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Perceived Effects of Artificial Intelligence Integration on Administrative, Teaching, and Learning Functions Among School Personnel of Restituta Z. Medina Elementary School

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ABSTRACT

This study examined school personnel's perceptions of artificial intelligence (AI) integration in administration, teaching, and learning functions at Restituta Z. Medina Elementary School, Masbate City, Philippines. Anchored on the Technology Acceptance Model, Diffusion of Innovations Theory, and Technological Pedagogical Content Knowledge Framework, the study employed a descriptive-quantitative research design. Using total enumeration, 20 school personnel participated in a structured, validated survey questionnaire employing a five-point Likert scale. Data were analyzed through frequency counts, percentages, weighted means, and Pearson correlation. Findings revealed generally favorable perceptions of AI integration across all three school functions. In administration, AI was perceived as most beneficial for administrative efficiency (3.48), while planning and monitoring received the lowest composite mean (3.03). In teaching, instructional delivery obtained the highest composite mean (3.35), followed by teacher productivity (3.33). In learning, learner engagement and motivation both recorded composite means of 3.30, exceeding learning achievement (3.23). A statistically significant moderate positive relationship was established between perceptions of AI integration in administration and teaching ($r = 0.50$, $p < 0.05$). The study concluded that AI is perceived as a valuable support tool that complements professional judgment and enhances educational practices. Recommendations emphasized continuous professional development, ethical AI utilization, improved technological resources, and institutional guidelines. The study supports Sustainable Development Goals 4 (Quality Education), 9 (Industry, Innovation and Infrastructure), and 16 (Peace, Justice and Strong Institutions) through its focus on educational innovation and responsible school governance. Its sustainability relevance lies in providing context-specific evidence to inform professional development, institutional decision-making, and responsible technology integration, potentially strengthening long-term educational quality, digital readiness, and administrative effectiveness.

Keywords: *Administrative Efficiency, Artificial Intelligence Integration, Educational Sustainability, Instructional Delivery, Learner Engagement, Learner Motivation, School Administration, School Personnel Perceptions, Teaching Functions, Technological Readiness*

1. INTRODUCTION

Artificial intelligence (AI) has become an increasingly important technology in education, offering opportunities to improve school administration, instructional practices, and learning experiences. AI applications support administrative tasks such as records management, reporting, communication, planning, and decision-making. They also assist teachers in lesson preparation, instructional delivery, assessment, and feedback while providing learners with personalized and interactive learning opportunities. Studies have demonstrated the potential of AI to enhance instructional efficiency, learner engagement, and academic achievement. Putra and Saputra (2025) found that AI supported lesson preparation and interactive classroom activities, while Pusoc et al. (2025) highlighted its contribution to learner-centered instruction. Cadiz et al. (2024) identified educational technology as an important area of instructional innovation. Similarly, Kazmaci et al. (2025) emphasized the importance of teachers' AI knowledge and attitudes, while Paloma (2023) established the influence of technology leadership on educational technology adoption. Hwang (2022) further demonstrated the positive effects of AI-supported instruction on elementary learners' mathematics achievement. Despite these advantages, AI integration presents challenges involving technological competence, institutional readiness, data privacy, academic integrity, and the reliability of AI-generated information. Lacanilao and Agamao (2026) emphasized the importance of addressing ethical concerns in AI-assisted educational assessment and instructional planning. These considerations demonstrate that effective AI integration requires not only technological resources but also competent personnel, supportive leadership, and responsible implementation. At Restituta Z. Medina Elementary School in Barangay Ibingay, Masbate City, AI is gradually becoming part of school operations. This study examines school personnel's perceptions of its effects on administration, teaching, and learning functions. The findings are intended to provide context-specific evidence that may guide educational planning, professional development, and responsible technology integration in elementary education.

Research Problem

Artificial intelligence offers significant opportunities to improve educational management, instructional quality, and learning outcomes. However, its successful implementation depends on school personnel's perceptions, technological readiness, professional competence, and institutional support. International studies generally indicate favorable perceptions of AI integration among educators. Olaseni (2020), Moura and Carvalho (2024), Prasetya et al. (2024), Arranz-García et al. (2025), Sunday et al. (2025), and Fajari et al. (2025) emphasized AI's potential to improve teaching effectiveness, classroom interaction, and learner participation. Similarly, Zheng et al. (2023), Lin H. (2022), Farhat et al. (2025), Ablin and Mediodia (2025), Mukti et al. (2025), and Raguindin and Ventayen (2025) reported improvements in instructional processes, personalized learning, and academic outcomes. Effective AI integration also requires institutional leadership and professional development. Huss (2025), Amdan et al. (2025), Marrone et al. (2025, Chen and Wang (2023), Kurkan and Çetin (2024), and Kafa (2025) highlighted the importance of organizational readiness, digital leadership, and educator support. Nevertheless, Castro et al. (2025), Erol and Erol (2024), Sain et al. (2024), Sharma et al. (2024), and Khairullah et al. (2025) identified technological limitations, inadequate training, infrastructure deficiencies, and ethical governance as continuing challenges. Philippine studies likewise demonstrate positive perceptions of AI integration. Francisco (2025), Robinos et al. (2024), Serdenia et al. (2025), Devanadera (2025), and Tejada (2025) reported favorable attitudes toward AI-supported instruction. However, Aliazas et al. (2025), Anselmo et al. (2025), Rubio and Pastor (2025), and Sibug et al. (2025) emphasized the continuing need for AI literacy, training,

and institutional assistance. Research also indicates that AI can improve teachers' productivity and school management. Reyes (2025), Umali (2024), Prestoza and Banatao (2024), Polinar et al. (2025), Abejo et al. (2024), and Ramos and Bauyot (2025) identified benefits involving instructional preparation, learner motivation, academic performance, and administrative efficiency. Conversely, Aquino and Perez (2025), Villanueva et al. (2025), Castro et al. (2025), Villarino (2025), and Rosqueta (2025) documented barriers involving technological resources, digital inequality, and professional competence. Ethical concerns regarding academic integrity, dependence on technology, and responsible implementation were further emphasized by Jesus and Caumeran (2025), Espartinez (2024), and Picardal (2025). Related investigations further establish that educators' perceptions and competencies influence AI adoption. Maigina and Wuryandani (2024), Yim and Wegerif (2024), Batubara et al. (2025), Hafifah (2025), and Nafasya et al. (2025) highlighted teacher readiness and acceptance. Delcker et al. (2025), Chen (2024), Kayıran et al. (2025), Serpen (2025), and Lin et al. (2022) emphasized technological, pedagogical, and ethical competencies. Furthermore, Kosmas et al. (2025), Song et al. (2025), Shi et al. (2024), Calleja and Camilleri (2025), Arkoumanis et al. (2025), Putri et al. (2025), and Setyawan et al. (2025) reported the potential of AI to improve instructional delivery and learner outcomes. Prihatin et al. (2025), Fathurrachman and Saputri (2025), and Ananyi and Somieari-Pepple (2023) emphasized the importance of institutional preparedness and educational management. Meanwhile, Alwaqdani (2025), Aravantinos et al. (2024), and Subaveerapandiyan et al. (2023) identified concerns regarding teacher preparedness, technological understanding, and ethical implementation. Local studies by Lagman and Tamayo (2025), Tagarao et al. (2025), Akdam and Lim (2025), Malacapay (2025), and Dumalasa (2025) similarly emphasized AI readiness and continuing professional development. Estaño and Castil (2025), Cubio (2025), Alvero and Saldua (2025), Arnado and Paglinawan (2025), Leon Jr. (2024), and Borbajo et al. (2023) identified AI's contributions to instructional productivity, assessment, and administrative support. However, Alieto et al. (2025), Trozo et al. (2025), Bernal et al. (2025), Doria (2024), and Co (2025) emphasized that successful integration requires responsible use, educator competence, and institutional preparedness. Sobremesana et al. (2025), Lanuza and Gonzales (2025), Bongcac and Pabalan (2024), Baba et al. (2024), and Vidal (2023) further underscored the importance of ethical safeguards, institutional policies, and effective educational information systems. Although existing studies provide substantial evidence concerning AI integration, most focus separately on teachers' perceptions, technological readiness, instructional practices, or educational leadership. Limited research simultaneously examines the perceived effects of AI on administration, teaching, and learning within a single elementary school, particularly in rural Philippine settings. This gap establishes the need to investigate the collective perceptions of school heads, teachers, and non-teaching personnel at Restituta Z. Medina Elementary School. Specifically, the study examines perceived administrative efficiency, decision-making, communication and collaboration, records and data management, planning and monitoring, lesson preparation, instructional delivery, assessment, teacher productivity, learner engagement, learning achievement, and learner motivation. It also investigates the relationship between personnel's perceptions of AI integration in administration and teaching functions. The study is limited to school personnel's perceptions and does not directly measure AI tools' effectiveness or include learners', parents', or other stakeholders' perspectives. Consequently, its findings are intended to reflect the participating school's context rather than represent all educational institutions.

Assumptions of the Study

The study assumes that school personnel differ in their demographic characteristics, particularly sex, civil status, educational attainment, position, and length of service. These differences provide a basis for describing the respondents and understanding their perceptions of AI

integration. It further assumes that personnel have varying perceptions of AI's effects on administrative efficiency, decision-making, communication and collaboration, records and data management, and planning and monitoring. Differences are likewise expected in their perceptions of AI integration in lesson planning and preparation, instructional delivery, assessment and evaluation, and teacher productivity. Regarding learning functions, the study assumes that personnel may differ in their perceptions of AI's influence on learner engagement, learning achievement, and learner motivation. Finally, the study assumes that the statistical methods employed are appropriate for examining the relationship between perceptions of AI integration in administration and teaching functions and that the findings reflect the respondents' perceptions within the school context.

Objectives of the Study

The general objective of this study is to determine school personnel's perceptions of the effects of artificial intelligence integration on administration, teaching, and learning functions at Restituta Z. Medina Elementary School. Specifically, it aims to describe the respondents' demographic profile in terms of sex, civil status, educational attainment, position, and length of service; determine their perceptions of AI integration in administrative functions, particularly administrative efficiency, decision-making, communication and collaboration, records and data management, and planning and monitoring; assess their perceptions of AI integration in teaching functions, including lesson planning and preparation, instructional delivery, assessment and evaluation, and teacher productivity; and examine their perceptions of AI integration in learning functions in terms of learner engagement, learning achievement, and learner motivation. Furthermore, the study seeks to determine whether a significant relationship exists between school personnel's perceptions of AI integration in administration and teaching functions. The findings are expected to provide relevant information that may assist school leaders, teachers, and educational authorities in strengthening AI-related policies, professional development programs, and institutional support for the responsible and effective integration of artificial intelligence in education.

Conceptual and Theoretical Framework

This study is anchored on the Technology Acceptance Model (TAM) by Davis (1989), Diffusion of Innovations Theory by Rogers (2003), and the Technological Pedagogical Content Knowledge (TPACK) Framework by Mishra and Koehler (2006). These frameworks explain the acceptance, adoption, and effective integration of AI in educational settings. The Technology Acceptance Model (TAM) developed by Davis (1989) explains that technology acceptance is influenced by perceived usefulness and perceived ease of use. In this study, TAM provides a basis for understanding how school personnel evaluate AI's usefulness in improving administrative tasks, instructional preparation, assessment, communication, and decision-making. Personnel who perceive AI as beneficial and accessible may demonstrate more favorable attitudes toward its integration. The Diffusion of Innovations Theory proposed by Everett Rogers (2003) explains how technological innovations are introduced and adopted within organizations. Its major characteristics—relative advantage, compatibility, complexity, trialability, and observability—help explain differences in school personnel's perceptions of AI. The theory is relevant because AI adoption may depend on its perceived advantages over existing practices, compatibility with school operations, ease of implementation, opportunities for experimentation, and observable benefits. The Technological Pedagogical Content Knowledge (TPACK) Framework developed by Mishra and Koehler (2006) emphasizes the integration of technological knowledge, pedagogical knowledge, and content knowledge. It provides a foundation for examining how teachers perceive AI's contribution to lesson preparation, instructional delivery, assessment, and learner

engagement. The framework also recognizes the importance of technological competence in supporting meaningful educational practices. Collectively, the Technology Acceptance Model (Davis, 1989), Diffusion of Innovations Theory (Rogers, 2003), and the Technological Pedagogical Content Knowledge (TPACK) Framework (Mishra & Koehler, 2006) explain how perceived usefulness, innovation adoption, and professional competence influence school personnel's perceptions of AI integration. The study also adopts an Input-Process-Output (IPO) conceptual approach. The inputs consist of respondents' demographic characteristics and their perceptions of AI integration across administration, teaching, and learning functions. The process involves gathering information through survey questionnaires and analyzing the responses using percentage, weighted mean, and Pearson R Correlation. The outputs include the identified demographic profiles, personnel's perceptions of AI integration, and the relationship between their perceptions of administrative and teaching functions. Feedback from the findings may guide educational stakeholders in identifying concerns, improving institutional practices, and developing appropriate strategies for AI integration. This conceptual approach connects the study's variables, research procedures, and intended outcomes.

Sustainable Development Goal and Multidisciplinary Sustainability Relevance

This study aligns with Sustainable Development Goal (SDG) 4 – Quality Education, SDG 9 – Industry, Innovation and Infrastructure, and SDG 16 – Peace, Justice and Strong Institutions, as it emphasizes educational improvement, technological innovation, and responsible school governance. In relation to SDG 4, the study examines the perceived contributions of artificial intelligence (AI) integration to instructional preparation, teaching effectiveness, learner engagement, academic achievement, and learner motivation. Its findings may help identify professional development needs and promote the responsible use of educational technologies, thereby supporting educational sustainability through continuous improvement in teaching and learning practices. Furthermore, the study supports SDG 9 by investigating AI as an emerging technology that enhances school administration, instructional innovation, and digital information management. By examining school personnel's perceptions of AI integration, the research may provide insights into technological readiness and the adoption of innovative educational practices, contributing to technological and digital sustainability. In connection with SDG 16, the study emphasizes the importance of effective school governance through improved administrative efficiency, decision-making, records management, communication, planning, and monitoring. It also recognizes the significance of data privacy, academic integrity, and ethical AI utilization in promoting accountability and responsible institutional practices. Overall, the study contributes to educational, technological, and institutional sustainability by generating context-specific evidence on the perceived effects of AI integration on administration, teaching, and learning functions at Restituta Z. Medina Elementary School. The findings may serve as a basis for strengthening professional development programs, improving administrative and instructional practices, and developing appropriate institutional policies that support the responsible, effective, and sustainable integration of artificial intelligence in basic education.

2. METHODOLOGY

Research Design

The study utilized a descriptive-quantitative research design to examine school personnel's perceptions of AI integration in administration, teaching, and learning functions. This design was appropriate because it allowed the researcher to systematically collect numerical data, describe existing conditions, and examine relationships among the variables without manipulating them. Specifically, the study assessed perceptions of AI integration in administrative efficiency, decision-making, communication and collaboration, records and data management, and planning and monitoring. It also examined teaching functions involving lesson planning and

preparation, instructional delivery, assessment and evaluation, and teacher productivity, as well as learning functions involving learner engagement, learning achievement, and learner motivation. Furthermore, the study determined the significant relationship between personnel's perceptions of AI integration in administration and teaching functions.

Research Locale or Study Setting

The study was conducted at Restituta Z. Medina Elementary School, a public elementary school located in Barangay Ibingay, Masbate City, Philippines. The institution provides basic education from kindergarten to Grade 6 and serves learners within the community. The school was selected because its personnel were directly involved in the administrative, teaching, and learning functions examined in the research. Its accessibility and the availability of qualified respondents also made it an appropriate setting for investigating school personnel's perceptions of AI integration.

Participants or Data Sources

The respondents consisted of school personnel officially employed at Restituta Z. Medina Elementary School during the conduct of the study. The research employed total enumeration as its sampling technique, allowing the inclusion of the entire identified population rather than selecting a sample. A total of 20 respondents participated in the study. They were selected because of their direct involvement in school operations and their experiences with AI applications in performing professional responsibilities. Their demographic characteristics were described according to sex, civil status, educational attainment, position, and length of service. The inclusion of personnel performing different school functions provided a basis for examining perceptions of AI integration in administration, teaching, and learning.

Research Instruments or Materials

The primary research instrument was a structured survey questionnaire designed to determine school personnel's perceptions of AI integration. It consisted of two parts. The first gathered demographic information, including sex, civil status, educational attainment, position, and length of service. The second measured respondents' perceptions of AI integration across three school functions. Administrative indicators included administrative efficiency, decision-making, communication and collaboration, records and data management, and planning and monitoring. Teaching indicators covered lesson planning and preparation, instructional delivery, assessment and evaluation, and teacher productivity, while learning indicators included learner engagement, learning achievement, and learner motivation. A five-point Likert scale was used to measure respondents' agreement with the statements. Before administration, the questionnaire underwent expert review and validation to ensure the clarity, relevance, and alignment of its items with the research objectives. Recommendations from the validators were incorporated into the finalized instrument.

Data Gathering Procedure

Data collection commenced after the thesis proposal was approved by the thesis committee. The researcher secured the necessary permit, endorsed by the thesis adviser, and submitted it to the Schools Division Superintendent of Masbate City Division for approval. Following authorization, the researcher prepared the survey questionnaire, which was reviewed by the thesis adviser and validated by teachers and other individuals in education. The instrument was subsequently revised and finalized based on their recommendations. Twenty copies of the validated questionnaire were reproduced and distributed to respondents with their approval. The retrieval of completed questionnaires extended beyond the intended one-month period because of school and office activities and other concerns, resulting in delays in data processing. After

retrieval, the responses were organized, tallied, and subjected to statistical analysis with the assistance of an expert statistician. The findings were then analyzed and interpreted to establish their implications for AI integration in school administration, teaching, and learning.

Data Analysis

The collected data were analyzed using frequency count, percentage, weighted mean, and Pearson R correlation. Frequency count and percentage were employed to describe the respondents' demographic characteristics in terms of sex, civil status, educational attainment, position, and length of service. Percentages were obtained by dividing the frequency of each category by the total number of respondents and multiplying the result by 100. The weighted mean was used to determine the respondents' levels of agreement regarding the perceived effects of AI integration on administration, teaching, and learning functions. It was calculated using the frequencies of responses and their corresponding numerical weights on the five-point Likert scale. Pearson R correlation was utilized to determine the relationship between school personnel's perceptions of AI integration in administration and teaching functions. The resulting data were organized, analyzed, and interpreted to address the study's research questions.

Ethical Considerations

The study observed ethical considerations throughout the research process by securing the necessary institutional authorization and obtaining respondents' approval before data collection. Permission to conduct the study was obtained from the Schools Division Superintendent of Masbate City Division, with the endorsement of the thesis adviser, before administering the survey questionnaires at Restituta Z. Medina Elementary School. Respondents were informed of the purpose of the study and their participation was sought before distributing the questionnaires. The research was conducted within the authorized school setting, ensuring that the data gathered were used to examine school personnel's perceptions of artificial intelligence integration in administration, teaching, and learning functions.

3. RESULTS AND DISCUSSION

3.1 Demographic Profile of the Respondents

3.1.1 Sex

Of the 20 respondents, 13 (65.00%) were female, while 7 (35.00%) were male. Female personnel therefore constituted the majority of the respondents. This finding indicates that the perceptions gathered regarding AI integration in administration, teaching, and learning functions predominantly represent female school personnel, reflecting their greater representation among the study participants.

3.1.2 Civil Status

Fourteen respondents (70.00%) were married, while 6 (30.00%) were single. No respondents were identified as widowed. The predominance of married personnel suggests that respondents may have different perspectives regarding AI integration, particularly in managing administrative responsibilities, instructional activities, and learning support functions alongside their personal responsibilities.

3.1.3 Educational Attainment

Eleven respondents (55.00%) had earned master's degree units, 6 (30.00%) had completed a master's degree, and 3 (15.00%) held bachelor's degrees. None reported doctoral units or completed doctoral degrees. These findings indicate that most respondents had pursued

graduate education, reflecting their involvement in professional development. Their educational backgrounds may influence their understanding and perceptions of AI applications in school administration, teaching, and learning.

3.1.4 Position

Teacher IV constituted the largest group, with 5 respondents (25.00%), followed by Teacher I with 4 (20.00%). Teacher III, Teacher VI, and Master Teacher I each accounted for 3 respondents (15.00%), while Teacher II comprised 2 respondents (10.00%). The distribution indicates that respondents represented different teaching ranks, providing perspectives from personnel with varying levels of professional responsibility. This diversity contributes to understanding perceptions of AI integration across school functions.

3.1.5 Length of Service

Ten respondents (50.00%) had served for 6–10 years, 7 (35.00%) for five years or less, and 3 (15.00%) for 11–15 years. The findings show that half of the respondents had accumulated six to ten years of teaching experience. Their professional experience may have enabled them to observe changes in educational practices and assess the perceived contributions of AI to administrative efficiency, instructional delivery, and learning processes.

3.2 Perceptions of AI Integration in Administration

3.2.1 Administrative Efficiency

Administrative efficiency obtained a composite mean of 3.48, interpreted as Strongly Agree. Reducing the time required to prepare school documents and improving the quality and accuracy of administrative work received the highest weighted means of 3.50 each. Completing reports and other administrative documents more quickly received the lowest mean of 3.45, also interpreted as Strongly Agree. These findings indicate that personnel strongly perceive AI as beneficial in streamlining administrative responsibilities, particularly document preparation and improving work accuracy. This supports Ramos and Bauyot (2025)38, who found that AI and other innovative technologies improved school management through administrative efficiency and evidence-based decision-making.

3.2.2 Decision-Making

Decision-making obtained a composite mean of 3.37, interpreted as Strongly Agree. Using AI-generated information to support work-related decisions received the highest mean of 3.45, while using AI to plan and organize school activities received the lowest mean of 3.30. The results suggest that respondents consider AI particularly useful for providing information that supports school-related decisions and addresses work concerns. This finding is consistent with Baba et al. (2024)89, who emphasized the importance of educational management information systems in facilitating technology integration and informed decision-making.

3.2.3 Communication and Collaboration

Communication and collaboration obtained a composite mean of 3.27, interpreted as Strongly Agree. Preparing announcements, letters, and other school communications and working effectively with other personnel both received the highest mean of 3.30. Communicating work-related information more clearly obtained the lowest mean of 3.20, interpreted as Agree. The findings indicate that AI is perceived as beneficial for preparing official communications and

supporting collaboration among school personnel, although its contribution to communication clarity received a slightly lower rating. This agrees with Cubio (2025)76, who reported that Department of Education personnel recognized AI's usefulness in documentation, communication, and routine administrative tasks.

3.2.4 Records and Data Management

Records and data management obtained a composite mean of 3.25, interpreted as Agree. Reducing errors in school records and reports received the highest mean of 3.40, interpreted as Strongly Agree, while organizing and managing school records more efficiently received the lowest mean of 3.15, interpreted as Agree. These results indicate that personnel perceive AI as more beneficial for improving the accuracy of school records than for organizing and managing them. This finding relates to Ananyi and Somieari-Pepple (2023)66, who reported that educational leaders recognized AI's potential to improve organizational efficiency, planning, and resource utilization, while acknowledging the need for infrastructure and capacity building.

3.2.5 Planning and Monitoring

Planning and monitoring obtained a composite mean of 3.03, interpreted as Agree. Preparing work plans, schedules, and activity timelines and identifying tasks requiring immediate attention received the highest means of 3.10 each. Monitoring the progress of school programs and activities obtained the lowest mean of 2.90. The findings suggest that respondents perceive AI as more useful for planning, scheduling, and prioritizing tasks than for monitoring ongoing school programs. Although AI is considered helpful in administrative planning, its application to program monitoring appears less emphasized among the respondents.

3.3 Perceptions of AI Integration in Teaching Functions

3.3.1 Lesson Planning and Preparation

Lesson planning and preparation obtained a composite mean of 3.28, interpreted as Strongly Agree. Generating learning activities aligned with lesson objectives received the highest mean of 3.35, while preparing detailed lesson plans aligned with learning competencies received the lowest mean of 3.20, interpreted as Agree. The results indicate that school personnel strongly recognize AI's contribution to developing instructional activities and preparing learning resources. This supports Raguindin and Ventayen (2025)12, who found that AI improved lesson planning, content delivery, and learner assessment in public elementary schools. Similarly, Calleja and Camilleri (2025)60 emphasized generative AI's contribution to lesson planning and collaborative teaching practices.

3.3.2 Instructional Delivery

Instructional delivery obtained a composite mean of 3.35, interpreted as Strongly Agree. Designing engaging classroom activities that encourage learner participation received the highest mean of 3.40, while providing examples and learning resources to support classroom instruction received the lowest mean of 3.30. These findings indicate that respondents perceive AI as particularly useful for developing interactive learning activities, explaining difficult concepts, and encouraging classroom participation. This is consistent with Arnado and Paglinawan (2025)78, who identified AI as an instructional support tool that enhanced lesson delivery. Prasetya et al. (2024)3 likewise reported favorable teacher perceptions of AI's

contribution to instructional effectiveness, while Mukti et al. (2025)11 emphasized its role in supporting engaging and individualized learning experiences.

3.3.3 Assessment and Evaluation

Assessment and evaluation obtained a composite mean of 3.30, interpreted as Strongly Agree. Preparing quizzes, tests, and performance tasks aligned with learning competencies received the highest mean of 3.35, while generating assessment questions with different difficulty levels obtained the lowest mean of 3.25, interpreted as Agree. The results indicate that personnel recognize AI as a useful tool for preparing competency-aligned assessments, developing scoring guides, and supporting learner evaluation. This supports Alvero and Saldua (2025)77, who found that generative AI improved assessment practices and feedback. Similarly, Alieto et al. (2025)81 reported favorable perceptions of AI-assisted educational assessment while emphasizing responsible and informed utilization.

3.3.4 Teachers' Productivity

Teachers' productivity obtained a composite mean of 3.33, interpreted as Strongly Agree. Reducing the time spent preparing lessons, assessments, and instructional materials received the highest mean of 3.40. Completing routine teaching tasks efficiently and accomplishing teaching responsibilities while maintaining instructional quality both received the lowest means of 3.30. These findings indicate that personnel perceive AI as beneficial in reducing preparation time and improving efficiency in teaching-related responsibilities. This agrees with Estaño and Castil (2025)75, who found that AI integration enhanced instructional quality, teacher productivity, and student motivation through more efficient lesson preparation and personalized learning.

3.4 Perceptions of AI Integration in Learning Functions

3.4.1 Learner Engagement

Learner engagement obtained a composite mean of 3.30, interpreted as Strongly Agree. All three indicators received identical weighted means of 3.30, indicating consistently favorable perceptions of AI-generated learning materials, AI-supported classroom activities, and visual and multimedia resources in promoting learner participation, attention, and interaction. These findings indicate that respondents perceive different AI-supported instructional strategies as equally beneficial in encouraging active learner engagement. This supports Prestoza and Banatao (2024)35, who demonstrated that AI-supported pedagogy improved student engagement through personalized learning experiences. Similarly, Kosmas et al. (2025)57 found that AI integration enhanced classroom engagement and interactive learning, while Shi et al. (2024)59 reported its contribution to personalized instruction and learner participation.

3.4.2 Learning Achievement

Learning achievement obtained a composite mean of 3.23, interpreted as Agree. Helping learners understand lesson concepts more easily through AI-supported instructional materials received the highest mean of 3.30, interpreted as Strongly Agree. Successful completion of learning tasks and improvement in academic performance both received the lowest means of 3.20, interpreted as Agree. The findings suggest that respondents perceive AI as particularly beneficial for improving learners' understanding of lesson concepts, although its perceived contributions to task completion and academic performance received slightly lower ratings. This

is consistent with Zheng et al. (2023)7, who found that AI improved students' learning achievement and learning perceptions. Likewise, Ablin and Mediodia (2025)10 reported that AI integration positively influenced instructional effectiveness, learner participation, and classroom productivity.

3.4.3 Learner Motivation

Learner motivation obtained a composite mean of 3.30, interpreted as Strongly Agree. Increasing learners' interest in lessons through AI-generated learning materials received the highest mean of 3.35, while encouraging learners to complete learning tasks received the lowest mean of 3.25, interpreted as Agree. These findings indicate that school personnel perceive AI as particularly useful for stimulating learners' interest and encouraging classroom participation. This supports Umali (2024)34, who found that AI enhanced learner motivation while assisting teachers in managing instructional activities. Likewise, Malacapay (2025)73 emphasized the relationship between AI literacy, preparedness, and motivation to use AI for academic and instructional purposes.

3.5 Relationship Between Perceptions of AI Integration in Administration and Teaching Functions

Pearson correlation analysis revealed a moderate positive relationship between school personnel's perceptions of AI integration in administration and teaching functions, with a computed r-value of 0.50. This exceeded the critical r-value of ±0.4438 at the 0.05 level of significance with 18 degrees of freedom. Consequently, the null hypothesis was rejected, indicating a statistically significant relationship between the two variables. The findings indicate that more favorable perceptions of AI integration in administrative functions are associated with more favorable perceptions of its integration in teaching functions. Personnel who recognize AI's usefulness in preparing reports, organizing information, managing records, and supporting decision-making may also demonstrate greater acceptance of its applications in lesson planning, instructional delivery, and assessment. This relationship highlights the interconnected nature of school personnel's perceptions of AI integration across administrative and instructional responsibilities.

4. CONCLUSIONS AND RECOMMENDATIONS

The study concluded that school personnel at Restituta Z. Medina Elementary School generally perceived artificial intelligence (AI) integration positively across administration, teaching, and learning functions. Most respondents were female, married, had earned master's degree units, held Teacher IV positions, and had served for 6–10 years. In administration, AI was perceived as most beneficial for improving efficiency, document preparation, accuracy, and decision-making, although its contribution to monitoring school programs received relatively lower ratings. In teaching, AI was viewed as particularly useful for instructional delivery, lesson preparation, assessment, and teacher productivity. In learning, AI was perceived to enhance learner engagement and motivation, while its contribution to academic achievement received slightly lower ratings. Furthermore, a moderate positive relationship was found between personnel's perceptions of AI integration in administration and teaching functions. Overall, the findings indicate that school personnel regard AI as a valuable support tool that complements, rather than replaces, human expertise and professional judgment.

Teachers are encouraged to pursue graduate studies and participate in professional development programs to strengthen their knowledge and competencies in artificial intelligence (AI) integration. School administrators should provide continuous training on the effective and ethical use of AI, particularly in monitoring, evaluation, and data management. Teachers should responsibly incorporate AI into lesson planning, instructional delivery, and assessment to improve teaching efficiency and learning experiences. Schools should also strengthen technological resources and establish clear guidelines to support responsible AI integration in administrative and instructional functions. Furthermore, future researchers are encouraged to conduct similar studies using larger sample sizes and examine additional factors that may influence teachers' perceptions of ICT integration.

The study was limited to 20 school personnel from Restituta Z. Medina Elementary School in Barangay Ibingay, Masbate City. It focused on respondents' perceptions of artificial intelligence (AI) integration in administration, teaching, and learning functions rather than directly measuring its actual effectiveness or impact on school operations, instructional performance, and learner achievement. Furthermore, the study was conducted in a single educational institution, limiting the generalizability of its findings to other schools and educational settings. These limitations highlight the need for further research involving larger samples and additional factors influencing personnel's perceptions of technology integration.

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