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Teachers' Readiness for DepEd AI Integration in Philippine Basic Education: A Descriptive–Correlational Study

Adriano G. Sabado [1], Lea B. Patungao [2], Fely Ann L. Aplasen [3], Jenny Claire B. Pecua [4], Julie-Ann A. Calimag [5], Kazmiah Joyze S. Eugenio [6], Grace Ann M. Magsino [7]
[1] Northeastern College,[2,3,4,5,6,7] Northeastern College, Santiago City, Isabela Philippines
[1] adriansabado71@gmail.com, [2] lea.patungao@deped.gov.ph, [3] felyanneaplasen@gmail.com
[4] jennyclaire.pecua@deped.gov.ph, [5] Julieann.calimag@deped.gov.ph, [6] kazmiahjoyze.eugenio@deped.gov.ph

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Corresponding Email:
adriansabado71@gmail.com

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Index Terms:

artificial intelligence in education; teacher readiness; AI integration; digital skills; AI literacy; educational technology adoption; DepEd ai guidelines; basic education Philippines;

Abstract. The integration of artificial intelligence (AI) in education has become a global priority, with increasing emphasis on its ethical, responsible, and pedagogically sound implementation. In the Philippines, the Department of Education (DepEd) has introduced foundational guidelines on AI integration in basic education to support digital transformation and enhance teacher capacity. Despite these initiatives, there remains limited empirical evidence on teachers' readiness to implement national AI policies in classroom practice. This study examined teachers' readiness to implement DepEd AI integration guidelines and explored its relationship with selected demographic variables. A descriptive–correlational research design was employed, involving 47 public basic education teachers selected through purposive sampling. Data were gathered using a structured survey questionnaire measuring four dimensions of readiness: AI knowledge, digital skills, training and professional development, and attitudes toward AI. Descriptive statistics and Pearson 'scorrelation analysis were used to analyze the data. The findings revealed that teachers demonstrated an overall "ready" level of preparedness (M = 3.26, SD = 0.63). Among the dimensions, attitudes toward AI obtained the highest mean, indicating positive perceptions of AI integration, while AI knowledge recorded the lowest mean, highlighting an area for improvement. Furthermore, no significant relationships were found between teachers' readiness and demographic variables ($p > .05$). These results suggest that readiness is not demographically determined but may be influenced by technological exposure and institutional support. The study underscores the need for sustained professional development, enhanced AI literacy programs, and improved technological infrastructure to ensure effective and ethical AI integration in Philippine basic education.

Introduction

Artificial intelligence (AI) is rapidly transforming various sectors worldwide, including education, healthcare, and industry, marking a significant phase of technological advancement (Qadhi et al., 2024). In education, many countries are increasingly integrating AI tools into teaching and learning processes to improve instructional delivery and learning outcomes (López-Chila et al., 2023). AI supports personalized learning by adapting content to individual student needs, enables automated assessment for efficient evaluation, and provides intelligent tutoring systems that offer tailored guidance. Moreover, AI facilitates data-driven instruction by allowing educators to make informed decisions based on learning analytics (Mahrishi et al., 2025). International organizations further emphasize the need for ethical and responsible AI use in education, advocating for frameworks that ensure transparency, equity, and data privacy (Lee et al., 2024; Li & Huang, 2025). Teachers play a central role in mediating AI integration in classrooms, ensuring its

ORCID: [1] https://orcid.org/0009-0009-1933-467X, [2] https://orcid.org/0009-0001-9732-5455, [3] https://orcid.org/0009-0002-8468-099X, [4] https://orcid.org/0009-0003-0542-8380, [6] https://orcid.org/0009-0000-9926-5161

pedagogical effectiveness while addressing ethical considerations and maintaining instructional integrity (Blonder & Feldman-Maggor, 2024). These developments highlight AI integration as a critical and growing global priority in education. In the Philippines, the Department of Education (DepEd) is actively promoting digital transformation to modernize teaching and learning practices through technology integration (Espartinez, 2025). A key initiative is the introduction of the Foundational Guidelines on Artificial Intelligence in Basic Education, which aims to ensure the ethical, responsible, and effective use of AI in schools (Espartinez, 2025). This policy emphasizes teacher capacity building, equipping educators with the knowledge and skills needed to implement AI tools in instruction, assessment, and learner support. Supporting programs, such as Project AGAP.AI, further provide practical resources to facilitate AI adoption (Espartinez, 2025). As frontline implementers of educational reforms, teachers are expected to integrate AI into their practices while upholding ethical and pedagogical standards. However, effective AI integration requires not only policy direction but also adequate teacher readiness, including AI knowledge, digital skills, professional development, and positive attitudes toward technology (Traga Philippakos & Rocconi, 2025; Yue et al., 2024). Despite these expectations, many teachers face challenges, such as limited AI-specific training, insufficient technological infrastructure, unclear policy understanding, and a lack of hands-on experience with AI tools (Castro et al., 2025; Traga Philippakos & Rocconi, 2025). These constraints may hinder the successful implementation of AI initiatives in schools.

Although previous studies have explored technology integration and digital readiness among teachers, much of the literature focuses on general technology adoption, higher education contexts, or international settings. Consequently, a significant research gap persists in understanding teachers' readiness within specific national policy frameworks, particularly in the Philippine basic education system. There is a lack of empirical, policy-specific, and context-sensitive evidence examining how prepared Filipino teachers are to implement the DepEd's AI integration guidelines. Moreover, no localized studies have comprehensively assessed whether teachers possess the required competencies—AI knowledge, digital skills, professional training, and attitudes—to operationalize these policies in actual classroom practice. This gap creates a disconnect between policy formulation and classroom implementation, limiting the ability of policymakers and school leaders to design targeted, evidence-based interventions.

Addressing this gap is essential to ensure that national AI initiatives translate into effective, ethical, and sustainable educational practices. Therefore, this study investigates teachers' readiness to implement the DepEd AI guidelines in basic education. Specifically, it examines readiness across key dimensions—AI knowledge, digital skills, training and professional development, and attitudes toward artificial intelligence—and analyzes their relationships with selected demographic variables. The findings aim to inform policymakers, school leaders, and teacher education institutions to strengthen capacity-building programs and support systems for AI integration in Philippine classrooms.

Research Questions

This study aimed to determine teachers' readiness to implement the DepEd Foundational Guidelines on Artificial Intelligence Integration in Basic Education. Specifically, it sought to answer the following questions:

1. What is the demographic profile of the teacher-respondents in terms of:
   a. age
   b. sex
   c. years of teaching experience
   d. highest educational attainment
   e. subject area taught
   f. teaching level (elementary, junior high school, senior high school)?
2. What types of AI- or technology-related training programs have the teacher-respondents attended?
3. What is the level of teachers' readiness in implementing the DepEd Foundational Guidelines on Artificial Intelligence Integration in Basic Education in terms of:
   a. AI knowledge
   b. digital skills
   c. training and professional development
   d. attitudes toward artificial intelligence?
4. Is there a statistically significant relationship between teachers' demographic profiles and their level of readiness to implement AI integration in basic education?
5. Is there a statistically significant relationship among the dimensions of teacher readiness (AI knowledge, digital skills, training and professional development, and attitudes toward AI)?

Related Literature and Studies

Teachers' Readiness and Perceptions Toward AI Integration

Research on Filipino teachers' readiness and perceptions regarding artificial intelligence (AI) integration consistently indicates a generally positive attitude toward adopting AI tools in classroom instruction, although some reservations remain regarding practical implementation. The findings suggest that Filipino teachers are open to utilizing AI to facilitate learning; however, they continue to express concerns related to limited resources, insufficient training, and a lack of confidence in effectively applying AI in teaching (Sanusi et al., 2023). Similarly, studies involving pre-service teachers in the Philippines have revealed moderate to high levels of readiness and self-confidence in integrating AI into educational contexts. Despite this, these future educators emphasize the need for more comprehensive training and increased exposure to AI technologies to fully develop their competence in AI-supported instruction (Ayanwale et al., 2024). Furthermore, Filipino teachers perceive AI as a valuable tool that enhances teaching efficiency, improves student engagement, and supports personalized learning experiences. These perspectives align with broader findings that highlight the importance of pedagogical innovation and technology integration in modern classrooms (Ellorin et al., 2024). However, despite these positive perceptions, many educators report lower confidence in the advanced technological skills required for more sophisticated AI applications, which poses a challenge for effective implementation. These findings underscore the importance of targeted professional development programs designed to strengthen teachers' AI-related competencies, including both technical knowledge and pedagogical integration skills. Such initiatives are essential in empowering teachers to overcome anxiety and build confidence in using AI, thereby fostering more effective and meaningful integration of AI-driven educational innovations (Ayanwale et al., 2024; Sanusi et al., 2023). Overall, the literature suggests that while Filipino educators are receptive to AI integration, sustained institutional support in the form of training, resources, and infrastructure is necessary to fully realize the potential of AI in enhancing teaching and learning processes (Sanusi et al., 2023).

AI Literacy and Technology Acceptance Among Teachers

A study conducted among pre-service teachers in Central Visayas, Philippines, revealed that perceived usefulness and perceived ease of use significantly influence teachers' attitudes and their intention to adopt artificial intelligence (AI) applications in education. This finding supports the technology acceptance model (TAM), highlighting the importance of these factors in shaping educators' acceptance and behavioral intention toward AI tools in teaching (Alejandro et al., 2024). Furthermore, research examining AI literacy and readiness among Filipino pre-service teachers reported moderate to high levels of AI literacy and acceptance, indicating a generally positive disposition toward AI integration in education. However, the study emphasized the need for targeted training programs to strengthen AI integration competencies within teacher education curricula (Tenberga & Daniela, 2024). This aligns with broader research underscoring AI literacy as a foundational element for successful AI adoption, as it not only enhances teachers' confidence but also enables meaningful pedagogical applications of AI tools (Al-Abdullatif, 2024). In addition, the integration of intelligent technological pedagogical content knowledge (TPACK) and perceived trust has been found to further influence teachers' acceptance of generative AI technologies, suggesting that professional development focusing on both technical and pedagogical aspects can enhance readiness and adoption (Al-Abdullatif, 2024). Moreover, the integration of AI in education necessitates the development of higher-order thinking skills, particularly critical thinking, which enables learners to effectively analyze and evaluate AI-generated information (Anselmo et al., 2025). Collectively, these findings highlight the importance of comprehensive teacher training programs that incorporate practical AI applications, ethical considerations, and critical thinking development to equip educators with the competencies required to navigate AI-driven educational environments effectively and responsibly (Al-Abdullatif, 2025; Tenberga & Daniela, 2024).

AI Implementation and Policy in Philippine Education

A narrative review of artificial intelligence (AI) in Philippine education indicates that the integration of AI is steadily expanding across various educational levels, reflecting the country's ongoing efforts toward digital transformation. However, its implementation continues to face significant challenges, including limited digital infrastructure, insufficient teacher training, and gaps in educational policies, which collectively hinder the effective deployment of AI technologies in schools (Cacho, 2024). These constraints mirror broader global concerns regarding AI integration, emphasizing the need for comprehensive support systems to ensure successful and sustainable adoption. In response, the Philippine Department of Education initiated programs aimed at promoting AI-driven learning systems and advancing the digitalization of education, demonstrating a strong commitment to modernizing instructional practices and improving learning outcomes (Cacho, 2024). These developments are further supported by studies that highlight the role of emerging technologies in

enhancing instructional effectiveness and enriching students' learning experiences (Anselmo et al., 2024). Nevertheless, despite these progressive initiatives, there remains a critical need for well-defined policy frameworks that address ethical considerations, data privacy, digital equity, and teacher preparedness to ensure the responsible and effective integration of AI in schools. The establishment of such policies is essential to balance technological innovation with inclusivity and fairness, in line with global recommendations advocating for ethical AI use in education (Azman & Tümkaya, 2025). Overall, while the Philippines is making meaningful progress in harnessing AI's transformative potential in education, addressing infrastructural limitations, strengthening teacher capacity, and refining policy implementation remain crucial for achieving sustainable and equitable digital advancement (Azman & Tümkaya, 2025; Cacho, 2024).

Integrated Conceptual and Theoretical Mapping

This study is guided by an integrated conceptual and theoretical framework that explores teachers' readiness to implement artificial intelligence (AI) integration in basic education. The framework illustrates the relationship between teachers' demographic characteristics, readiness dimensions, and the anticipated outcomes of AI integration in teaching. At its foundational level, the framework is anchored on several esteemed theoretical perspectives, including the technology acceptance model (TAM), technological pedagogical content knowledge (TPACK) framework, and teacher readiness theory. These theories collectively offer valuable insights into how teachers adopt and integrate emerging technologies, such as artificial intelligence, in educational settings. The technology acceptance model suggests that teachers' acceptance of AI technologies may be influenced by their perceptions of usefulness and ease of use, whereas the TPACK framework emphasizes the integration of technology, pedagogy, and content knowledge as essential elements of effective technology-enhanced teaching. Within the conceptual structure of the framework, teachers' demographic profile, including age, sex, educational attainment, teaching experience, and the number of AI- or technology-related trainings attended, serves as an exogenous variable that may influence teachers' readiness to integrate AI into education. These factors represent personal and professional characteristics that may affect teachers' exposure to technology, experience with digital tools, and willingness to adopt new innovations in teaching. The central component of the framework is teachers' readiness to implement AI integration, which is measured through four key dimensions: AI knowledge, digital skills, training and professional development, and attitudes toward AI. These dimensions represent the competencies and perceptions necessary for teachers to effectively utilize AI tools in teaching and learning. Finally, the framework suggests that when teachers demonstrate adequate readiness in these dimensions, it may lead to the effective implementation of AI in basic education, potentially contributing to improved teaching practices, enhanced learning experiences, and the responsible and ethical use of artificial intelligence in the classroom.

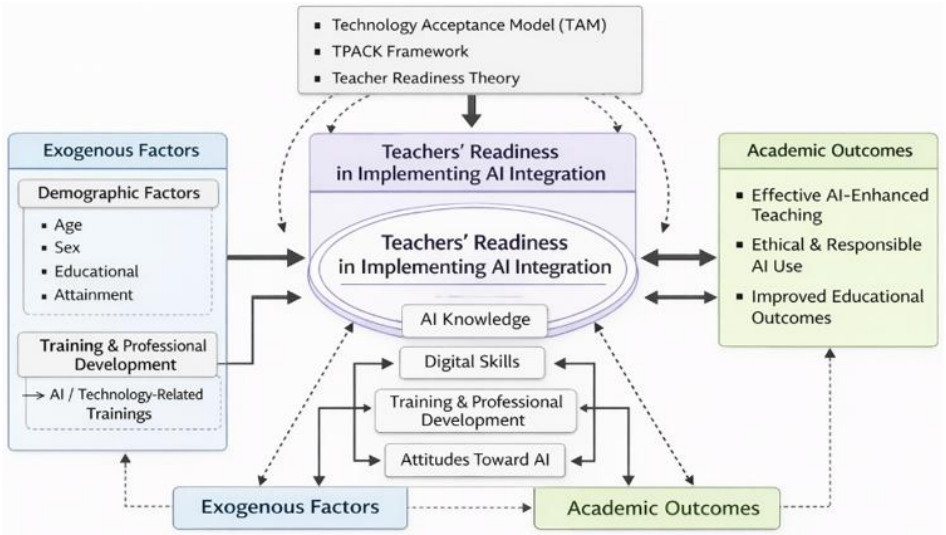

Figure 1 Figure 1. Integrated Conceptual and Theoretical Framework of Teachers' Readiness in Implementing Artificial Intelligence Integration in Basic Education

Methodology

Research Design

This study employed a descriptive–correlational research design to examine teachers' readiness to implement the Department of Education (DepEd) Foundational Guidelines on Artificial Intelligence (AI) Integration in Basic Education. The descriptive component aimed to determine the current level of teachers' readiness across four key dimensions: AI knowledge, digital skills, training and professional development, and attitudes toward artificial intelligence. The correlational component investigated the relationship between teachers' demographic characteristics and their readiness to implement AI integration in teaching. This non-experimental design was appropriate because it enabled a systematic description of the existing conditions and examination of the statistical relationships among variables, without manipulating the research environment.

Respondents of the Study

The respondents comprised 47 public school teachers who were currently teaching in basic education. These educators were actively engaged in classroom instruction and were expected to integrate emerging educational technologies, including artificial intelligence tools, into their teaching practices. Participants represented different grade levels and subject areas to capture varied instructional contexts and provide a broader perspective on AI integration in schools. An a priori power analysis using G*Power software indicated that a minimum sample of 34 respondents was required to detect a medium effect size at a significance level of $\alpha = .05$ with statistical power set at .80. The final sample exceeded this requirement, indicating that the study had adequate statistical power to detect meaningful relationships among variables.

Research Instrument

Data were collected using a structured survey questionnaire designed to measure teachers' readiness for AI integration into basic education. The instrument consists of two main sections. The first section gathered respondents' demographic information, including age, sex, years of teaching experience, highest educational attainment, subject area taught, teaching level, and the number of AI- or technology-related training sessions attended. The second section measured teachers' readiness across four dimensions: AI knowledge, digital skills, training and professional development, and attitudes toward AI. The items were assessed using a five-point Likert scale to capture the degree of agreement with each statement (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree).

The questionnaire items were adapted from established instruments and prior studies on AI readiness, digital competence, and technology acceptance in educational settings. Content validity was established through expert review by specialists in educational technology and research measurement to ensure clarity, relevance, and alignment with the study objectives. Reliability testing demonstrated strong internal consistency across the four readiness dimensions, with Cronbach's alpha coefficients ranging from .82 to .91, indicating that the instrument was statistically reliable for measuring teachers' readiness.

Data Collection Procedure

Prior to data collection, formal permission to conduct the study was obtained from appropriate school authorities. The purpose, scope, and voluntary nature of the study were explained to the participants. Informed consent was obtained from all respondents before participation. Ethical considerations, including confidentiality, anonymity, and responsible data handling, were strictly observed throughout the study. The survey questionnaire was administered either in printed form or through an online survey platform, depending on accessibility and participant preference. Upon completion, responses were collected, checked for completeness, and organized systematically for statistical analysis.

Statistical Treatment of Data

The collected data were analyzed using both descriptive and inferential statistical techniques. Frequency counts and percentage distributions were used to summarize respondents' demographic characteristics. The mean and standard deviation were computed to determine the level of teachers' readiness across the four dimensions of AI knowledge, digital skills, training, and professional development, and attitudes toward artificial intelligence. Pearson product–moment correlation analysis was employed to examine the relationships between demographic variables and teachers' readiness to implement AI integration. Statistical significance was evaluated at an alpha level of.05. These analytical procedures ensured objective data interpretation and provided robust empirical support for the study findings.

Sampling Technique

This study utilized Purposive sampling was used to ensure the selection of participants with relevant professional experience and technological exposure. Teachers currently employed in public basic education institutions who had experience in using or encountering digital technologies in instructional settings were considered eligible to participate. This sampling strategy was appropriate because the study specifically targeted teachers who were directly involved in the implementation of educational technologies and AI-related initiatives. By selecting participants with appropriate background and contextual experience, the study ensured that the gathered data were relevant, informed, and aligned with the research objectives.

Results and Discussion

Demographic Profile of the Respondents

Variable	Category	Frequency (f)	Percentage (%)
Age	21–30	25	53.19
	31–40	14	29.79
	41–50	4	8.51
	51 and above	4	8.51
Sex	Female	41	87.23
	Male	5	10.64
	Prefer not to say	1	2.13
Highest Educational Attainment	Bachelor's Degree	8	17.02
	Master's Units	32	68.09
	Master's Degree	3	6.38
	Doctorate Units	4	8.51
Years of Teaching Experience	1–5 years	25	53.19
	6–10 years	9	19.15
	11–15 years	5	10.64
	16–20 years	4	8.51
	21 years and above	4	8.51
Teaching Level	Elementary	26	55.32
	Junior High School	9	19.15
	Senior High School	6	12.77
	Both Junior and Senior High School	5	10.64
	Elementary & Junior High School	1	2.13
Number of AI or Technology-related Trainings Attended	None	24	51.06
	1–2 trainings	17	36.17
	3–4 trainings	4	8.51
	5 or more trainings	2	4.26

Table 1. Demographic Profile of the Respondents (N = 47)

Table 1 presents the demographic characteristics of the 47 teacher respondents, categorized by age, gender, highest educational attainment, years of teaching experience, teaching level, and number of AI or technology-related training sessions attended. The majority of the respondents were aged 21–30 years (53.19%), followed by those aged 31–40 years (29.79%). A smaller proportion were aged 41–50 years and 51 years and above, each constituting 8.51% of the sample. This distribution suggests that most respondents were relatively young educators, likely in the early stages of their teaching careers. The respondents were predominantly female (87.23%), with 10.64% male and 2.13% who did not disclose their gender, reflecting the prevalent trend of a female predominance in the teaching profession. Concerning highest educational attainment, the majority of respondents had completed master's units (68.09%), followed by those with a bachelor's degree

(17.02%), Doctorate Units (8.51%), and master's degree (6.38%), indicating a strong inclination towards pursuing graduate studies for professional growth.

Regarding teaching experience, over half of the respondents had 1–5 years of experience (53.19%), followed by those with 6–10 years (19.15%), 11–15 years (10.64%), 16–20 years, and 21 years and above (8.51% each). This suggests that a significant proportion of the respondents were relatively new to the teaching profession. Regarding teaching level, the majority were engaged at the elementary level (55.32%), with 19.15% teaching in junior high school, 12.77% in senior high school, 10.64% handling both junior and senior high school, and 2.13% teaching both elementary and junior high school. Finally, concerning AI or technology-related training, more than half of the respondents reported having no training (51.06%), 36.17% attended one to two training sessions, 8.51% attended three to four sessions, and only 4.26% attended five or more sessions. This indicates that while teachers are engaged in professional development, many have limited exposure to AI or technology-related training programs.

Level of Teachers' Readiness in Implementing AI Integration

Dimensions	Mean	Standard Deviation	Verbal Interpretation
AI Knowledge	3.19	0.66	Ready
Digital Skills	3.27	0.63	Ready
Training and Professional Development	3.22	0.65	Ready
Attitudes Toward Artificial Intelligence	3.36	0.59	Ready
Overall Mean	3.26	0.63	Ready

Table 2. Level of Teachers' Readiness in Implementing AI Integration

Table 2 shows that teachers demonstrate an overall "ready" level of preparedness to implement artificial intelligence (AI) integration (M = 3.26, SD = 0.63). Among the dimensions, attitudes toward AI obtained the highest mean, indicating that teachers have positive perceptions toward using AI in education, which is an important factor in technology adoption. Digital skills and training and professional development also showed relatively high levels, suggesting that teachers possess adequate technological competence and are engaged in professional learning. However, AI knowledge recorded the lowest mean, indicating a need to further improve teachers' understanding of AI concepts and applications. These findings suggest that while teachers are generally prepared, there is still a need for targeted training to strengthen AI literacy. This result is consistent with previous studies showing that teachers often require additional support in AI-related competencies (Tenberga, I. & Daniela, 2024; Traga Philippakos, Z. A. & Rocconi, 2025). Similarly, Anselmo, C. et al. (2026) found that Filipino teachers are generally ready to implement AI guidelines but still need continuous professional development and institutional support.

Relationship Among the Dimensions of Teachers' Readiness in AI Integration

Variables	AI Knowledge	Digital Skills	Training & Professional Development	Attitudes Toward AI
AI Knowledge	1.00	0.58*	0.62*	0.49*
Digital Skills	0.58*	1.00	0.67*	0.55*
Training & Professional Development	0.62*	0.67*	1.00	0.60*
Attitudes Toward AI	0.49*	0.55*	0.60*	1.00

Legend: *p < .05 (Significant relationship) , Values represent Pearson correlation coefficients (r)

Table 3. Correlation Matrix of the Dimensions of Teachers' Readiness for AI Integration

Table 3 illustrates that all dimensions of teachers' readiness for AI integration—AI knowledge, digital skills, training and professional development, and attitudes toward AI—are positively related to one another. This suggests that teachers with higher AI knowledge also tend to possess enhanced digital skills, more extensive training experience, and more positive attitudes toward AI. Notably, there is a strong relationship between digital skills and training, indicating that teachers who engage in more professional development often improve their technological abilities. Overall, the results suggest that teachers' readiness is interconnected, wherein enhancing one area may contribute to strengthening the others. This finding aligns with the perspective of Al-Abdullatif, A. M. (2024), who emphasized the importance of AI literacy and professional development in supporting teachers' adoption of AI in education.

Relationship Between Age and Teachers' Readiness in Implementing AI Integration

Variables	r-value	p-value	Interpretation	Decision
Age and AI Knowledge	-0.16	0.38	Very Weak Correlation	Not Significant
Age and Digital Skills	-0.13	0.47	Very Weak Correlation	Not Significant
Age and Training & Professional Development	0.09	0.63	Very Weak Correlation	Not Significant
Age and Attitudes Toward AI	0.21	0.26	Weak Correlation	Not Significant

Table 4. Relationship Between Age and Teachers' Readiness in Implementing AI Integration

Table 4 illustrates the association between teachers' age and their preparedness to implement artificial intelligence (AI) integration across various dimensions, including AI knowledge, digital skills, training and professional development, and attitudes toward AI. The findings indicate very weak correlations (r = −0.16 to 0.21) with p-values exceeding 0.05, signifying that these relationships are not statistically significant. This implies that teachers' age does not substantially affect their readiness to integrate AI into teaching. Regardless of whether teachers are younger or more experienced, they exhibit comparable levels of readiness across all dimensions. These results suggest that readiness for AI integration is not age-dependent but may instead be influenced by factors such as exposure to technology and access to professional development opportunities. This outcome aligns with previous studies, which indicate that technology adoption among teachers is more closely linked to training and digital competence rather than age differences (Sanusi, I. T. et al., 2023).

Relationship Between Sex and Teachers' Readiness in Implementing AI Integration

Variables	r-value	p-value	Interpretation	Decision
Sex and AI Knowledge	0.09	0.62	Very Weak Correlation	Not Significant
Sex and Digital Skills	-0.02	0.92	Very Weak Correlation	Not Significant
Sex and Training & Professional Development	-0.09	0.62	Very Weak Correlation	Not Significant
Sex and Attitudes Toward AI	-0.03	0.88	Very Weak Correlation	Not Significant

Table 5. Relationship Between Sex and Teachers' Readiness in Implementing AI Integration

Table 5 presents the relationship between sex and teachers' readiness to implement artificial intelligence (AI) integration in terms of AI knowledge, digital skills, training, and professional development, as well as attitudes toward AI. The results indicate weak correlations, with r-values ranging from − 0.09 to 0.09 and all p-values exceeding 0.05, suggesting that the relationships are not statistically significant. This implies that the sex of the teachers does not significantly influence their readiness to integrate AI in teaching. Both male and female teachers demonstrated similar levels of readiness across the four dimensions of AI integration. These findings suggest that readiness to adopt AI technologies in education is not determined by gender but may be influenced by other factors, such as technological exposure and professional development opportunities (Sanusi et al., 2023).

Relationship Between Educational Attainment and Teachers' Readiness

Variables	r-value	p-value	Interpretation	Decision
Educational Attainment and AI Knowledge	-0.08	0.65	Very Weak Correlation	Not Significant
Educational Attainment and Digital Skills	-0.13	0.50	Very Weak Correlation	Not Significant
Educational Attainment and Training & Professional Development	-0.08	0.68	Very Weak Correlation	Not Significant
Educational Attainment and Attitudes Toward AI	0.04	0.82	Very Weak Correlation	Not Significant

Table 6. Relationship Between Educational Attainment and Teachers' Readiness

Table 6 presents the relationship between teachers' highest educational attainment and readiness to implement artificial intelligence (AI) integration in terms of AI knowledge, digital skills, training and professional development, and attitudes toward AI. The results show that the correlation coefficients are very weak, with r-values ranging from -0.13 to 0.04, and all p-values are greater than 0.05, indicating that the relationships are not statistically significant. This means that teachers' level of educational attainment does not significantly influence their readiness to integrate AI into teaching. Regardless of whether teachers have a bachelor's degree, master's units, or higher qualifications, their readiness in terms of AI knowledge, digital skills, training, professional development, and attitudes toward AI remains relatively similar. These findings suggest that readiness to adopt AI technologies in education may not necessarily depend on educational attainment but may be

influenced by teachers' exposure to digital technologies and professional learning opportunities (Tenberga and Daniela 2024).

Relationship Between Teaching Experience and Teachers' Readiness

Variables	r-value	p-value	Interpretation	Decision
Teaching Experience and AI Knowledge	-0.05	0.79	Very Weak Correlation	Not Significant
Teaching Experience and Digital Skills	-0.08	0.68	Very Weak Correlation	Not Significant
Teaching Experience and Training & Professional Development	-0.07	0.69	Very Weak Correlation	Not Significant
Teaching Experience and Attitudes Toward AI	0.26	0.16	Weak Correlation	Not Significant

Table 7. Relationship Between Teaching Experience and Teachers' Readiness

Table 7 presents the relationship between teachers' years of teaching experience and readiness to implement artificial intelligence (AI) integration in terms of AI knowledge, digital skills, training, and professional development, as well as attitudes toward AI. The results show that the correlation coefficients are very weak, with r-values ranging from -0.08 to 0.26, and all p-values are greater than 0.05, indicating that the relationships are not statistically significant. This means that teachers' years of teaching experience did not significantly influence their readiness to integrate AI into teaching. Teachers with varying levels of teaching experience demonstrated similar levels of readiness across the four AI integration dimensions. These findings suggest that readiness to adopt AI technologies in education may not necessarily depend on teaching experience but may instead be influenced by teachers' exposure to digital technologies and professional development opportunities (Al-Abdullatif, 2024).

Relationship Between Number of AI Trainings Attended and Teachers' Readiness

Variables	r-value	p-value	Interpretation	Decision
AI Trainings and AI Knowledge	0.06	0.76	Very Weak Correlation	Not Significant
AI Trainings and Digital Skills	0.08	0.68	Very Weak Correlation	Not Significant
AI Trainings and Training & Professional Development	0.05	0.80	Very Weak Correlation	Not Significant
AI Trainings and Attitudes Toward AI	0.11	0.56	Very Weak Correlation	Not Significant

Table 8. Relationship Between Number of AI Trainings Attended and Teachers' Readiness

Table 8 presents the relationship between the number of AI- or technology-related trainings attended and teachers' readiness to implement artificial intelligence (AI) integration in terms of AI knowledge, digital skills, training, and professional development, as well as attitudes toward AI. The results show that the correlation coefficients are very weak, with r-values ranging from 0.05 to 0.11, and all p-values are greater than 0.05, indicating that the relationships are not statistically significant. This means that the number of AI or technology-related training attended does not significantly influence teachers' readiness to integrate AI into teaching. Teachers demonstrated similar levels of readiness, regardless of the number of training sessions they attended. These findings suggest that readiness to adopt AI technologies in education may not solely depend on the number of trainings, but may also be influenced by teachers' overall digital competence and experience in using technology in teaching (Sanusi et al., 2023).

Conclusion and Implications

This study sheds light on how ready teachers are to embrace the Department of Education's AI integration guidelines in Philippine basic education. It turns out that educators are generally well-prepared when it comes to digital skills, professional growth, and their attitudes toward AI, even though they have not had much formal training in this area. Interestingly, the study found that readiness is not affected by demographic factors. Instead, it is more about how much teachers have been exposed to technology and their willingness to innovate. This highlights the importance of institutional

support for making AI integration work effectively. While teachers have positive views and basic skills, their lower level of AI knowledge points to the need for specific capacity-building efforts to boost AI literacy and its application in teaching. These findings suggest that policymakers, school leaders, and teacher education institutions should focus on ongoing professional development, structured AI training, and better digital infrastructure to ensure that AI is used ethically and effectively in teaching. The study also stresses the importance of system-level interventions, such as school-based mentoring, AI integration frameworks, and continuous learning opportunities, to ensure that national AI policies are implemented in classrooms. Overall, this research adds to the growing knowledge about AI in education by setting a baseline for teacher readiness and offering practical steps for achieving inclusive, sustainable, and policy-aligned AI integration in Philippine basic education.

Limitations of the Study

This study has several limitations that should be considered when interpreting the findings. First, the relatively small sample size limits the generalizability of the results to the broader population of basic education teachers in the Philippines. Second, the study relied on self-reported measures, which may have been subject to response bias, including social desirability and individual perception differences that could influence how teachers assessed their own readiness. Third, the cross-sectional research design captures teachers' readiness at a single point in time and does not account for changes that may occur as artificial intelligence initiatives, policies, and professional development programs evolve. Therefore, longitudinal studies are recommended to monitor readiness trends and implementation progress over time. Finally, the study was conducted within a single geographic location, which may not fully represent the diverse educational contexts, resource conditions, and technological infrastructure present across regions. Future studies involving larger, multi-site samples and mixed-method approaches are encouraged to provide a more comprehensive understanding of teachers' readiness for AI integration in Philippine basic education.

Recommendation

Several actionable strategies are recommended to strengthen teachers' readiness for artificial intelligence (AI) integration in basic education. First, the Department of Education and teacher education institutions may develop structured AI micro-credentials that provide modular, competency-based training focused on practical classroom applications, ethical AI use, and data-informed instruction. These stackable certifications can help teachers progressively build AI literacy and digital competencies aligned with national policy goals. Second, schools may designate school-level AI coordinators or technology integration specialists to mentor teachers, facilitate hands-on workshops, and provide technical and pedagogical support for AI-enabled teaching practices. Establishing dedicated personnel ensures sustained implementation rather than one-time training exposure. Third, DepEd may establish regional AI innovation hubs that provide shared digital infrastructure, demonstration laboratories, curated AI teaching resources, and continuous professional learning opportunities. These hubs can serve as collaborative centers for training, experimentation, and best practice dissemination across divisions. Collectively, these targeted initiatives can institutionalize support systems that enable effective, ethical, and sustainable AI integration in Philippine Basic Education.

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Data Availability Statement

Access to the data used in this study was obtained by submitting a formal request to the authors.

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Appendices

No appendices are included in this article