sampling. Data were gathered using a structured questionnaire, supplemented by interviews and documentary analysis, and analyzed using frequency, percentage, and weighted mean. The findings revealed that technology was often utilized, particularly in records management and communication systems, and was perceived to be moderately effective. Nevertheless, inadequate ICT infrastructure, limited digital competence, unreliable internet connectivity, and resistance to change remained serious concerns. Despite these challenges, respondents recognized the usefulness and ease of use of technology in improving administrative functions. The study concludes that strengthening ICT infrastructure, capacity-building initiatives, organizational support, and strategic technology planning is essential to achieving a more efficient, transparent, and data-driven system of school administration.

**Keywords:** Technology utilization, school administration, ICT integration, administrative functions, public schools.

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**INTRODUCTION**

Secondary education plays a vital role in preparing young people for higher education, employment, and responsible participation in society. It equips learners with the knowledge, skills, and values necessary for economic productivity and social development while laying the foundation for future professionals, technicians, scientists, and entrepreneurs (Brown, 2020). As a bridge between primary and tertiary education, secondary schools help adolescents

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develop the competencies and social values needed to become productive and responsible citizens.

Effective school administration is fundamental to the achievement of educational goals. It ensures that human resources, financial resources, school facilities, and instructional programs are efficiently managed to support quality teaching and learning (Bassey et al., 2020). Administrative functions such as financial management, personnel supervision, facilities management, student discipline, and curriculum implementation require systematic planning, organization, coordination, and monitoring to promote school effectiveness (Clark, 2021). Studies have shown that schools with effective administrative practices generally demonstrate higher student achievement, better teacher performance, improved student discipline, and stronger community engagement (Jacobsen et al., 2022).

The rapid advancement of information and communication technology (ICT) has transformed administrative practices in educational institutions. Digital technologies enable school administrators to automate routine tasks, improve communication, manage records efficiently, and facilitate evidence-based decision-making (Ajuwon et al., 2024). Through digital systems, administrators can collect, store, retrieve, and analyze data more accurately, thereby enhancing planning, resource allocation, policy implementation, and organizational performance.

Technology has likewise strengthened transparency and accountability in school administration. Digital platforms support accurate record management, timely dissemination of information, effective monitoring of school operations, and collaboration among administrators, teachers, students, parents, and other stakeholders (Forrester, 2019; Viberg et al., 2020). Consequently, many educational institutions continue to invest in technological innovations to improve administrative efficiency and service delivery.

Despite these advantages, the integration of technology into school administration remains challenging. Many public schools continue to face constraints, including inadequate ICT infrastructure, limited internet connectivity, insufficient digital literacy among personnel, and resistance to organizational change (Alonzo et al., 2024). These challenges may hinder the effective utilization of digital technologies and limit their potential to improve administrative functions and processes.

Recognizing these realities, this study sought to investigate the utilization of technology in the administrative functions and processes of public schools in Legislative District 5, Isabela. Specifically, it aimed to determine the extent of technology use, identify the challenges encountered by school administrators and staff, examine the perceived usefulness and ease of use of technology, and develop strategies to strengthen technology integration in school administration. The findings of the study are expected to provide empirical evidence that can guide school administrators and policymakers in enhancing administrative efficiency, transparency, and overall organizational performance.

### Statement of the problem

This study aimed to investigate the utilization of technology in the administrative functions and processes of public schools in Legislative District 5, Isabela, during the School Year 2025–2026.

Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in terms of age, gender, civil status, highest educational attainment, number of family members, present occupation or employment, and average monthly family income?
2. What is the extent of the utilization and perceived effects of technology in the administrative functions and processes of public schools in Legislative District 5,

Isabela, in terms of records management, communication systems, resource allocation and monitoring, and decision-making and reporting?

3. What challenges do school administrators and staff encounter in utilizing technology for administrative purposes in terms of digital literacy and skills, availability of ICT infrastructure, internet connectivity, organizational support and readiness, and attitudes toward and resistance to change?
4. What is the extent of agreement of school administrators and staff regarding the perceived usefulness and perceived ease of use of technology in improving administrative functions and processes?
5. Based on the findings of the study, what strategies may be proposed to strengthen the utilization of technology in the administrative functions and processes of public schools?

## METHODOLOGY

This study employed the descriptive-normative research design to determine the extent of the use and perceived effects of technology in the administrative functions and processes of public schools in Legislative District 5, Isabela. It also examined the challenges encountered by school administrators and staff and assessed their level of agreement regarding the perceived usefulness and ease of use of technology in school administration.

According to Habaridota (2019), the descriptive-normative research method is appropriate for describing existing conditions, identifying relationships among variables, defining current problems, and generating information that can serve as a basis for sound decision-making and improved practice. Descriptive research focuses on describing existing conditions, practices, and attitudes without manipulating variables, making it appropriate for educational studies that seek to determine the actual status of a phenomenon. Normative research, on the other hand, establishes prevailing practices or standards within a particular population and provides a basis for recommending improvements (Bejos, 2009). Short (2023) further explained that descriptive-normative research combines the description of current practices with the identification of prevailing norms, making it particularly valuable in educational management research because it provides a comprehensive understanding of existing practices and serves as a basis for policy and program enhancement.

The study was conducted in selected public schools within Legislative District 5 of Isabela, which comprises the municipalities of Aurora, Burgos, Luna, Mallig, Quezon, Quirino, Roxas, and San Manuel. Legislative District 5 was created through Republic Act No. 11080, signed into law on September 27, 2018, to strengthen legislative representation and governance in the province of Isabela.

The respondents consisted of 48 administrative officers and teachers with administrative assignments from selected public schools in Legislative District 5, Isabela. They were selected using purposive sampling, with six (6) respondents from each of the eight municipalities included in the study. The respondents were considered appropriate because they were directly involved in the administrative functions and processes where technology is utilized.

The primary instrument used in the study was a structured questionnaire, which was developed after a comprehensive review of related literature and previous studies. The questionnaire consisted of four sections covering the respondents' profile, the extent of the use and perceived effects of technology in administrative functions and processes, the challenges

encountered in technology utilization, and the level of agreement regarding the perceived usefulness and ease of use of technology.

To ensure the accuracy and credibility of the data, the questionnaire was supplemented by unstructured interviews and documentary analysis. Before its administration, the instrument underwent pilot testing among selected administrative officers outside the study locale. The comments and recommendations of the respondents during the pilot testing, together with the suggestions of the research adviser and the Dean of the Graduate School, were incorporated into the final version of the questionnaire.

Before conducting the study, the researcher secured approval from the Office of the Schools Division Superintendent and obtained permission from the principals or school heads of the participating schools. The research instrument underwent validation to establish its clarity, relevance, and reliability. After incorporating the validators' recommendations, the questionnaire was reproduced and personally administered by the researcher. The completed questionnaires were subsequently retrieved, checked for completeness, organized, and prepared for statistical analysis.

The data collected were analyzed using appropriate descriptive statistical tools. Frequency and percentage were employed to describe the profile of the respondents. Weighted mean was used to determine the extent of the use and perceived effects of technology in administrative functions and processes, the challenges encountered by school administrators and staff, and the respondents' level of agreement regarding the perceived usefulness and ease of use of technology. These statistical techniques enabled the researcher to summarize and interpret the data objectively in relation to the objectives of the study.

## RESULTS AND DISCUSSION

The study involved 48 administrative officers and teachers with administrative assignments from public schools in Legislative District 5, Isabela. Most respondents were 31–40 years old (72.92%), married (83.33%), Bachelor's degree holders (93.75%), and Administrative Officers (87.50%), with a nearly equal distribution of male (52.08%) and female (47.92%) respondents. These characteristics indicate that the participants were in their productive professional years and possessed sufficient educational preparation and administrative experience to provide reliable assessments of technology utilization in school administration. Their daily involvement in administrative work enabled them to evaluate not only the presence of technology but also its actual contribution to improving office operations.

The findings reveal that technology is already an integral part of administrative work in the participating schools, obtaining an overall weighted mean of 3.45, interpreted as Often. Records management emerged as the strongest area of technology utilization (WM = 3.62), followed by communication systems (WM = 3.50). This suggests that schools have successfully adopted digital technologies in routine administrative activities such as storing records, securing confidential files, retrieving information, preparing reports, and facilitating communication among personnel. These functions are repetitive, document-intensive, and procedural in nature, making them the most suitable areas for digitalization.

However, technology was utilized only sometimes in resource allocation and monitoring (WM = 3.37) and decision-making and reporting (WM = 3.30). This finding indicates that the use of ICT has not yet progressed beyond basic administrative operations. Although digital tools are available, they are not yet being maximized to support strategic management functions such as financial planning, resource monitoring, performance analysis, and evidence-based decision-making. In many schools, technology still functions primarily as a tool for documentation rather than as an instrument for organizational planning and management. This suggests that ICT integration remains operational rather than

transformational, limiting its potential to improve administrative efficiency and institutional governance.

With respect to effectiveness, technology was perceived to be moderately effective overall (WM = 3.45). The highest effectiveness was observed in records management, where digital technologies enhanced the security of confidential records, improved data storage, facilitated report preparation, and accelerated information retrieval. Communication systems likewise benefited from technology through the regular use of email, online messaging platforms, and video conferencing applications. These findings demonstrate that ICT has already improved the speed, organization, and accessibility of many administrative tasks.

Nevertheless, the moderate ratings for resource allocation, monitoring, decision-making and reporting suggest that the full benefits of technology have yet to be realized. Modern administrative systems are expected to generate accurate data for planning, budgeting, forecasting, and performance evaluation. The findings imply that these capabilities are still underutilized in the participating schools. As a result, administrative decisions may continue to depend heavily on manual procedures and personal judgment rather than on comprehensive digital information systems. This limits the ability of school administrators to respond promptly to organizational needs and to make timely, evidence-based decisions.

The study further revealed that the challenges associated with technology utilization remain serious, with an overall weighted mean of 4.03. The most critical concerns were ICT infrastructure and attitudes and resistance to change, both obtaining the highest mean of 4.17. These were followed by digital literacy and skills (WM = 4.00) and internet connectivity (WM = 4.00). The results indicate that technology adoption is constrained by both technical and human factors.

The infrastructure-related problems point to inadequate ICT equipment, limited technical support, insufficient maintenance, and unequal access to technological resources across schools. At the same time, the persistence of resistance to change suggests that some personnel continue to prefer traditional methods despite recognizing the potential advantages of ICT. These findings imply that successful technology integration cannot be achieved solely by providing computers or software. It also requires continuous professional development, organizational support, effective leadership, and a school culture that encourages innovation and lifelong learning. Without these complementary conditions, investments in technology may fail to produce meaningful improvements in administrative performance.

Despite these challenges, administrators and staff expressed a favorable perception of technology, obtaining an overall agreement rating of 4.03. They generally agreed that ICT simplifies administrative work, promotes transparency, improves communication, reduces duplication of tasks, supports better school management, and is essential for effective administration. This positive perception is encouraging because it demonstrates that resistance to technology does not necessarily stem from doubts about its usefulness. Rather, it appears to arise from practical limitations such as inadequate infrastructure, insufficient training, weak technical support, and unreliable internet connectivity. In other words, the willingness to adopt technology already exists, but the conditions necessary for its successful implementation remain inadequate.

Taken together, the findings indicate that public schools in Legislative District 5, Isabela, are undergoing a gradual digital transformation in their administrative operations. Technology has already improved routine office functions, particularly records management and communication. However, its application remains relatively limited in strategic administrative functions that require data analytics, performance monitoring, financial planning, and evidence-based decision-making. The results therefore suggest that future ICT

initiatives should move beyond simple computerization of office tasks and toward the development of integrated administrative information systems that support planning, governance, accountability, and continuous organizational improvement. Such initiatives should be accompanied by sustained investments in ICT infrastructure, reliable internet connectivity, technical support services, and capacity-building programs that strengthen both the competence and confidence of school personnel in using digital technologies.

## CONCLUSION

The study concludes that the respondents generally represent a mature, professionally qualified, and experienced administrative workforce. Most are middle-aged, married, Bachelor's degree holders, and Administrative Officers, indicating that they possess the educational background and practical experience necessary to assess the use of technology in school administration.

Technology has become a regular component of administrative work, particularly in records management and communication systems. Digital tools are widely used for storing and retrieving records, preparing reports, and facilitating communication among school personnel. However, technology has not yet been fully integrated into resource allocation, monitoring, decision-making, and reporting. Schools should therefore strengthen the use of digital systems in these administrative areas to support more transparent, efficient, and evidence-based management.

The findings further indicate that technology contributes positively to administrative efficiency, especially in records management and communication. Nevertheless, its contribution to strategic administrative functions remains only moderate. This suggests the need to expand the use of ICT beyond routine clerical work by adopting integrated digital systems that support planning, budgeting, resource management, monitoring, and data-driven decision-making.

Despite the positive contributions of technology, several barriers continue to hinder its effective implementation. The most significant challenges include inadequate ICT infrastructure, insufficient digital competencies, unreliable internet connectivity, and resistance to organizational change. These findings underscore the need for continuous capacity-building programs, regular ICT training, improved technical support, upgraded equipment, and sustained investments in internet connectivity. School administrators should likewise strengthen ICT strategic planning and ensure that adequate resources are allocated to support long-term digital transformation.

The respondents generally recognize technology as useful, user-friendly, and beneficial in improving administrative functions. Their positive perception indicates that resistance to ICT does not stem from doubts about its value but from practical limitations in its implementation. Schools should therefore capitalize on this positive attitude by fostering a culture of innovation, encouraging greater acceptance of digital technologies, and promoting their consistent application across all administrative functions.

Generally, the study concludes that public schools in Legislative District 5, Isabela, have made meaningful progress in integrating technology into school administration. However, maximizing the benefits of ICT requires a more comprehensive and systematic approach that combines infrastructure development, continuous professional training, strong organizational support, effective leadership, and strategic ICT planning. These initiatives will enable schools to move beyond the digitalization of routine office tasks toward a more efficient, transparent, responsive, and data-driven system of school administration. Future researchers may further investigate specific ICT implementation models or best practices that can enhance technology integration and administrative effectiveness in various educational settings.

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