

Readiness of Public Elementary Teachers in Cabiao, Nueva Ecija in Using AI Tools in Teaching: A Basis for the Development of Capacity-Building Program

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Abstract—This study examined the readiness of public elementary teachers in Cabiao, Nueva Ecija, to integrate AI tools into their teaching practices. As technology continues to evolve, artificial intelligence (AI) has become increasingly integrated into the educational landscape. Understanding the level of readiness among public elementary teachers regarding the use of AI tools is essential for enhancing the teaching and learning process. A descriptive quantitative research design was employed, involving 100 public elementary teachers selected through a combination of cluster and simple random sampling. Data were gathered using a validated researcher-made questionnaire and analyzed using the weighted mean, one-way ANOVA, and a one-sample t-test. Nueva Ecija, exhibit a level of readiness to integrate AI tools into their teaching that is verbally interpreted as "Agree" across all measured areas. Regarding awareness and knowledge of AI tools, perceived usefulness and ease of use, self-efficacy in using technology, and access to technological resources, the teachers demonstrated readiness. Consequently, teachers are encouraged to actively participate in professional development activities to enhance their practices and to collaborate within learning communities to share effective strategies for classroom instruction.

Index Terms—Polytechnic University of the Philippines, Bachelor of Elementary Education, Teachers' Level of Readiness in using AI Tools, Awareness and Knowledge of AI Tools, Perceived Usefulness and Ease of Use, Self-efficacy in Using Technology and AI Tools, Access to technological resources, Elementary Teachers, Capacity-Building Program.

1. The Problem and its Setting

A. Introduction

In this time of modernization and development, the use of technology, specifically artificial intelligence (AI) tools have been prevalent in every aspect of life. It enhances people's daily life by improving communication, increasing efficiency and productivity in personal and professional tasks, and providing access to information and learning resources. The artificial intelligence is becoming part of our daily routines, simplifying various tasks and offering new conveniences to our lives. From simple daily tasks to more complex activities, even helping to

manage tasks and assignments related to studies, AI quietly integrates into routines, enhancing both ease and efficiency to us (Aslitdinova, 2025).

On February 20, 2025, the Department of Education (DepEd) launches the Education Center for AI Research (E-CAIR), which aims to integrate artificial intelligence (AI) capabilities and solutions in education developing AI-driven tools that enhance teaching, learning, and school administration. This initiative focuses on developing AI applications to enhance teaching, learning, and school administration, aligning with the government's digital transformation goals. Education Secretary Sonny Angara emphasized that AI is a tool for genuine, enduring reforms in education, aiming to provide Filipino students access to quality, technology-driven learning (DepEd, 2025). Artificial Intelligence (AI) has become an important force in transforming educational systems around the globe. In the Philippines, the Department of Education (DepEd) has demonstrated a strong commitment to using this groundbreaking technology. A prime example is the establishment of the Education Center for AI Research (E-CAIR) in 2025, as outlined in DepEd official reports (DepEd, 2025).

Teachers are very much aware with the potential benefits AI tools can offer to their individual student learning needs. Additionally, teachers in this study reported high level of support from their institutions. However, despite these promising developments, fully integrating AI into Philippine education remains a complex task. The lack of knowledge and support are primary reasons teachers are not integrating AI into their classrooms. Numerous educators indicate they want more comprehensive training on educational AI tools but encounter obstacles such as insufficient support from their districts and expensive independent learning opportunities (EdWeek Research Center, 2025). Moreover, disparities in training quality and accessibility to digital resources were noted as persistent issues (Mane, 2025). This gap has led to teachers' technology skills remaining undeveloped, which leads to poor

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implementation in the classroom and reduced instructional effectiveness (Lv *et al.*, 2024). As Bachelor of Elementary Education (BEED) students, this research is a vital part of our academic development and professional preparation. This study came up to determine the readiness of public elementary teachers in integrating artificial intelligence (AI) tools in teaching and learning process in Cabiao, Nueva Ecija.

B. Theoretical Framework

The Technology Acceptance Model (TAM) is a theoretical framework designed to explain how users come to accept and use new technology. It was developed by Fred Davis in the 1980s and focuses on two primary factors influencing user acceptance. First is the perceived usefulness (PU), which is the degree to which a person believes that using a particular technology will enhance their job performance or task accomplishment. The other one is the perceived ease of use (PEOU), the degree to which a person believes that using the technology will be free from effort and is simple to learn. This means that if a system is easy to understand and does not require complex steps, people are more likely to find it helpful for their daily tasks. According to TAM, these perceptions influence users' attitudes toward the technology, which shapes their behavioral intention to use it, ultimately determining actual usage. External variables such as social influence can also affect these perceptions. The model suggests that if a technology is perceived as useful and easy to use, users are more likely to adopt it. This comprehensive approach helps in transforming theoretical insights into practical strategies for modern classrooms.

In summary, TAM explains technology acceptance as the outcome of perceived usefulness and perceived ease of use, which form attitudes and behavioral intentions that lead to actual technology use. It serves as a foundation for understanding and encouraging successful adoption of technological innovations.

C. Conceptual Paradigm

The paradigm of the study (Figure 1) shows the course of the study. The input consists demographic profile of teachers namely; age, sex, years of teaching experience, frequency of training attended related to ICT or AI, and subject area taught. It also includes the awareness and knowledge of AI tools, perceived usefulness and ease of use, self-efficacy in using technology and AI tools, and access to technological resources. On the other hand, the process involves survey or assessment of teacher readiness, data analysis to determine level of readiness, identification of factors significantly influencing readiness, and to determine the level of readiness of teachers. The study's output or outcome is to proposed capacity-building program for AI integration in teaching. This paradigm is based on theory of Fred Davis' Technology Acceptance Model (TAM). It focuses on two primary factors influencing user acceptance. The perceive usefulness and perceive ease of use, shows in the level of readiness on the input part of the paradigm. This model has an external variables influencing social that can also affect these perception. The external factors are awareness and knowledge

of AI tools, self-efficacy in using technology in AI tools, and access to technological resources that also shows in level of readiness in input part on the paradigm.

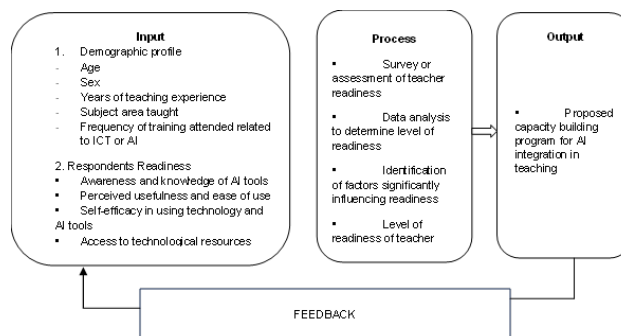


Fig. 1. Paradigm of the study

D. Statement of the Problem

- What is the teacher-respondents demographic profile in terms of:
 - Age;
 - Sex;
 - Years of teaching experience;
 - Subject area taught; and
 - Frequency of training attended related to ICT or AI?
- What is the level of teacher-respondents' readiness in terms of:
 - Awareness and knowledge of AI tools;
 - Perceived usefulness and ease of use;
 - Self-efficacy in using technology and AI tools; and
 - Access to technological resources?
- Is there a significant difference between the respondents' profile and their level of readiness to use AI tools?
- What capacity-building program can be develop to enhance teacher-respondents readiness?

E. Hypothesis

There is no significant difference between the respondents' profile and their level of readiness to use AI tools with 0.05 level of significance.

F. Scope and Limitations of the Study

The main purpose of this study is to determine the level of readiness of public-school teachers in integrating artificial intelligence (AI) tools in teaching and to propose a capacity-building program for artificial intelligence (AI) integration in teaching in terms of their awareness and knowledge of AI tools; perceived usefulness and eases of use; self-efficacy in using technology and AI tools; and access to technological resources. Other factors that may determine the readiness of teachers are excluded.

The scope of this study is limited to the randomly selected public elementary school teachers at Cabiao, Nueva Ecija. This study was conducted for the academic year 2025-2026.

G. Significance of the Study

This study determined the readiness of public elementary teachers to use AI tools in teaching. The study also proposed a capacity-building program to facilitate the integration of AI in teaching. The findings contribute to enhancing modern educational practices and institutional policies regarding technological integration.

The following sectors were among those that benefited from the study:

Teachers – It was beneficial for them to have knowledge about the right usage of AI tools in teaching, which helped them to be better equipped in integrating it in the classroom setting. This knowledge enabled them to demonstrate awareness of the diverse types of AI tools available for educational purposes.

Schools – This study gave the schools knowledge about the challenges that hindered teachers' readiness in using AI tools in teaching, which helped them in implementing and utilizing AI-powered tools effectively.

Students – It was beneficial for them that the teacher was equipped to integrate AI tools in teaching so that learning became more interactive and engaging for them.

Future Researchers – It provided them with more knowledge about this study and served as a valuable reference in exploring the readiness of teachers to integrate AI-tools in the classroom.

H. Definition of Terms

AI Tools – In this study, it is used as the digital platforms, applications, or systems powered by artificial intelligence that assist teachers in tasks such as lesson planning.

Capacity-Building Program – In this study, it is used as the proposed output designed to enhance teachers' readiness in integrating AI tools into the teaching and learning process.

Disparity – In this study, it is used to describe the differences in the level of readiness among public elementary teachers in terms of their access to technology, training, and ability to use AI tools in teaching.

E-CAIR – In this study, it refers to the DepEd's strategic initiative, which aims to develop AI-powered educational tools and promote their integration in teaching.

Professional Training – In this study, the term professional training is used to refer to the formal and informal learning opportunities attended by teachers to improve their knowledge and skills in ICT and AI integration.

Proficiency – In this study, the term proficiency is used to indicate the teachers' skill level and expertise in operating and applying AI tools in educational settings.

Readiness – In this study, it refers to the degree to which public elementary school teachers are prepared to integrate AI tools into their teaching practices.

Resources – In this study, it refers to all forms of support and tools available to teachers that facilitate the integration of AI in teaching.

Self-Efficacy – In this study, it is used to determine the level of confidence teachers have in their capability to adopt and use AI tools in their teaching practices.

2. Review of Literature and Studies

This section discusses related literature, studies, and the results of other related research to which the current study was linked or had some relevance.

A. Awareness and Knowledge of AI Tools

Numerous studies highlight the importance of varying levels of teachers' understanding and knowledge concerning artificial intelligence (AI) tools in education, as well as the difficulties they encounter when implementing these tools in classrooms. Arante et al. (2024) indicate that teachers possess basic AI knowledge but have limited access to AI tools and a lack of expertise for specific teaching applications, demonstrating the need for more focused training on both the benefits and challenges associated with AI in education. Similarly, Rosekate and Nicholas (2024) report that while teachers show moderate awareness, their use of AI is often ineffective, suggesting that workshops and conferences could improve educators' understanding and efficacy in utilizing AI tools.

Although teachers generally hold a positive view of the educational merits of AI, their understanding of particular AI tasks is limited, and they express caution regarding its broader implications, revealing the need for further training (Rehman et al., 2025). Furthermore, Samaila et al. (2024) noted that while teachers are aware of AI-driven assessment tools and are mostly willing to adopt them, their attention remains partial, indicating a readiness that is coupled with gaps in practical application. In a related study, Erol and Erol (2024) found that teachers recognize both the cognitive and socioemotional benefits of AI but simultaneously voice concerns about its potential negative implications for students, insisting that AI cannot replace human educators entirely. Building on these insights, institutional frameworks must provide continuous professional development to help teachers transition from general awareness to practical, hands-on implementation of artificial intelligence. Moreover, establishing clear guidelines and ethical safeguards will ensure that AI serves as a complementary tool that empowers teachers rather than undermines their critical instructional role.

Moreover, Ghimire et al. (2024) found that computer science educators demonstrate a higher technical understanding and acceptance of generative AI compared to educators from other fields, although confidence in identifying AI-generated content remains low across all disciplines. Güneşli et al. (2024) advocate for emphasizing hands-on experiences with AI tools in professional development. On the other hand, Tammets and Ley (2023) contend that successful AI integration necessitates advancing educators from basic awareness to a comprehensive understanding that encompasses decision-making consistent with pedagogical frameworks. Teachers' trust in AI technologies is largely influenced by their knowledge of AI and self-efficacy rather than by demographic variables (Viberg et al., 2025).

In contrast, Diliberti et al. (2024) report that only around 18% of K–12 teachers had utilized AI tools in classrooms as of 2023, with a greater prevalence among secondary students compared to those in elementary grades, highlighting a disparity between

awareness and practical implementation. Additionally, Garzón et al. (2025) emphasizes the growing research in AI education that underscores the need for teacher expertise and training focused on pedagogical practices to effectively implement AI tools. Self-efficacy emerges as a crucial factor, as outlined by Traga-Philippakos and Rocconi (2025), where teachers' confidence is a strong predictor of AI tool usage in classrooms. The development of AI literacy should encompass technical abilities, ethical considerations, and pedagogical insights, suggesting that simple awareness is not enough for effective teaching (Kelley and Wenzel, 2025).

Moreover, Yim (2024) notes that teachers' acceptance of AI is linked to perceived usefulness and expertise in specific tasks. Alejandro et al. (2024) affirm that perceived usefulness and simplicity of use significantly affect pre-service teachers' intentions to embrace AI applications, reinforcing the importance of these aspects in professional development approaches. Additionally, the willingness of elementary teachers to adopt AI is influenced by the resources available, including materials and experience, demonstrating a relationship between awareness, knowledge, and resources (Kim et al., 2020). Surface-level AI presentations fall short of transforming awareness into action, highlighting the necessity for practical and scaffolded professional development (Moura & Carvalho, 2024). Furthermore, Ferikoglu and Akgün (2022) discovered that assessing AI awareness should incorporate dimensions such as basic recognition, practical familiarity, and ethical understanding, which is essential for effectively adapting teacher training.

Moreover, Marengo et al. (2023) discovered that teacher knowledge, not merely awareness, is vital for the successful integration of AI in education, with similarities noted between higher education and K–12 settings. Previous experience with AI tools shows a strong correlation with teachers' feelings of preparedness and their views on usefulness, which subsequently predict the adoption of AI (Granstrom & Oppi, 2025).

B. Perceived Usefulness and Ease of Use

Study revealed that Artificial Intelligence (AI) successful integration is heavily influenced by teachers' perceptions, readiness, and pedagogical competencies, mobile AI, the combination of artificial intelligence (AI) and mobile technologies, has revolutionized elementary education by offering individualized, interactive, and accessible learning experiences. However, results showed that teachers' intermediate practical readiness and their favorable perceptions differed. The best predictor of preparation was shown to be personal experience, while perceptions were significantly predicted by cognitive comprehension and practical skill (Batubara et al., 2025).

There is a balanced perspective that is marked by interest, openness, and awareness of both opportunities and potential risks associated with AI. The views toward AI tools, perceived usefulness, preparedness, and actual adoption plans are all significantly correlated. A teacher's readiness to use AI technology is largely influenced by their level of confidence

and their perception of the technology's value in educational settings. On the other hand, issues like restricted training chances and AI anxiety are noted as obstacles to successful deployment (Granström & Oppi, 2025). Can & Nguyen (2025) reported a positive correlation between perceived usability and perceived credibility across all dimensions. When teachers perceive AI chatbots as useful, easy to use, easy to learn, and satisfying, they are more likely to trust these tools and apply them in their professional work. These results imply that teachers can increase their trust with AI chatbots by making them easier to use.

Positive perceptions, with high agreement on AI's potential to enhance efficiency, creativity, and assessment support, alongside strong demand for training. Teachers emphasized AI as a supportive tool rather than a replacement, reflecting pragmatic optimism and relatively low concern about job displacement. Institutional readiness, however, is still inconsistent, with notable variations among school contexts and between public and private schools (Hafifah, 2025). In addition, Paie et al. (2022) reported generally positive perceptions of public elementary school teachers about using AI in instruction, indicating perceived usefulness among elementary teachers. Alketbi (2025) states that people have generally positive attitudes towards AI tools, especially among teachers who regularly utilize them and are comfortable doing so. Notable benefits include personalized learning opportunities, reduced teachers' workload, and enhanced student engagement.

However, the report also identifies obstacles like inadequate training, limited infrastructure, and data privacy issues. Behavioral intention to use AI was significantly predicted by both performance expectancy and facilitating conditions. This highlights the significance of perceived usefulness and the presence of supportive environments in influencing teachers' readiness to incorporate AI into their practice (Watted, 2025). Furthermore, behavioral intention to use AI tools in the future can be highly significantly explained by the perceived usefulness of AI tools, the subjective norm of AI use, and the participants' self-efficacy beliefs. In addition, pre-service teachers' behavioral intention and self-efficacy beliefs are significant predictors of the weekly duration of AI use (Hoya et al., 2024).

Teachers' perceptions of their AI CK and experience in teaching AI literacy (technological content knowledge) are the first of five factors that affect their acceptance of AI educational learning tools. The other two factors are technical challenges and stakeholder acceptance, the characteristics of AI educational learning tools, school infrastructure and budgetary constraints, and the possibility of distraction and negative emotional reactions (Yim & Wegerif, 2024). According to Talha et al. (2025), instructors are far more inclined to use AI equipment if they believe it is easy to use and can help them train more effectively. If they believe it is easy to include into their lessons, they will all utilize AI tools frequently. In the end, faculties, schools, universities and all different academic institutions should make AI adoption user-pleasant, and they have to supply education to academics so that they can adopt those sorts of technologies efficiently.

Educators know very little about artificial intelligence (AI) and how it might help them in their work. They do, however, see it as a teaching opportunity. In order for teachers to be productive and successful in their work practices, they require assistance; the researchers believe AI can be utilized to deliver this assistance (Chounta *et al.*, 2022).

Moreover, Owan *et al.* (2023) believed that the cumulative effect of these AI applications can help teachers ensure a challenging, however engaging, and positive learning environment in which both teachers and students can thrive. Through reducing burdens and enriching a positive teaching experience, AI can promote more sustainable and satisfying teaching practices.

As stated by Yang & Jang (2025), artificial intelligence (AI) in education holds promise for supporting data-driven policymaking and personalizing learning. However, teachers' perceptions of AI is essential to its effective use in the classroom. Even though artificial intelligence (AI) has the potential to improve education, elementary school teachers find it difficult to implement the technology because of a lack of resources, opposition to change, and inadequate training. The study found that among primary school teachers, trust, perceived validity, innovativeness, insecurity, discomfort, optimism, usefulness, and simplicity of use were all important components of a successful AI adoption (Darmawan *et al.*, 2024).

Alwaqadani (2025), argues that many educators agree that AIED can help with time-saving, enriching activity design, and personalizing learning experiences. However, there are issues with training effort, job displacement, a lack of creativity and critical thinking, unintended consequences, and trusting AI to perform flawlessly. Although teachers have explicit optimism about AIED's benefits, a cautious stance emerges due to concerns about its impact on educational quality, human touch, and potential risks.

Castro *et al.* (2025) believed that teachers don't perceive AI as a threat to their jobs; rather, they see it as a chance to streamline teaching in multigrade classrooms, streamline workloads, and customize learning. At the same time, they emphasize the need for technological and didactic resources aligned with the specific characteristics of their contexts, such as offline resources and adaptable AI curricula to address the prevalent issue of limited or absent internet connectivity in many rural schools. However, Kim and Kim (2022) found that even though teachers generally viewed the AI as useful scaffolding and positive for student learning, they raised concerns about role changes and transparency. Falebita and Kok (2025) argues that respondents' technological self-efficacy determines their usage of AI tools and perception of AI tools' ease of use, but this does not determine their perception of the AI tools' usefulness and attitude towards AI tools usage. Additionally, it was discovered that technology readiness influences perceived usefulness, perceived ease of use, and technical self-efficacy, but it has no effect on how they utilize or feel about using AI technologies. Bakhadirov (2024) found that among school teachers, perceived usefulness significantly predicted their actual use of AI for teaching, while perceived

ease of use showed no direct effect. Institutional support and peer influence also contributed to AI adoption.

According to Kim *et al.* (2020), perceived usefulness of an AI teaching assistant and perceived ease of communication with an AI teaching assistant are key to understanding an eventual adoption of AI teaching assistant-based education. These findings provide support for AI teaching assistant adoption. Teachers' awareness and understanding of AI tools directly increased their perceived usefulness of AI, which in turn enhanced their intention to integrate AI into their teaching practices (Wang *et al.*, 2025). In addition, Velli *et al.* (2024) discovered that perceived usefulness was the strongest predictor of behavioral intention to use educational AI tools. Other factors such as personal innovativeness and social influence also influenced technology acceptance. Likewise, Bergdahl *et al.* (2025) noted that K–12 teachers' AI self-efficacy and perceived usefulness jointly increased their willingness to use AI tools in teaching. Teachers with higher confidence in AI showed more positive attitudes toward its classroom application. Further, Chen *et al.* (2025) show that perceived usefulness and perceived ease of use both significantly predict teachers' intention to adopt AI tools, and suggest this fits the Technology Acceptance Model (TAM).

Talha *et al.* (2025), states that instructors locate the AI is simple to apply and could assist them in training in a better way, they are much more likely to adopt AI gear, and if instructors locate that AI gear is very smooth to comprise into their teaching, then they all used AI tools often. In the end, faculties, schools, universities and all different academic institutions should make AI adoption user-pleasant, and they have to supply education to academics so that they can adopt those sorts of technologies efficiently. There is a gap between teachers' positive perceptions and their moderate practical readiness. Personal experience was identified as the strongest predictor of readiness, whereas cognitive understanding and practical ability were significant predictors of perceptions (Batubara *et al.*, 2025).

Bergdahl and Sjöberg (2025) discovered that while teachers are generally positive about the potential of AI in education, their AI self-efficacy varies significantly based on prior use of the technology, perceived relevance, and the support available to them. The study highlights the need for internal support and targeted professional development interventions and offers practical insights for policymakers, educators, and curriculum developers to foster teacher readiness and competence in using AI-driven chatbots in their professional tasks, in and outside of class.

Teachers' familiarity with AI directly influences their adoption of AI tools in the online classroom. Despite teachers' mixed beliefs about the ability of AI to enhance students' learning, no significant relationship was found between these beliefs and teachers' familiarity and usage of AI. Interestingly, teachers who had already incorporated AI into their teaching practices were more likely to believe in the benefits of AI in online education (Doty & Lipien, 2024). The study of Ibrahim *et al.* (2024) revealed that academic integrity concerns have an influence on how university teachers perceive AI use in

assessment; that perception for innovative assessment concerns at university significantly affects how university teachers utilize diverse AI tools in educational assessment; and that university teachers' perception of using AI tools is likely to be associated with their tendency to personalize AI use at universities. It was concluded that AI use in educational assessment is in itself not harmful but the potential risks involved must be mitigated as it is deployed for use for students' assessment at universities in Nigeria. Teachers' readiness and perceived usefulness are the strongest predictors of AI adoption. They indicate the importance of both psychological preparedness, such as confidence and motivation, and contextual enablers like access to tools, content, and leadership support (Granström & Oppi, 2025).

C. Self-efficacy in Using Technology and AI tools

The effective incorporation of technology into education greatly depends on the self-efficacy of teachers. Sumandal (2023) asserts that educators who possess a strong sense of self-efficacy regarding AI believe in their ability to enhance teaching and learning methods by utilizing AI-based educational tools. Furthermore, Backfisch, Lachner, Stürmer, and Scheiter (2021, as cited by Mangubat *et al.*, 2025) observe that teachers with strong self-efficacy are more willing to explore innovative instructional strategies and embed technology within their lessons, thereby enriching the learning experience.

Indeed, numerous research studies have consistently demonstrated a connection between teachers' self-efficacy and effective technology integration (Tondeur *et al.*, 2018). As a result, Oran *et al.* (2023) highlight that the application of AI in education is highly associated with teachers' self-efficacy beliefs; those with increased confidence tend to have a more favorable view of AI. In contrast, low self-efficacy is often linked with feelings of anxiety and hesitance towards AI integration (Oran *et al.*, 2023). Nevertheless, this sense of self-efficacy is not consistent across all educators. Bergdahl and Sjöberg (2025) point out that teachers' self-efficacy fluctuates significantly based on their previous experiences with technology, their assessment of the technology's relevance, and the resources available to them. Moreover, Ghazali *et al.* (2024) discovered that self-efficacy levels vary by location, with urban educators showing higher self-efficacy than those in rural regions. This variation can likely be attributed to differences in resources and support systems available.

Consequently, the authors conclude that professional experience plays a critical role, demonstrating that the self-efficacy levels of classroom educators differ significantly based on their professional tenure and the length of time they have utilized computer and mobile technologies (Kaşçı and Selçuk, 2021). Lastly, concerning the origins of self-efficacy,

Rajapakse *et al.* (2024) propose that teachers' low self-efficacy mainly stems from their physical and emotional wellness as well as their perceived experiences with AI training; notably, mastery experiences tend to exert a more profound influence than verbal persuasion or vicarious experiences.

Self-efficacy functions as a crucial link between a teacher's

knowledge and their willingness to integrate AI. Zhao *et al.* (2024) indicate that teachers' acceptance of AI and their TPACK (Technological Pedagogical Content Knowledge) are influenced by their self-efficacy.

In a similar vein, Ismaniati *et al.* (2025) confirm that self-efficacy serves as a vital mediator between TPACK and the willingness to adopt AI in instruction. This finding suggests that even if teachers have a solid foundation of TPACK, it is their self-efficacy that empowers them with the confidence and motivation necessary for utilizing AI tools.

Additionally, Sulistiani *et al.* (2024) found that pre-service elementary educators generally exhibited above-average levels of TPACK, self-regulation, and self-efficacy in technology integration. In a related investigation, Wang *et al.* (2025) discovered that when self-efficacy in health education acts as a mediator, the integration of AI in preschool teacher training significantly enhances their educational outcomes. Furthermore, this relationship is influenced by technological proficiency, suggesting that teachers with stronger digital skills gain greater advantages from AI integration (Wang *et al.*, 2025).

The existing literature strongly supports the notion that external support systems are essential for fostering the self-efficacy needed for AI adoption. Zhao *et al.* (2024) found that organizational backing positively influences both self-efficacy and TPACK. Therefore, professional growth and institutional support are crucial for boosting teachers' self-efficacy, which in turn promotes effective AI integration in educational settings (Bergdahl & Sjöberg, 2025).

Furthermore, the role of institutional support in the adoption of AI is quite intricate. Hazzan-Bishara *et al.* (2025) discovered that institutional support affects educators' willingness to utilize AI in both direct and indirect ways, with the indirect effect being influenced by intrinsic motivation and self-efficacy as personal factors. As a result, Ismaniati *et al.* (2025) argue that professional development programs aimed at enhancing both TPACK and self-efficacy can significantly enhance teachers' preparedness to integrate AI into their teaching methods.

D. Access to Technological Resources

Science teachers experience very limited access to technology, although most teachers report only modest obstacles (Alieto *et al.*, 2024). Even when training improves access to digital resources and learning flexibility, issues such as restricted technology access, limited technical expertise, resistance to change, and lack of resources aligned with Islamic principles remain evident (Nurhayati *et al.*, 2024). Teachers believe they are prepared technologically, pedagogically, and psychologically for digital teaching, yet rural teachers continue to face challenges due to unequal access to technology, resulting in digital learning inequity (Aditya & Sulistiawan, 2021).

Arvin *et al.* (2023) explain that despite AI's benefits for engagement and individualized learning, teachers still encounter obstacles related to technical issues, limited resources, and the need for additional professional development. Based on the study of Castro *et al.* (2025),

teachers view AI as an opportunity to personalize learning and reduce workload, but they also highlight the need for offline resources and adaptable AI curricula due to limited or absent Internet access in rural contexts. Although teachers are optimistic and familiar with basic digital tools, their preparedness continues to be hindered by inadequate institutional support and infrastructure (Doni et al., 2025).

The lack of institutional support, training, and infrastructure severely affects AI adoption (Sunday et al., 2025). Malon and Paglinawan (2025) states that despite productivity gains, disparities in Internet connectivity and support still impede teachers in remote areas.

In contrary, Balakrishnan and Lourdasamy (2024) emphasize that the absence of dedicated IT staff and insufficient funding for hardware maintenance make technological resources unusable, thereby affecting AI preparation more directly. Insufficient infrastructure and limited training are the main barriers to AI readiness, highlighting the need for institutional investment and technical assistance (Asogwa & Oboegbulem, 2025).

According to Obi and Osinachi (2025), strong professional development and robust digital infrastructure enhance teacher preparedness, while deficiencies in school technology continue to pose challenges that require leadership and institutional support.

The reliance of many AI platforms on stable Internet connectivity presents major problems in rural areas, suggesting the need for low-bandwidth and offline AI solutions to support teachers (Chen and Liu, 2024). Based on the study of Rodrigo et al. (2024), Filipino public-school teachers remain enthusiastic toward AI but struggle with inadequate software, hardware, and Internet infrastructure, emphasizing that improving technological resources is an essential foundation for effective AI implementation.

E. Capacity-Building Program

Capacity building, through teacher training and development, infrastructure improvement, leadership training, curriculum enhancement, innovative teaching methods, access to educational resources, and technology and digital adaptation, serves as a critical mechanism for attaining quality education. However, this strategic tool is constrained by challenges such as inadequate funding, lack of teacher training and development, the digital divide, weak policy implementation and alignment, inequitable resource distribution, and limited community engagement (Maxwell, 2024).

Building on this foundation, Altinay et al. (2024) extend the discourse by emphasizing that the future of education depends on the integration of information technologies anchored in equity and inclusiveness. They stress that teacher education programs are central to preparing qualified educators and that integrating Artificial Intelligence (AI) into education systems is essential to ensure comprehensive and inclusive services. Sustainable improvements in teaching practices require continuous institutional support and strategic integration of capacity-building initiatives (Putra et al., 2024). Their recommendation for tailored professional development,

mentoring integration, and systematic evaluation of teacher performance reinforces the structural components (Maxwell, 2024).

The technological dimension of capacity building is further reinforced by Mor (2025), who highlights AI's transformative potential in sustainability through enhanced decision-making, efficiency, and innovative problem-solving. However, effective integration of AI into sustainability frameworks necessitates significant investment in education and capacity building, thereby linking AI advancement directly to educational preparedness. In the educational context, Sulaimon et al. (2025) demonstrate that AI tools can personalize learning, automate routine tasks, and enhance engagement in elementary schools, but their effectiveness depends largely on teachers' competence. This competence is often hindered by infrastructural and training limitations in developing regions, echoing Maxwell's (2024) identified challenges of funding deficits and digital divides. Although coding and AI education have become global policy priorities, substantial gaps remain between policy formulation and classroom implementation, particularly in developing countries. Successful implementation requires sustained teacher capacity-building, instructional leadership, and district-level support systems, extending the conversation on policy alignment and institutional backing (Susanto et al., 2026).

This perspective aligns with Cai et al. (2025), who identify AI literacy and institutional support as critical drivers of teachers' professional growth and adaptability in the era of educational digitalization. Teachers' readiness involves not only technical knowledge but also a positive mindset. The future of AI in the classroom depends not just on technological advancement but on a collective commitment to teacher empowerment and ethical innovation. Therefore, teacher education programs must integrate AI literacy, professional development must be continuous and contextualized, and school leadership must cultivate a culture that supports innovation (Ngongpah & Omolara, 2025).

The role of teacher preparation is further strengthened by Le et al. (2026), who note that teacher education students occupy a dual role as current learners and future educators. Consequently, they require targeted training to navigate the expanding influence of Generative AI (GenAI) on teaching, learning, and professional identity. This complements Rosqueta (2025), who highlights how AI training enhances efficiency in media creation and personalized instruction, particularly in elementary settings. The Philippine experience demonstrates how hybrid strategies and focused capacity-building efforts can mitigate infrastructural constraints, offering practical solutions to the challenges identified in the Nigerian context. AI-supported teacher professional development (TPD) enhances teacher engagement, enables differentiated instruction, and reduces administrative burdens, thereby promoting student-centered learning. However, structured AI literacy programs and continuous professional development initiatives are necessary for effective implementation (Fatima, 2024).

Although educators are generally aware of generative AI, their knowledge remains limited in areas such as AI-based

troubleshooting and grading. They advocate for professional development workshops with clear principles and best-practice guidelines tailored to Grade 3–12 educators to build confidence and competence (Wang & Fan, 2025).

DepEd (2026) stresses the importance of a human-centered paradigm in which AI functions as an auxiliary tool rather than a substitute for teachers. Policies emphasize prioritizing teacher professional development to ensure inclusive, secure, and meaningful learning experiences while safeguarding academic integrity within the K–12 curriculum. This reinforces the overarching theme across all studies: capacity building, particularly in AI literacy, institutional support, infrastructure, and policy alignment, is indispensable for achieving sustainable and inclusive quality education.

F. Synthesis of the Reviewed Literature and Studies

The literature reviewed indicates that the successful incorporation of artificial intelligence (AI) and information and communication technology (ICT) in educational settings is influenced by the complex relationship between teachers' knowledge, attitudes, confidence, and access to technological resources.

Studies across various contexts and educational levels consistently highlight that, while teachers generally hold positive views regarding AI and acknowledge its potential to improve teaching effectiveness, personalization, and assessment methods, the actual implementation in classrooms remains limited due to deficiencies in skills, confidence, and institutional backing.

A common theme in the literature is the difference between awareness of AI tools and practical knowledge about them. Although many educators show a basic understanding and favorable attitudes toward AI, their grasp of AI concepts and their pedagogical applications is often shallow, leading to hesitant or irregular usage. Research emphasizes that successful integration of AI goes beyond just awareness; it requires pedagogical knowledge, instructional design capabilities, and the skill to critically assess the appropriate contexts for AI application. Teachers who possess higher competencies related to ICT and AI are more capable of fostering engaging, student-focused learning environments, while those with minimal training tend to rely on traditional teaching methods.

Teachers' perceptions and readiness are significant predictors of AI adoption. Factors such as perceived utility, ease of use, and reliability of AI tools have a substantial impact on the intention to utilize them, in line with the Technology Acceptance Model (TAM). Although many educators consider AI to be an assistive resource rather than a substitute for human instructors, worries continue to exist regarding issues related to data privacy, academic integrity, transparency, and the diminishing of personal interaction. The literature demonstrates a considerable gap between teachers' optimistic view of AI and their modest levels of practical readiness, indicating that enthusiasm alone does not lead to effective utilization.

Closely connected to readiness is the concept of self-efficacy, which frequently acts as an essential mediator between teachers' knowledge and their willingness to integrate AI.

Educators possessing higher levels of technological and AI self-efficacy tend to exhibit more confidence, experience less anxiety, and show a greater willingness to explore innovative teaching practices. In contrast, low self-efficacy, which is often rooted in insufficient training, inadequate support, and negative past experiences, impedes the adoption of AI. Further studies reveal variations in self-efficacy based on geographical location, access to resources and professional background, with rural and under-resourced educators encountering more significant obstacles. Access to technological resources and institutional support represents another crucial factor affecting AI readiness. Despite improvements reported from training initiatives, numerous teachers, particularly those in rural and public school environments, still face challenges such as poor internet connectivity, inadequate hardware and software, lack of technical assistance, and restricted funding. These limitations worsen digital inequities and inhibit teachers' capability to effectively employ AI tools. The literature strongly advocates for ongoing professional development, supportive leadership, and investments in infrastructure, including low-bandwidth and offline AI solutions, to promote equitable access and practical application.

The analysis indicates that the effective integration of AI in education relies on a harmonious combination of teacher competency, well-informed and positive perceptions, robust self-efficacy, and sufficient institutional and technological support.

3. Methodology

This section presented the discussion of the research design, methodology used, respondents, population, instrument, validation of the instrument, data gathering procedure, and statistical treatment of data.

A. Method of Research

A descriptive quantitative method was used to describe the level of readiness of elementary teachers in Cabiao, Nueva Ecija, in terms of their knowledge, skills, attitude, and the availability of AI tools in teaching. This approach involved using a survey to collect data on various topics, such as teachers' awareness and knowledge of AI, their perceived attitude towards using AI in teaching, their self-efficacy in using technology and AI tools, and their access to technology resources.

(3) comprises of ten (10) teachers from San Roque Elementary School; Cluster four (4) involves twenty-five (25) teachers from Central Elementary School; and Cluster five (5) contains twenty-seven (27) teachers from San Fernando Sur Elementary School. The researchers employed cluster sampling technique to divide the entire population of public elementary teachers in Cabiao, Nueva Ecija into five (5) clusters. The first cluster comprises Sinipit Elementary School, Sta. Ines Elementary School, St. Joseph Elementary School, Enrique P. Rivera Jr. Elementary School, and Jose P. Bustamante Sr. Elementary School. The second cluster includes San Vicente Elementary School, Concepcion Elementary School, Sta. Rita Elementary School, Bagong Sikat Elementary School, Sta.

Isabel Elementary School, and San Carlos Elementary School. The third cluster consists of San Roque Elementary School, San Antonio Bagong Buhay Elementary School, Polilio Elementary School, and Bagong Silang Elementary School. The fourth cluster features Central Elementary School, Maligaya Elementary School, Palasinan Elementary School, and San Gregorio Elementary School, while the fifth cluster includes San Fernando Sur Elementary School, San Fernando Norte Elementary School, and Entablado Elementary School. Due to the extensive population size, a simple random sampling technique was utilized. Schools from each cluster were entered into a digital randomized selector called "Wheel of Names", ensuring that the selection process remained objective and that all potential teacher-respondents had an equivalent opportunity to be chosen as a respondent of the study.

To determine the appropriate number of respondents, the researchers used Cochran's Formula for sample size computation.

$$n = \frac{n_0}{1 + \frac{(n_0-1)}{N}}$$

The formula is as follows:

Where:

n = final, adjusted sample size

n_0 = initial sample size from the Cochran's Formula

N = total population size

Sample Size Calculator

Calculate the sample size needed for your research study.

Parameters

Confidence Level:
☐ 90% ☒ 95% ☐ 99%

Margin of Error (%):

Common values: 1%, 2%, 3%, 4%, 5%, 10%

Population Size (optional):

Leave blank for infinite population

Estimated Proportion (p):

Use 0.5 for most conservative (largest) sample size

Calculate Sample Size **Reset**

Required Sample Size
100
 participants needed

Fig. 2.

To determine the sample size for the randomly selected public elementary schools of each cluster, the researchers calculated the average percentage by dividing the total sample size to the total number of populations, and multiplying the result to the total number of populations of each cluster.

$$ASS = \frac{\text{sample size}}{\text{total number of population}}$$

$$ASS = \frac{100}{134}$$

$$ASS = 0.7463 \text{ or } 0.75$$

This table presents the total number of population and sample size of the study. The column on the left listed the five (5) distinct clusters, where the entire population of public elementary schools in Cabiao District were placed. The total population of the study will consist of one hundred thirty-four (134) public elementary school teachers among the randomly selected public elementary schools in Cabiao, Nueva Ecija.

Table 1
Total number of population and sample size of the respondents

Clusters	Total Number of Population	Sample Size
Cluster 1	17	13
Cluster 2	33	25
Cluster 3	13	10
Cluster 4	33	25
Cluster 5	37	27
Total	134	100

By the use of the simple random sampling technique, the number of respondents included in the study will be one hundred (100) teachers: thirteen (13) from cluster one (1) consisting Sinipit Elementary School, twenty-five (25) from cluster two (2) comprising of San Vicente Elementary School, ten (10) from cluster three (3) including San Roque Elementary School, and twenty-five (25) from cluster four (4) consisting Central Elementary School, while there are twenty-seven (27) from cluster five (5) including San Fernando Sur Elementary School. The researchers implemented a cluster sampling technique to divide the entire population of public elementary schools in the Cabiao District into five (5) clusters. Simple random sampling method was employed, randomly selecting teacher-respondents from the distinct five (5) clusters, where the whole population of public elementary teachers in Cabiao District were divided into. This approach ensured that every teacher had an equal and fair opportunity to participate in the study. Through this technique, educators from each clustercluster one, cluster two, cluster three, cluster four, and cluster five were randomly selected to represent their respective clusters. This guaranteed that each school had a meaningful role in the research while maintaining fairness and representativeness in the selection process.

B. Description of Respondents

The study's respondents consisted of teachers from all grade levels in public elementary schools across randomly selected institutions in the Cabiao District: cluster one (1) consisting Sinipit Elementary School, cluster two (2) comprising of San Vicente Elementary School, cluster three (3) including San Roque Elementary School, and cluster four (4) consisting Central Elementary School, while from cluster five (5) including San Fernando Sur Elementary School.

The total number of educators in the randomly selected public elementary schools in Cabiao District, which is divided into five (5) distinct clusters, was one hundred thirty-four (134), but only one hundred (100) of the population were the study's respondents. Regarding age, the majority of participants fell between 46 and above years old, with a percentage of 30.0%. In terms of gender, most of the respondents were female, with

a percentage of 82.0%. A significant portion of the respondents had 15 and above years of teaching experience, with a percentage of 49.0%. Most of the educators taught mathematics as their area of focus, with a percentage of 61.0%. A large number of them had attended training, with a percentage of 60.0%. The researchers employed a cluster sampling technique to divide the entire population of public elementary schools in the Cabiao District into five (5) clusters. Subsequently, a simple random sampling method was applied. All public elementary schools within each of the identified cluster were entered into a digital randomization tool called “Wheel of Names” to ensure that each school had an equal and fair chance of being selected and represented in the study.

C. Instrumentation

The main instrument that was used in this study was a questionnaire. The researchers formulated the questionnaire themselves. It was the source from which the respondents' profile and data were derived. It was comprehensively constructed and consisted of a series of questions intended to evoke and collect responses from the respondents.

A questionnaire is a list of questions or items used to gather data from respondents about their attitudes, experiences, or opinions (Bhandari, 2023).

The questionnaire consists of two components. The first part's central point is the demographic profile of the respondents, consisting of age, sex, teaching experience, subject area taught, training attended related to ICT or AI, and level of ICT competency.

The second part of the questionnaire focuses on the respondents' level of readiness, including their awareness and knowledge of AI tools, their perception of using AI in teaching, their self-efficacy in using technology and AI tools, and their access to technological resources. To measure this, the research study will employ a four-point Likert scale: (4) Strongly Agree, (3) Agree, (2) Disagree, and (1) Strongly Disagree.

One of the key elements of the research process is the validation of the research tool. As noted by Elangovan (2021), validating a survey tool is a crucial step in the research process. Although face validity and content validity are qualitative methods, they are vital in determining the extent to which the survey tool can accurately measure its intended variables. Furthermore, Santos (2024) emphasizes that validating research tools is essential for various reasons. First, it yields consistent and repeatable results, which bolsters the credibility of the findings. Second, it confirms that the tool effectively assesses what it is designed to measure. Additionally, it facilitates adjustments and enhancements to the questions or items within the tool, ensuring their relevance to the research context. Finally, a thoroughly validated tool can be utilized across different studies, enabling comparisons of results over time or among diverse populations.

The thesis adviser, along with another knowledgeable research coordinator, studied, reviewed, and validated the research questionnaire.

The Jamovi app was used by the researchers to evaluate the instrument's reliability. The analysis of the instrument's

reliability was revealed by the results.

The researchers then submitted the instrument to the University Research Ethics Committee (UREC) for validation and evaluation in order to obtain ethics clearance for the distribution of the questionnaire and approval prior to data collection.

D. Data-Gathering Procedures

The researchers obtained approval for the questionnaire as the initial step in gathering data. The thesis adviser, provided an authorization letter. The researchers subsequently presented this authorization letter to the superintendent of the school division at the DepEd Division Office located in Santa Rosa, Nueva Ecija to obtain approval for conducting the study in selected public elementary schools in Cabiao, Nueva Ecija. Once the authorization letter was submitted, the researchers were notified by the staff at the School Division Office (SDO) that the request processing would require some time.

Next, the researchers drafted a request letter addressed to the following principals of the chosen public elementary schools: School Principal of Sinipit Elementary School; School

Principal of San Vicente Elementary School; School Principal of San Roque Elementary School; School Principal of Cabiao Central Elementary School; and the School Principal of San Fernando Sur Elementary School. The purpose of the letter was to gather the total population and retrieve the list of teachers' names as secondary data, as well as to carry out the survey.

The questionnaires were distributed directly by the researchers to the selected respondents. Data collection took place over a week to guarantee that every member of the target population was contacted. Once the questionnaires were completed, they were collected, reviewed for completeness, and analyzed using JAMOMI application.

E. Statistical Treatment of Data

1) Weighted Mean

The weighted mean was the primary statistical tool employed to calculate the overall response to the second part of the research instrument, which measured the teachers' current level of readiness to use AI tools in teaching and the teachers' self-efficacy of AI literacy. The analysis employed a weighted mean because the study was designed as a parametric analysis, allowing the researcher to determine the central tendency and dispersion of the respondents' responses across the various factors on the questionnaire. This method provides a representative average that accounts for the relative importance of each response category within the survey.

The formula is as follows: $\bar{x} = \frac{\sum fx}{n}$

Where:

$\bar{x}$ = weighted mean

x = scale value

f = frequency

fx = the product of the frequency and the scale value

$\sum fx$ = the sum of the products of each frequency and its corresponding scale value

n = total number of respondents

The Five-Point Likert Scale: Level of agreement scale

Scale	Weighted Mean (WM)	Interpretation (I)	Description
5	4.20-5.00	Strongly Agree	The teacher is very ready.
4	3.40-4.19	Agree	The teacher is ready.
3	2.60-3.39	Slightly Agree	The teacher is somewhat ready.
2	1.80-2.59	Disagree	The teacher is not ready.
1	1.00-1.79	Strongly Disagree	The teacher is not ready at all.

The researchers employed a Likert scale to analyze the different components of the questionnaire. The responses aimed to evaluate the use of AI tools and their impact on teachers' self-efficacy in AI tools throughout the academic year 2025–2026 among educators in selected public elementary schools in Cabiao, Nueva Ecija. The range and meaning of the five-point scale are presented.

2) One-Way ANOVA

The One-Way Analysis of Variance (ANOVA) is a statistical test classified as parametric, which is utilized to assess whether there are meaningful differences among the means of three or more independent groups. In this research, the One-Way ANOVA is used to investigate the significant differences in readiness levels for utilizing AI tools based on the respondents' demographic characteristics, including age, sex, years of teaching experience, subject area taught, and training attended.

The formula is as follows: $F = \frac{MS_{between}}{MS_{within}}$

Where:

$SS_{between}$ = how much the group means differ from the overall grand mean

SS_{within} = the spread of scores within each individual group

$df_{between} = k - 1$ (where k is the number of groups)

$df_{within} = N - k$ (where N is the total number of respondents)

$$MS_{between} = \frac{SS_{between}}{df_{between}}$$

$$MS_{within} = \frac{SS_{within}}{df_{within}}$$

3) One-sample T-Test

A one-sample t-test was used in this study to determine whether there is a significant difference between the respondents' level of readiness in using AI tools in teaching and the assumed or standard mean value.

This statistical test helps identify if the obtained mean readiness score of the respondents differs significantly from the expected level of readiness.

The test was conducted based on the respondents' demographic profile, such as age, sex, years of teaching experience, and training attended.

The results of the one-sample t-test served as the basis for determining whether the respondents' readiness in using AI tools in teaching is statistically significant.

The formula is as follows: $t = \frac{\bar{X} - \mu_0}{S/\sqrt{n}}$

Where:

t = the calculated t-statistic

$\bar{X}$ = the average of the sample data

μ_0 = the target or hypothesized value

S = measure of data spread

$S/\sqrt{n}$ = the standard error of the mean

F. Decision Rule

Ha: The null hypothesis was rejected if the calculated p-value was less than or equal to the 0.05 significance level.

Ho: The null hypothesis was retained if the p-value is greater than the 0.05 significance level.

G. Conclusion

Ha: The null hypothesis was rejected if the calculated p-value was less than or equal to the 0.05 significance level, indicating that there was a significant difference between the respondents' profile and their level of readiness to use AI tools.

Ho: The null hypothesis was retained if the p-value was greater than the 0.05 significance level, which indicated that there was no significant difference between the respondents' profile and their level of readiness to use AI tools.

4. Results and Discussion

This section presented a detailed analysis and discussion of the data collected from 100 questionnaires completed by public elementary school teachers in the district of Cabiao, Nueva Ecija. The data gathered from the survey were presented in tabular form, accompanied by corresponding interpretations, implications, and relevant theoretical foundations.

A. Demographic Profile of the Respondents

Table 2
Demographic profile of the respondents based on age

AGE	% of Total
2	6.0 %
3	16.0 %
4	19.0 %
5	29.0 %
6	30.0 %

Table 2 shows the respondents' age distribution. The majority of the respondents belong to the age 46 and above, with a percentage of 30.0%. This was followed by respondents aged 41–45 at 29.0%, ages 36–40 at 19.0%, and ages 31–35 at 16.0%. Meanwhile, the age 26–30 had a percentage of 6.0%, while respondents aged 20–25 recorded the lowest percentage of 0%. The findings reveal that a significant portion of the participants fall within the age group of 46 and older. This outcome implies that the respondents have extensive career experience and a profound understanding of their profession, offering highly dependable and long-term insights for this research.

Table 3
Demographic profile of the respondents based on sex

SEX	% of Total
1	18.0 %
2	82.0 %

Table 3 shows the sex of the respondents. Most of the respondents were female, with a percentage of 82.0%, while male respondents made up 18.0% of the total respondents. The findings show that a majority of the participants are women. This outcome suggests that the conclusions of this study will predominantly represent a female perspective and may closely emphasize the experiences and insights that are uniquely relevant to women in this setting.

Table 4
Demographic profile of the respondents based on years of teaching experience

Years of Teaching Experience	% of Total
1	5.0 %
2	7.0 %
3	17.0 %
4	21.0 %
5	50.0 %

Table 4 shows the respondents' years of teaching experience. The majority of the respondents have 15 and above years of teaching experience, with a percentage of 50.0%. This followed by those 12–14 years of teaching experience at 21.0%, and 8–11 years at 17.0%. Meanwhile, respondents with 4–7 years and 0–3 years of teaching experience accounted for 7.0% and 5.0%, respectively. The findings reveal that the majority of respondents possess over 15 years of teaching experience. This indicates that they are expert educators with extensive expertise in classroom management and instructional practices, thereby enhancing the credibility and reliability of their feedback.

Table 5
Demographic profile of the respondents based on subject area taught

Math	% of Total
1	61.0 %
2	39.0 %

Table 5 shows the subject area taught by the respondents in Mathematics. 61.0% of the respondents are teaching the subject, while 39.0% are not teaching it. The findings show that the majority of respondents are engaged in teaching Mathematics. This suggests that they possess well-developed analytical, problem-solving, and logical reasoning abilities, which likely inform their perspectives with a structured and methodical approach to education.

Table 6
Demographic profile of the respondents based on subject area taught

Science	% of Total
1	44.0 %
2	56.0 %

Table 6 shows the subject area taught by the respondents in Science. 44.0% of the respondents are teaching the subject, whereas 56.0% are not teaching it. The findings indicate that the majority of respondents are engaged in teaching Science.

This implies that they possess substantial technical expertise and a comprehensive understanding of scientific concepts, inquiry-based learning methodologies, and laboratory practices, thereby reinforcing the relevance of their contributions to the study.

Table 7
Demographic profile of the respondents based on subject area taught

English	% of Total
1	63.0 %
2	37.0 %

Table 7 shows the subject area taught by the respondents in English. The majority of the respondents are teaching the subject, with a percentage of 63.0%, while 37.0% are not. The findings reveal that the majority of respondents are engaged in teaching English. This suggests that they predominantly represent language educators whose instructional practices and perspectives are shaped by their expertise in English language teaching.

Table 8
Demographic profile of the respondents based on subject area taught

Social Studies	% of Total
1	30.0 %
2	70.0 %

Table 8 shows the subject area taught by the respondents in Social studies. 30.0% of the respondents are teaching the subject, while the majority, with 70.0%, are not teaching. The findings reveal that the majority of respondents are engaged in teaching Social Studies.

This suggests that they possess specialized expertise in the social sciences and are actively involved in fostering civic awareness, historical understanding, and cultural education, thereby contributing valuable perspectives to the study.

Table 9
Demographic profile of the respondents based on subject area taught

T.L.E.	% of Total
1	16.0 %
2	84.0 %

Table 9 shows the subject area taught by the respondents in T.L.E. 16.0% of the respondents are teaching the subject, whereas 84.0% are not.

The findings indicate that the majority of respondents are teaching T.L.E. This suggests that their instructional focus is centered on practical skills training and vocational education, providing them with distinctive insights into experiential learning and student skill development.

Table 10
Demographic profile of the respondents based on subject area taught

MAPEH	% of Total
1	29.0 %
2	71.0 %

Table 10 shows the subject area taught by the respondents in MAPEH. 29.0% of the respondents are teaching the subject, while 71.0% are not.

The findings reveal that the majority of respondents are teaching MAPEH. This suggests that they adopt a comprehensive educational approach that integrates physical fitness, health awareness, and artistic expression, thereby offering meaningful insights into the holistic development of students.

Table 11
Demographic profile of the respondents based on subject area taught

Other	% of Total
1	32.0 %
2	68.0 %

Table 11 shows the subject area taught by the respondents in other subjects. 32.0% of the respondents are teaching them, while 68.0% are not teaching other subjects.

The findings reveal that the majority of respondents are teaching subjects outside the core curriculum. This indicates that they represent diverse instructional backgrounds, thereby contributing a broad range of perspectives to the study rather than limiting insights to a single disciplinary focus.

Table 12
Demographic profile of the respondents based on training

Training	% of Total
1	60.0 %
2	40.0 %

Table 12 shows the training attended by the respondents. The majority of the respondents have already attended training related to ICT or AI, with a percentage of 60.0%, while the remaining 40.0% have not yet attended any training.

The findings indicate that the majority of respondents have participated in training related to ICT or AI. This suggests that they already possess a solid technological foundation and demonstrate greater confidence in integrating digital tools into their professional practice.

Table 13
Summary of demographic profile of respondents

Summary of demographic profile of respondents				
Age	20-25		0.0 %	
	26-30		6.0 %	
	31-35		16.0 %	
	36-40		19.0 %	
	41-45		29.0 %	
	46 and above		30.0 %	
Sex	Male		18.0 %	
	Female		82.0 %	
Years of Teaching Experience	0-3		5.0 %	
	4-7		7.0 %	
	8-11		17.0 %	
	12-15		21.0 %	
	15 and above		50.0 %	
Mathematics	Yes	No	61.0 %	39.0 %
Science	Yes	No	44.0 %	56.0 %
English	Yes	No	63.0 %	37.0 %
Social Studies	Yes	No	30.0 %	70.0 %
T.L.E.	Yes	No	16.0 %	84.0 %
MAPEH	Yes	No	29.0 %	71.0 %
Other	Yes	No	32.0 %	68.0 %
Training Attended	Yes		60.0 %	
	No		40.0 %	

The demographic profile of the respondents reveals a highly experienced and predominantly mature workforce. A majority

of the participants are female, with most falling into the age bracket of 46 and above and possessing 15 or more years of teaching experience.

In terms of professional development and academic alignment, a majority of the respondents have attended relevant training sessions.

Furthermore, most of the participants are actively engaged in teaching core and specialized subjects, specifically Mathematics, Science, English, Social Studies, T.L.E., MAPEH, and other designated areas.

Findings revealed a group of experienced educators whose professional stability serves as a valuable asset for the integration of new teaching technologies.

B. Respondents' level of Agreement on the Readiness of Using AI Tools in Teaching

Table 14 presents the respondents' level of agreement on the readiness of using AI tools in teaching by their awareness and knowledge of AI tools. The respondents "Agree" with the following statements: "Able to critically identify and select AI tools that are specifically useful and relevant to the particular subject area or discipline," with a weighted mean of 3.94; "Actively stays current with the latest developments and innovations in educational AI technology and practices," with a weighted mean of 3.96; "Possesses a strong understanding of how AI tools can be effectively leveraged to support and enhance teaching and learning process," with a weighted mean of 3.97; "Holds a clear conceptual grasp of how AI tools contribute to personalized and adaptive learning experiences for students," with a weighted mean of 3.97; "Demonstrate awareness of the diverse types of AI tools applicable within the educational landscape," with a weighted mean of 4.03; and "Understand and assesses both the potential benefits and inherent risks associated with utilizing AI tools in instructional practices," with a weighted mean of 4.04. The statement "Understand and assesses both the potential benefits and inherent risks associated with utilizing AI tools in instructional practices," got the highest weighted mean 4.04, which is verbally interpreted as "Agree" and described as "Ready." This indicates that they were well-informed and cognitively prepared to engage with AI tools. This implied that educators are knowledgeable and aware of how to utilize AI tools in their teaching practices. This collective readiness underscores the need for continuous professional development to bridge awareness with advanced classroom implementation.

According to Uygun D. et al (2024), integrating AI in education offers advantages such as personalized learning and operational efficiency. However, educators need to be aware of AI's implications in education. Teachers must enhance their awareness and knowledge levels to adapt to the educational environment where AI technologies are becoming increasingly prevalent.

Table 15 presents the respondents' level of agreement on the readiness of using AI tools in teaching by perceived usefulness and ease of use. The respondents "Agree" with the following statements: "Asserts that leveraging AI tools simplifies the process of addressing diverse and individual student learning

Table 14

Respondents' level of agreement on the readiness of using AI tools in Teaching by their awareness and knowledge of AI tools

Awareness and knowledge of AI tools	Weighted Mean (WM)	Verbal Interpretation (VI)
Demonstrates awareness of the diverse types of AI tools applicable within the educational landscape.	4.03	Agree
Possesses a strong understanding of how AI tools can be effectively leveraged to support and enhance teaching and learning processes.	3.97	Agree
Able to critically identify and select AI tools that are specifically useful and relevant to the particular subject area or discipline.	3.94	Agree
Actively stays current with the latest developments and innovations in educational AI technology and practices.	3.96	Agree
Holds a clear conceptual grasp of how AI tools contribute to personalized and adaptive learning experiences for students.	3.97	Agree
Understands and assesses both the potential benefits and inherent risks associated with utilizing AI tools in instructional practices.	4.04	Agree
Overall	3.98	Agree

Legend: 5 – Strongly Agree; 4 – Agree; 3 – Slightly Agree; 2 – Disagree; 1 – Strongly Disagree

Table 15

Respondents' level of agreement on the readiness of using AI tools in teaching by their perceived usefulness and ease of use

Perceived usefulness and ease of use	Weighted Mean (WM)	Verbal Interpretation (VI)
Confidently asserts that AI tools possess the capability to significantly enhance the quality of both instruction and student learning outcomes.	3.98	Agree
Finds that AI tools facilitate the delivery of more interactive and dynamic lesson content.	3.97	Agree
Holds the conviction that the use of AI tools in the classroom increases student engagement in the learning process.	4.00	Agree
Recognizes the value of AI tools in providing data-driven insights that lead to improved instructional decisions.	4.11	Agree
Believes that the strategic integration of AI contributes to an overall increase in teaching effectiveness.	4.03	Agree
Asserts that leveraging AI tools simplifies the process of addressing diverse and individual student learning needs.	3.92	Agree
Observes that AI tools contribute to improved efficiency in classroom management and organization.	3.96	Agree
Perceives that AI tools streamline and simplify the assessment of student performance.	3.95	Agree
Overall	3.99	Agree

Legend: 5 – Strongly Agree; 4 – Agree; 3 – Slightly Agree; 2 – Disagree; 1 – Strongly Disagree

Table 16

Respondents' level of agreement on the readiness of using AI Tools in teaching by their self-efficacy in using technology and AI Tools

Self-efficacy in using technology and AI tools	Weighted Mean (WM)	Verbal Interpretation (VI)
Exhibits high confidence in the capacity to quickly learn and master the use of new AI educational tools.	3.97	Agree
Demonstrates a high degree of agility in mastering new educational technologies, ensuring the seamless and rapid integration of cutting-edge AI tools into the curriculum.	3.95	Agree
Navigates AI platforms with confidence, possessing the expertise to independently troubleshoot and resolve technical challenges to maintain instructional momentum.	3.76	Agree
Capable of effectively integrating AI tools and resources directly into lesson plans and curriculum design.	3.85	Agree
Serves as a definitive guide for students, providing expert instruction on the responsible, strategic, and ethical application of AI in academic settings.	3.84	Agree
Exercises expert discernment in modifying and elevating AI-generated outputs, ensuring every resource is precisely calibrated to meet rigorous instructional objectives.	3.86	Agree
Maintains confidence in managing and facilitating engaging classroom activities that incorporate AI tools.	3.92	Agree
Maintains a sophisticated understanding of the AI landscape, with total confidence in the personal capacity to lead the implementation of emerging advancements in education.	3.91	Agree
Confidently executes robust strategies to safeguard academic integrity, ensuring that AI tools enhance rather than compromise the learning environment.	3.93	Agree
Overall	3.89	Agree

Legend: 5 – Strongly Agree; 4 – Agree; 3 – Slightly Agree; 2 – Disagree; 1 – Strongly Disagree

needs," with a weighted mean of 3.92; "Perceives that AI tools streamline and simplify the assessment of student performance," with a weighted mean of 3.95; "Observes that AI tools contribute to improve efficiency in classroom management and organization," with a weighted mean of 3.96; "Finds that AI tools facilitate the delivery of more interactive and dynamic lesson content," with a weighted mean of 3.97; "Confidently asserts that AI tools possess the capability to significantly enhance the quality of both instruction and students learning outcomes," with a weighted mean of 3.98;

"Holds the conviction that he use of AI tools in classroom increases students engagement in the learning process," with a weighted mean of 4.00; "Believes that the strategic integration of AI contributes to an overall increase in teaching effectiveness," with a weighted mean of 4.03; and "Recognizes the value of AI tools in providing data-driven insights that lead to improved instructional decisions," with a weighted mean of 4.11. The statement "Recognizes the value of AI tools in providing data-driven insights that lead to improved instructional decisions," got the highest weighted mean 4.11,

Table 17

Respondents' level of agreement on the readiness of using AI Tools in teaching by their access to technological resources

Access to technological resources	Weighted Mean (WM)	Verbal Interpretation (VI)
Possesses reliable access to computers or personal devices that are technically suitable for running AI applications.	4.08	Agree
Has necessary access to the specialized software and applications required for AI-based instructional delivery.	3.89	Agree
The school reliably furnishes the essential tools, such as appropriate devices and software, necessary for AI integration in teaching.	3.87	Agree
Access to necessary platforms or paid subscriptions for specialized AI educational tools is readily available.	3.74	Agree
Appropriate training materials or tutorials necessary for mastering the use of AI tools are accessible.	3.74	Agree
Maintains access to a stable and robust internet connection within the work environment.	3.78	Agree
Sufficient administrative support is provided to facilitate the integration and effective implementation of AI tools in teaching.	3.82	Agree
Adequate technological resources are available and equitably distributed among all teaching staff within the school.	3.89	Agree
Overall	3.85	Agree

Legend: 5 – Strongly Agree; 4 – Agree; 3 – Slightly Agree; 2 – Disagree; 1 – Strongly Disagree

which is verbally interpreted as “Agree” and described as “Ready.” This indicates that they recognize the transformative potential of AI. This implied that educators believe that these tools significantly enhance the quality of both instruction and student learning outcomes. This recognition highlights the importance of translating these positive perceptions into pedagogical strategies that maximize student engagement. According to Dr. Kumar D. & Singh M. (2021), indicated that teacher-educators have a favorable attitude toward the use of ICT and its tools and gadgets in the teacher education process to some level. The current finding reveals that teacher-educators are under-trained and lack technological support. It was discovered that if teacher-educators are familiar with ICT-training, technical assistance, ICT resources, motivation, management support, and the benefits of ICT in the education process, they would be able to successfully include ICT in the teacher education process.

Table 16 shows the respondents' level of agreement on the readiness of using AI tools in teaching by self-efficacy in using technology and AI tools. The respondents "Agree" with the following statements: " Navigates AI platforms with confidence, possessing the expertise to independently troubleshoot and resolve technical challenges to maintain instructional momentum" with a weighted mean of 3.76; "Serves as a definitive guide for students, providing expert instruction on the responsible, strategic, and ethical application of AI in academic setting" with a weighted mean of 3.84; "Capable of effectively integrating AI tools and resources directly into lesson plans and curriculum design" with a weighted mean of 3.85; "Exercises expert discernment in modifying and elevating AI-generated outputs, ensuring every resource is precisely calibrated to meet rigorous instructional objectives" with a weighted mean of 3.86; "Maintains a sophisticated understanding of the AI landscape, with total confidence in the personal capacity to lead the implementation of emerging advancements in education" with a weighted mean of 3.91; "Maintains confidence in managing and facilitating engaging classroom activities that incorporate AI tools" with a weighted mean of 3.92; "Confidently executes robust strategies to safeguard academic integrity, ensuring that AI tools enhance- rather than compromise- the learning environment" with a

weighted mean of 3.93; " Demonstrates high degree of agility in mastering new educational technologies, ensuring the seamless and rapid integration of cutting-edge AI tools into the curriculum" with a weighted mean of 3.95; and "Exhibits high confidence in the capacity to quickly learn and master the use of new AI educational tools" with a weighted mean of 3.97. The statement "Exhibits high confidence in the capacity to quickly learn and master the use of new AI educational tools," got the highest weighted mean 3.97, which is verbally interpreted as “Agree” and described as “Ready.” This indicates that they generally possess a strong sense of self-efficacy in using AI tools for teaching. This indicates that teachers are self-assured in their capability to understand and handle AI tools, incorporating them into their teaching. According to Hastomo et al. (2025), the study concludes that fostering teacher AI self-efficacy requires more than simply providing access to technology. It demands differentiated, practical training, and professional environments that support teacher autonomy and innovation. The findings further suggest that teachers perceive self-efficacy as both a catalyst for pedagogical innovation enabling creative integration of AI into classroom practice and a tool for administrative efficiency, streamlining routine tasks. A mature form of efficacy also emerged, striking a balance between confidence in AI use and a critical awareness of its risks, ensuring responsible and reflective adoption.

Table 17 presents the respondents' degree of agreement regarding on the readiness of using AI tools in teaching by their access to technological resources. The respondents agreed with the following statements: "Access to necessary platforms or paid subscriptions for specialized AI educational tools is readily available," and "Appropriate training materials or tutorials necessary for mastering the use of AI tools are accessible," with a 3.74 weighted mean; "Maintains access to a stable and robust internet connection within the work environment," with a 3.78 weighted mean; "Sufficient administrative support is provided to facilitate the integration and effective implementation of AI tools in teaching," with a 3.82 weighted mean; "The school reliably furnishes the essential tools, such a appropriate devices and software, necessary for AI integration in teaching," with a 3.87 weighted mean; "Has necessary access to the specialized software and applications required for AI-based instructional

Table 18

Summary of the overall weighted mean of the respondents' level of agreement on the readiness of using AI Tools in teaching

Level of Readiness	Overall Weighted Mean	Verbal Interpretation (VI)
Awareness and Knowledge of AI Tools	3.98	Agree
Perceived Usefulness and Ease of Use	3.99	Agree
Self-efficacy in Using Technology and AI Tools	3.89	Agree
Access to Technological Resources	3.85	Agree

Legend: 5 – Strongly Agree; 4 – Agree; 3 – Slightly Agree; 2 – Disagree; 1 – Strongly Disagree

Table 19

Overall of the One-Way ANOVA on the significant difference between respondents' demographic profile and their level of readiness to use AI tools

Demographic Profile	Level of Readiness	P-value	Decision	Conclusion
Age	Overall	0.073	Retain Ho	Not Significant
Years of Teaching Experience	Overall	0.322	Retain Ho	Not Significant

Legend: p-value ≤ 0.05 = do not retain Ho; p-value > 0.05 = retain Ho

Table 20

Overall of the One-Sample T-Test on the on the significant difference between respondents' demographic profile and their level of readiness to use AI tools

Demographic Profile	Level of Readiness	P-value	DECISION	CONCLUSION
Sex	Overall	< .001	Do Retain Ho	Significant
Subject area taught	Overall	< .001	Do Retain Ho	Significant
Training attended	Overall	< .001	Do Retain Ho	Significant

Legend: p-value ≤ 0.05 = do not retain Ho; p-value > 0.05 = retain Ho

delivery," and "Adequate technological resources are available and equitably distributed among all teaching staff within the school," with a 3.89 weighted mean, and "Possesses reliable access to computers or personal devices that are technically suitable for running AI applications," with a 4.08 weighted mean. The statement "Possesses reliable access to computers or personal devices that are technically suitable for running AI applications," got the highest weighted mean 4.08, which is verbally interpreted as "Agree" and described as "Ready." This indicates that they have sufficient access to technological resources. This implied that educators have adequate support, training, and access to technological resources in integrating AI tools in teaching. This adequate infrastructure highlights the need to bridge remaining gaps in subscription access and technical support for seamless classroom integration. Oloraza (2026) emphasizes that AI integration significantly improves teaching and learning in skill-based subjects. Similarly, Castro et al. (2025) note that teachers in rural areas require context-specific, offline resources and adaptable AI curricula to overcome connectivity limitations.

Table 18 presents the summary of the overall weighted mean of the respondents' level of agreement regarding their readiness to use AI tools in teaching. The results indicate a consistently positive perception across all assessed categories, with all variables receiving a verbal interpretation of "Agree" which is described as "Ready."

Specifically, Perceived Usefulness and Ease of Use recorded the highest mean score of 3.99, followed closely by Awareness and Knowledge of AI Tools at 3.98. Self-efficacy in Using Technology and AI Tools followed with a mean of 3.89, while Access to Technological Resources recorded the lowest mean score at 3.85.

Overall, these findings suggest that the respondents possess a high level of readiness to integrate AI tools into their teaching practices. This implies that public elementary teachers are ready to utilize AI tools in the classroom, specifically in terms of their awareness and knowledge of AI, perceived usefulness and ease of use, self-efficacy in using technology and AI tools, and access to technological resources. This overall high level of

readiness highlights the foundation for successful, system-wide AI integration, provided that institutional support and resource allocation continue to grow.

C. Significant Difference Between the Respondents' Demographic Profile and their Level of Readiness to Use AI Tools

Table 19 shows the overall result of the One-Way ANOVA according to age and years of teaching experience. The findings revealed no significant difference in the respondents' overall level of readiness based on age ($p = 0.073$) and years of teaching experience ($p = 0.322$).

The p-values are greater than 0.05; therefore, the null hypothesis was retained, indicating no significant difference among the respondents overall readiness according to age and years of teaching experience.

Viberg et al. investigated teachers from six countries and found that age and professional experience were not significant predictors of teachers' trust and readiness to use AI technologies in education. Instead, AI self-efficacy and AI understanding were identified as the strongest factors affecting readiness.

Area taught, and training attended. The findings revealed a significant difference in the respondents' overall level of readiness based on sex ($p < .001$), subject area taught ($p < .001$), and training attended ($p < .001$).

The p-values are less than 0.05; therefore, the null hypothesis was not retained, indicating a significant difference among the respondents overall readiness according to sex, subject area taught, and training attended. The integration of artificial intelligence into teaching was significantly correlated by factors such as a teacher's age, sex, educational background, professional experience, and training.

Both educators and administrators emphasized that successful implementation within basic education requires a comprehensive approach, specifically calling for inclusive training programs, robust policy frameworks, and clear ethical guidelines (Raguindin & Ventayan, 2026).

Table 21
Project B.R.I.D.G.E. (Building readiness integration and development for growth in education)

Phase	Objectives	Programs/ Activities	Persons Involved	Time Frame	Resources/ Tools Needed	Expected Output
Pre-Implementation Phase	To plan activities and assign focal persons for AI integration readiness. To orient teachers on the importance and application of AI tools in teaching. To finalize the capacity-building framework and training modules.	Conduct planning meetings and form an AI Readiness Committee. Orientation sessions on AI in education. Review and finalize training design and schedule.	Principal, ICT Coordinator, Teacher Leaders, Teachers	July–August 2026	Meeting materials, digital planning tools, multimedia presentation, laptops, projector	Clear implementation plan, designated focal persons, and approved training modules.
Implementation Phase	To conduct hands-on workshops and collaborative learning sessions on AI tools. To monitor progress and identify challenges in AI integration. To strengthen institutional support and resource accessibility.	Facilitate workshops on AI-assisted lesson planning, assessment, and classroom management. Conduct classroom observations and feedback sessions. Coordinate with local education offices for resource enhancement.	Principal, ICT Coordinator, Teachers	August–November 2026	AI tools, laptops, internet access, monitoring forms, observation checklists, communication tools	Teachers demonstrate improved proficiency in using AI tools; challenges identified and addressed; improved access to technological resources and institutional backing.
Post-Implementation Phase	To evaluate the effectiveness of Project BRIDGE and teacher growth. To disseminate findings and recommendations for sustainability.	Collect and analyze data from pre- and post-training assessments. Present results to the Division Research Coordinator and stakeholders.	Principal, Teachers, ICT Coordinator	December 2026–January 2027	Evaluation forms, analytics tools, presentation materials, printed reports	Data showing increased teacher readiness and proficiency; institutional adoption of Project BRIDGE as a model for tech-driven academic excellence.

D. Propose Capacity-building Program

Table 21 shows the Action Plan for Project BRIDGE (Building Readiness Integration and Development for Growth in Education). It presents a structured framework divided into three phases: Pre-Implementation, Implementation, and Post-Implementation, to strengthen the readiness of public elementary teachers in Cabiao, Nueva Ecija, in effectively using AI tools for teaching.

This structured approach ensures systematic support through foundational preparation, active engagement, and continuous evaluation.

In the Pre-Implementation Phase, the objectives focus on planning activities, assigning focal persons, orienting teachers on the importance of AI, and finalizing the capacity-building framework. Activities include forming an AI Readiness Committee, conducting orientation sessions, and preparing training modules. The expected outcome is a clear implementation plan and approved training design.

The Implementation Phase emphasizes hands-on workshops, collaborative learning sessions, classroom observations, and institutional support. Teachers, principals, and ICT coordinators are involved, with resources such as laptops, AI tools, and monitoring forms. The expected outcome is improved teacher proficiency in AI integration, identification of challenges, and strengthened institutional backing.

The Post-Implementation Phase highlights evaluation and sustainability. Activities include collecting and analyzing pre- and post-training data, and presenting results to stakeholders. The expected outcome is evidence of increased teacher readiness and institutional adoption of Project BRIDGE (Building Readiness Integration and Development for Growth in Education) as a model for tech-driven academic excellence. This comprehensive framework ensures a systematic approach to translating educator readiness sustainable AI integration practices.

5. Summary of Findings, Conclusions, and Recommendations

This section includes an analysis and interpretation of the data from the previous chapter, a conclusion based on the findings, a summary of the study, and recommendations that were derived from the investigation.

A. Summary of Findings

1. Demographic profile of respondents
 1. 30% of the respondents ages 46 and above.
 2. 82% of the respondents are female while 18% are male.
 3. 50% of the respondents have a 15 years and above of teaching experience.

4. 61% of the respondents are teaching mathematics subject, 44% of the respondents are teaching science subject, 63% of the respondents are teaching English subject, 30% of the respondents are teaching social studies subject, 16% of the respondents are teaching T.L.E subject, 29% of the respondents are teaching MAPEH subject, 32% of the respondents are teaching other subjects.
5. 60% of the respondents attended a training.
2. Respondents' Level of Readiness
 1. The respondents' level of agreement on the readiness of using AI tools in teaching by their awareness and knowledge of AI tools had an overall weighted mean of 3.98.
 2. The respondents' level of agreement on the readiness of using AI tools in teaching by their perceived usefulness and ease of use had an overall weighted mean of 3.99.
 3. The respondents' level of agreement on the readiness of using AI tools in teaching by their self-efficacy in using technology and AI tools had an overall weighted mean of 3.89.
 4. The respondents' level of agreement on the readiness of using AI tools in teaching by their access to technological resources had an overall weighted mean of 3.85.
3. Significant Difference between Teacher-Respondents' Profile and their Level of Readiness to Use AI Tools in Teaching
 1. 0.073 is the computed p-value for age and 0.322 the computed p-value for years of teaching experience using One-Way Anova.
 2. <.001 is the computed p-value for sex, subject area taught, and frequency training attended related in ICT or AI using One-Sample t-Test.
4. Propose Capacity-Building Program
 1. Public elementary teachers in Cabiao, Nueva Ecija are ready to integrate artificial Intelligence (AI) tools in their teaching practices in terms of awareness and knowledge of AI tools with an overall weighted mean of 3.98, perceived usefulness and ease of use with an overall weighted mean of 3.99, self-efficacy in using technology and AI tools with an overall weighted mean of 3.89, and access to technological resources with an overall weighted mean of 3.85. To strengthen the already significant readiness of public elementary teachers, it is essential to implement a holistic capacity-building framework that moves beyond basic awareness toward advanced pedagogical integration, as proposed in the program titled Project B.R.I.D.G.E. (Building Readiness, Integration, and Development for Growth in Education).

B. Conclusions

Majority of the respondents are 46 years old and above, with most being female and having 15 years and above of teaching experience. They mainly instruct core subjects like Mathematics, English, and Science, and also engage in teaching Social Studies, T.L.E., MAPEH, and various specialized areas. Additionally, a large portion of the respondents has participated in training related to ICT or AI.

The respondents' level of readiness regarding the use of AI tools for teaching was consistently rated as "Agree" across all aspects, which corresponds to a description of "Ready." They expressed agreement regarding their awareness and knowledge of AI tools, their perceived usefulness and ease of use, their self-efficacy in using technology and AI tools, and their access to technological resources.

This indicates that public elementary teachers are ready to effectively utilize AI tools in their teaching practices. Such consistent ratings underscore a positive predisposition toward embracing modern educational technologies in the classroom.

The results indicate that while there is no significant difference between age and years of teaching experience and the teachers' level of readiness to use AI tools, there is a significant difference regarding sex, subject area taught, and the frequency of ICT or AI-related training attended.

Public elementary teachers in Cabiao, Nueva Ecija are ready to integrate AI tools into their teaching practices. To build upon this strong foundation and move teachers from basic awareness to advanced classroom integration, the study proposes a holistic capacity-building framework called Project B.R.I.D.G.E. (Building Readiness, Integration, and Development for Growth in Education). This structured framework provides a vital bridge from foundational awareness to advanced classroom implementation, ensuring long-term pedagogical success.

C. Recommendations

1. To Regional and Division Offices - Organize continuous seminars, workshops, and training programs, such as Project BRIDGE (Building Readiness Integration and Development for Growth in Education), on the effective use of AI tools in teaching to enhance teachers' competence and confidence.
2. To Teachers - Actively participate in professional development activities related to educational technology and AI integration to enhance their teaching practices.
3. To School Organizations - Establish collaborative learning communities where teachers can share best practices, experiences, and strategies in using AI tools in classroom instruction.
4. To Future researchers - Conduct similar studies involving a wider scope of respondents or different educational settings to validate and expand the findings of this study.

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