EduHeart Knowledge Network and Publishing, Inc.
EduHeart

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2

DOI: https://doi.org/10.66206/eduheart.2026.280

KNOWLEDGE, ATTITUDE, AND PRACTICES ON THE INTEGRATION OF ARTIFICIAL INTELLIGENCE (AI) IN THE TEACHING PROCESS AMONG EDUCATORS: BASIS FOR A CAPACITY-BUILDING PROGRAM

Jean Aborque-Medino
jean.medino@evsu.edu.ph
https://orcid.org/0009-0003-1965-870X
Eastern Visayas State University, Carigara Campus, Carigara, Leyte, Philippines

ABSTRACT: *In the evolving landscape of 21st-century education, Artificial Intelligence has emerged as a paradigm-shifting force capable of redefining teaching and learning engagements. The use of Generative Artificial Intelligence chatbots, such as ChatGPT, has increased significantly. Despite growing access to AI tools, AI integration remains a challenge. While AI offers remarkable opportunities, its compelling integration depends on educators' knowledge, attitudes, and practices. The study investigated the level of manifestation of the Eastern Visayas State University educators' knowledge, attitudes, and practices in the integration of AI in the teaching process. Further, establishing the relationship between the level of manifestation of the educators' attitudes and practices in the integration of AI in the teaching process and their profile variables. This study employs a descriptive-correlational design. Data were collected using a validated survey questionnaire and analyzed using descriptive and inferential statistics. Frequency counts and percentages were utilized to examine the educators' profiles. The levels of educators' knowledge, attitudes, and practices toward AI integration were analyzed using the weighted mean and standard deviation. Kendall's tau-b correlation coefficient and Point-biserial correlation were used to address the level of manifestation of the educators' knowledge, attitude, and practices in the integration of AI in the teaching process, and their profile variables. Results disclosed that educators demonstrated generally adequate knowledge and positive attitudes. No significant differences were found in knowledge and attitudes across profile variables. However, a significant difference in practices was observed. Anchored on these insights, the study proposes a comprehensive capacity-building program. By aligning with CHED's digital transformation agenda and Sustainable Development Goals (SDG 4 and SDG 9), this research contributes to building a future-ready, inclusive, and innovation-driven higher education system in the Philippines.*

Keywords: *Artificial Intelligence, AI Integration, AI in the teaching process, Capacity Building Program*

INTRODUCTION

The evolving pace of technological innovation has significantly reshaped education, prompting institutions worldwide to redefine teaching and learning in the digital age. Among emerging technologies, Artificial Intelligence (AI) has gained increasing prominence due to its potential to personalize instruction, automate feedback, and support inclusive pedagogical practices. Recent studies highlight that AI-driven tools including intelligent tutoring systems, adaptive learning platforms, and virtual assistant scan enhance student engagement and learning outcomes by tailoring instruction to individual needs (Wayne Holmes et al., 2022; Enkelejda Kasneci et al., 2023).

However, the effectiveness of AI integration in education depends not solely on the technology itself but on educators' capacity to use it meaningfully. As emphasized in recent research, teachers' knowledge, attitudes, and practices play a critical role in determining whether AI tools are used in ways that enhance, rather than merely automate, the teaching and learning process (Zawacki-Richter et al., 2019). Globally, scholars highlight that effective AI adoption requires more than technical familiarity; it demands conceptual understanding, pedagogical alignment, and ethical responsibility. Educators must be prepared to critically evaluate AI outputs, safeguard student data, and ensure equitable access to digital resources. AI literacy has increasingly been recognized as an essential competency for educators, particularly as digital technologies reshape instructional practices. For instance, Long Duri and Magerko Brian (2020) emphasize that AI literacy extends beyond basic tool use to include understanding how AI systems function, their limitations, and their societal implications. At the same time, frameworks such as the Technological Pedagogical Content Knowledge highlight the need for educators to integrate technological, pedagogical, and content knowledge to effectively incorporate emerging technologies into teaching. Despite these expectations, empirical research consistently points to gaps in teachers' readiness for AI integration. Studies such as those by Olaf Zawacki-Richter et al. (2019) reveal that while many educators demonstrate generally positive attitudes toward AI, they often lack sufficient technical competence and a deep understanding of ethical considerations, including issues related to data privacy, bias, and responsible use.

In the Philippine context, these challenges are compounded by disparities in digital infrastructure and uneven access to professional development. While national policies such as CHED Memorandum Order No. 4 (2020) on flexible learning and Commission on Higher Education Memorandum Order (2017) on outcomes-based education promote digital transformation,

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

clear guidelines on the pedagogical and ethical use of AI remain limited. Studies report that Filipino teachers generally welcome AI but express caution regarding issues of data privacy, algorithmic bias, and equity. This policy gap contributes to inconsistent adoption across institutions, particularly between urban and rural campuses.

Like many other institutions of higher learning, Eastern Visayas State University has long embraced blended and online learning modalities during the COVID-19 pandemic. However, little empirical evidence exists on the readiness of its educators to integrate AI into teaching. Addressing this gap, the present study investigates the knowledge, attitudes, and practices of Eastern Visayas State University educators regarding AI integration, examining how profile variables such as age, teaching experience, and training influence readiness. By grounding the inquiry in educators lived experiences, the study seeks to design a capacity-building program that strengthens AI literacy, fosters ethical and pedagogical competence, and empowers teachers to harness AI responsibly.

For the purpose of clarity, the generative artificial intelligence (AI) referred to in this study specifically pertains to ChatGPT. As highlighted by Zhai (2023), this AI tool was considered a representative example of generative AI technologies that support instructional planning, content creation, feedback generation, and other teaching-related tasks discussed in the study. Moreover, the study deliberately limited its respondents to educators directly involved in classroom instruction, as this group plays a central role in the integration of innovations into meaningful AI learning experiences. For the eligible educators a complete enumeration was employed to observe a comprehensive assessment of the respondents within the external campuses. This approach aligns with contemporary methodological recommendations emphasizing that complete enumeration enhances representativeness and eliminates sampling error, thereby improving the validity of research outcomes (Makwana et al., 2023). Furthermore, examining teachers' perspectives provides more accurate insights into the actual integration of AI, since educators mediate the relationship between technological tools and student learning outcomes (Zhai, 2023). Thereupon, limiting respondents to classroom practitioners vouches that the findings are founded in precise instructional viewpoint and articulate real-world applications of AI in classroom instructions.

This research contributes to both national and global educational priorities. It supports Sustainable Development Goal 4 (Quality Education) by promoting inclusive and innovative teaching practices, and SDG 9 (Industry, Innovation, and Infrastructure) by advancing digital transformation in higher education. More importantly, it provides actionable insights for policymakers, administrators, and educators, offering a framework for professional development that ensures AI integration enhances, rather than undermines, the human dimensions of teaching and learning.

Statement of the Problem

The research study aimed to determine the profile of educators at Eastern Visayas State University and their knowledge, attitudes, and practices regarding AI in teaching.

Specifically, it sought to answer the following questions:

1. What is the profile of educators in Eastern Visayas State University in terms of:
    a. Age;
    b. Gender;
    c. Position;
    d. Highest educational attainment;
    e. Number of years in service as an educator;
    f. Number of years of training or seminars related to AI; and
    g. Average family monthly income?
2. What is the level of manifestation of the educators' knowledge in the integration of AI in the teaching process, in terms of:
    a. Conceptual Understanding;
    b. Technical Skills;
    c. Pedagogical Application;
    d. Ethical and Responsible Use; and
    e. Continuous Learning and Adaptability?
3. What is the level of manifestation of the educators' attitude in the integration of AI in the teaching process, in terms of:
    a. Openness to Innovation;

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2

DOI: https://doi.org/10.66206/eduheart.2026.280

   b. Perceived Usefulness;
   c. Confidence and Readiness; and
   d. Ethical Considerations?
4. What is the level of practice in the integration of AI in the teaching process, in terms of:
   a. Instructional Planning;
   b. Instructional Delivery;
   c. Assessment and Evaluation;
   d. Research and Professional Development; and
   e. Administrative and Support Functions?
5. Is there a significant relationship between the level of manifestation of the educators' knowledge in the integration of AI in the teaching process and their profile variables?
6. Is there a significant relationship between the level of manifestation of the educators' attitude in the integration of AI in the teaching process and their profile variables?
7. Is there a significant relationship between the level of practice in the integration of AI in the teaching process and its profile variables?
8. What capacity-building program may be proposed to enhance the knowledge, attitudes, and practices of educators in EVSU?

Objective of the Study

The objective of the study is to determine the level of manifestation of educators' knowledge, attitudes, and practices, and the relationship between the level of practice in the integration of AI in the teaching process and its profile variables in the integration of Artificial Intelligence in the teaching process across the external campuses of Eastern Visayas State University.

Review of Related Literature

Knowledge on AI Integration

Educators' knowledge of Artificial Intelligence (AI) integration is not a single skill but a multidimensional competence that shapes how meaningfully AI is used in teaching, encompassing conceptual understanding, technical skills, pedagogical application, ethical responsibility, and continuous learning (Miao & Cukurova, 2024) Primarily, this knowledge encompasses conceptual understanding, technical skills, pedagogical application, ethical responsibility, and continuous learning, all of which play crucial roles in establishing whether AI enhances or merely supports instruction.

At the most fundamental level, conceptual understanding serves as the foundation of AI integration. Educators who understand how AI systems function, including their capabilities and limitations, are better positioned to use them critically and purposefully. However, recent studies indicate that many teachers still demonstrate only surface-level understanding of AI concepts, which may lead to uncritical reliance on AI-generated outputs (Kasneci et al., 2023). This limitation suggests that without sufficient conceptual grounding, AI may be used mechanically rather than strategically in instructional contexts.

Supported by Howard et al., (2021), beyond understanding technical skills form the operational backbone of AI integration. While educators are increasingly able to access and use AI tools, higher-order competencies such as interpreting outputs, customizing applications, and applying AI-driven insights to teaching remain underdeveloped. Empirical evidence shows that many teachers possess basic operational skills but lack the deeper technical proficiency required for effective instructional integration, such that although educators demonstrate general digital skills, many struggle with advanced competencies, such as critically evaluating digital outputs and integrating them meaningfully into pedagogical practice. This gap reflects the persistent disconnect between technological familiarity and pedagogical application in digital learning environments (Demissie, 2022). Notably, targeted professional development and access to digital infrastructure have been found to significantly enhance educators' technical competence, indicating that these gaps are addressable through institutional support and structured training (Amemasor et al., 2025)

However, even with technical capability, AI integration remains incomplete without strong pedagogical application. Effective integration requires educators to align AI tools with instructional goals, learner needs, and desired outcomes.

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

Recent research highlights a persistent gap between teachers' awareness of AI and their ability to apply it in meaningful, learner-centered ways (Saharuddin et al., 2025). In many cases, AI is used primarily for efficiency and administrative purposes rather than for transformative practices such as differentiation and adaptive instruction. This suggests that pedagogical competence remains a critical determinant of effective AI use.

Equally important is ethical responsibility, which has become increasingly central in AI integration. Issues related to data privacy, algorithmic bias, and transparency require educators to make informed and responsible decisions in their use of AI. Although teachers generally acknowledge the importance of ethical considerations, recent studies reveal that their practical understanding of ethical AI use remains limited (Spyros et al., 2025). This gap raises concerns about the potential risks of uncritical AI adoption, particularly in safeguarding student data and ensuring equitable learning environments.

Finally, the continuously advancing nature of AI underscores the importance of adaptability and continuous learning. As AI tools and applications continue to develop, educators must engage in ongoing professional development to remain effective. Evidence shows that teachers who participate in sustained training demonstrate greater confidence, adaptability, and competence in integrating AI into their practice (Fakhri et al., 2025). Continuous learning not only supports skill development but also enables educators to critically evaluate and refine their use of AI in response to evolving educational demands.

Collectively, enhanced educators' knowledge requires more than isolated training sessions, and this study underscores that a systematic, sustained, and context-sensitive professional development that integrates conceptual, technical, pedagogical, and ethical dimensions. Only under these opportunities can educators become acquainted with AI tools to significantly use these tools to their advantage and integrate these tools in transforming meaningful learning interactions.

Attitudes toward AI Integration

Determining whether AI served as a vortex instructional tool or remains underutilized depends largely on educators' attitudes towards the use of this technology. Evident in various academic undertakings, educators' attitudes are shaped by dimensions such as openness to innovation, perceived usefulness, confidence, and readiness, and ethical considerations, reflecting not only how teachers perceive AI but also how prepared they are to act on these perceptions. Empirical evidence supports this, showing that teachers' attitudes and willingness to integrate AI are significantly influenced by their perceived usefulness of the technology, self-efficacy, and availability of support systems (Bergdahl, 2025; Granström et al., 2025). Moreover, studies indicate that positive perceptions of AI's usefulness and ease of use enhance teachers' acceptance and intention to adopt AI in instructional practice, reinforcing the role of attitudes as a key determinant of technology integration (Robinos et al., 2024). These findings generally attest that educators' attitudes are not merely affective responses but are closely linked to their readiness, confidence, and ethical awareness in utilizing AI effectively in educational settings. Consistent with Rogers' Diffusion of Innovations theory as cited by Orr (2003) educators who are more open to change are more likely to adopt emerging technologies earlier and more effectively. The literature suggests that many teachers today demonstrate a generally positive disposition toward AI, viewing it as a tool that can modernize instruction and enhance engagement (Asanre et al., 2025). However, openness alone does not guarantee meaningful use. To fully sustain AI integration in instruction, outstanding support from stakeholders determines educators' interest in establishing logical reliance on AI technology.

Closely linked to this is perceived usefulness, a key determinant of technology adoption as explained by the Technology Acceptance Model, with recent studies confirming that perceived usefulness remains a significant predictor of educators' and learners' attitudes and intentions to adopt artificial intelligence technologies (Bakhadirov, 2024). When educators believe that artificial intelligence can improve teaching efficiency, enhance student learning, and reduce workload, they are more likely to integrate it into their instructional practice (Chiu & Chai, 2020; Zhai, 2023).

This finding aligns with existing research showing that perceived usefulness drives not only initial adoption but also continued use of technology. Teachers who experience tangible benefits from artificial intelligence such as streamlined lesson planning and more personalized feedback are more motivated to invest time and effort in its application. However, when these benefits are unclear or overshadowed by complexity, adoption tends to decline. This is strongly supported by the Technology Acceptance Model, which posits that perceived usefulness is a primary determinant of users' attitudes, behavioral intentions, and actual technology use (Davis, 1989). Recent empirical studies further confirm that perceived usefulness remains a significant predictor of teachers' acceptance and sustained

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

use of educational technologies, particularly in AI-integrated environments (Ghimire & Edwards, 2024; Zaman et al., 2023).

Another critical dimension is confidence and readiness, grounded in Bandura's theory of self-efficacy. Ghimire et al.,(2024) underscore that educators who feel capable of using AI are more likely to experiment, troubleshoot challenges, and sustain its use over time. Research consistently shows that confidence influences both the frequency and depth of AI integration. Conversely, low confidence often results in cautious or minimal use, with teachers limiting AI to low-risk or administrative tasks. This suggests that confidence is a manifestation of access to training, support, and experience, not merely a personal trait.

At the same time, ethical considerations shape how educators approach AI adoption. While many teachers recognize the potential of AI, they also express concerns about data privacy, algorithmic bias, transparency, and the possible loss of professional autonomy (Ostick et al., 2025; Chardonnens, 2025). These concerns are not barriers in themselves; rather, they reflect a critical awareness that can guide responsible use. On the other hand, ethical awareness is essential in preventing blind reliance on AI systems and ensuring that technology aligns with educational values. However, the literature also suggests that educators often lack clarity on how to operationalize ethical principles in practice, creating uncertainty that may hinder adoption, as emphasized by Zawacki-Richter et al. (2019).

Emphasized by Howard et al., (2021), educators' self-reported digital competence often does not align with their demonstrated skills, highlighting a mismatch between perception and actual performance. Their findings suggest that relying solely on self-assessment may lead to an inflated sense of readiness, which can hinder effective integration of technology in the classroom. Most likely, educators feel confident on the ability to use AI tools, but this doesn't correspond to the level of their actual competence. Most likely, this results in a gap between perceived readiness and actual capability, manifesting a situation where teachers belief on their readiness to be equipped with preparedness but find it troublesome in the actual utilization of AI tools.

Clearly, there is an immediate need for a more objectively structured diagnostic approach to professional development that will far reach beyond self-awareness into crucial evaluation of inert skills and because of this, there is a clear need for a more objective and diagnostic approaches to professional development that go beyond self-perception and instead assess actual skills and provide targeted support. The ones that identify specific areas where educators are provided with professional advancement and are involved in training programs that are more responsive, practical, and ultimately more effective in helping educators use AI with confidence and competence.

Furthermore, the Technological Pedagogical and Content Knowledge (TPACK) framework (Mishra & Koehler, 2006; Niess, 2017) highlights that attitudes alone are insufficient without the integration of technological, pedagogical, and content knowledge. As reported by Saharuddin et al., (2025), even educators with moderate knowledge and positive attitudes often struggle to align AI tools with instructional goals. This suggests that while attitudes may initiate adoption, knowledge and competence sustain it.

Collectively, improving educators' attitudes toward AI is not about changing their perceptions but about strengthening their confidence, clarifying ethical use, and demonstrating real instructional value. Educators supported with the right knowledge, training, and institutional guidance can evolve their positive attitudes into meaningful and transformative practice.

Practices in AI Integration

Across instructional domains, AI is already beginning to reshape how teachers plan, deliver, and assess learning. In instructional planning, AI tools particularly generative platforms and digital assistants are helping educators design lessons, differentiate instruction, and better anticipate students' needs. These tools make it easier for teachers to organize content, generate ideas, and adjust their plans based on learner diversity, ultimately making planning more efficient and responsive. Empirical studies support this, showing that generative AI can assist teachers in creating structured lesson plans, instructional materials, and learning activities while reducing workload and enhancing planning efficiency (Peikos et al., 2025). Furthermore, research highlights that AI-enabled systems support differentiated and data-driven instruction by allowing educators to tailor content to diverse learners and adapt lessons more flexibly (Karpouzis et al., 2024). These findings collectively reinforce that AI functions not merely as a productivity tool but as a pedagogical support system that enhances teachers' capacity to plan more inclusive, efficient, and responsive instruction.

As supported by Zawacki-Richter et al. (2019), who found that AI applications in education are commonly used to support instructional design and planning by enabling more personalized and adaptive learning experiences. Their

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

review highlights how AI can streamline planning processes while improving the alignment of instructional materials with student needs.

In this way, AI does not replace the teacher's role in planning but rather enhances it, allowing educators to focus more on creativity, decision-making, and tailoring instruction to support meaningful learning. However, implementation remains uneven. While some educators strategically use AI to design learner-centered lessons, others rely on it only for basic content generation due to limited training and confidence (Tabuena, 2025). This highlights a critical gap between efficiency-driven use and pedagogically informed use.

In terms of instructional delivery, artificial intelligence opens new possibilities for providing real-time feedback, supporting adaptive learning, and creating more interactive classroom experiences. When thoughtfully integrated, AI can help teachers respond more effectively to individual student needs, making learning more personalized and engaging. This is supported by Kasneci et al. (2023), who emphasized that AI tools such as ChatGPT can enhance instructional delivery by enabling immediate feedback, facilitating differentiated instruction, and supporting more dynamic learning interactions. Their findings highlight that AI has the potential to transform how lessons are delivered by making them more responsive and learner-centered.

However, despite these opportunities, many educators still approach AI use with caution. Rather than fully embedding it into instruction, they often combine AI with traditional teaching methods, reflecting a transitional stage of adoption. This suggests that while teachers recognize the potential of AI in instructional delivery, its use remains in a developing phase, with many still exploring how to apply it effectively in real classroom settings. Empirical studies support this pattern, indicating that although educators generally hold positive perceptions of AI, they also express concerns about trust, ethics, and reliability, which contribute to hesitation and partial adoption (Taheri et al., 2025).

The role of AI becomes particularly significant in assessment and evaluation, where it enables automated grading, real-time feedback, and data-driven insights into student performance. Research highlights that AI-assisted assessment enhances efficiency and provides valuable diagnostic information that can inform instruction (Owan et al., 2023). However, concerns about fairness, reliability, and ethical implications continue to limit widespread adoption (Holmes et al., 2019; Williamson & Eynon, 2020). Educators emphasize the importance of maintaining human oversight, recognizing that while AI can support assessment, it cannot replace professional judgment. This reflects a growing understanding that AI should complement, not replace, the teacher's role in evaluation.

In administrative and support functions, AI integration is more evident and widely accepted. Educators commonly use AI for grading, communication, scheduling, and data management, resulting in improved efficiency and reduced workload (Tabuena, 2025). This practical utility makes administrative applications the most consistently adopted area of AI use. However, this also reveals a pattern: AI is often used where it is easiest and least risky, rather than where it can have the most transformative impact on learning.

Taken together, these findings reinforce the framework of the Knowledge–Attitude–Practice model (Liang, 2025), which posits that knowledge influences attitudes, and attitudes shape practices. Empirical studies support this pathway, showing that higher AI literacy leads to more positive attitudes and greater classroom use (Dung et al., 2024), while attitudes play a mediating role in translating knowledge into actual technology use (Chiu & Chai, 2020). However, this study also suggests that the progression is not automatic. Even when knowledge and attitudes are present, practice may remain limited without sufficient support, training, and institutional guidance.

Theoretical Framework

Developed by Mishra and Koehler (2006), the Technological Pedagogical Content Knowledge Framework (TPACK) provides a foundational lens for understanding AI integration. TPACK emphasizes that effective technology use in education requires not just content knowledge and pedagogical skills, but also an understanding of how technology intersects with both. In the context of AI, educators need to grasp the functionalities of AI tools (technological knowledge), how these tools support teaching strategies (pedagogical knowledge), and how they enhance subject-specific learning (content knowledge). Without this integrated understanding, educators may struggle to implement AI meaningfully in lesson planning, instructional delivery, and assessment. Therefore, the TPACK framework supports examining educators' knowledge and practices as interconnected domains necessary for successful AI integration. Mishra (2023) argued that the framework provides a critical lens for understanding the competencies teachers need to integrate tools such as ChatGPT into teaching, particularly in aligning AI capabilities with pedagogical goals and disciplinary knowledge

In addition, the Knowledge–Attitude–Practice (KAP) model provides a practical framework for understanding how knowledge of AI shapes educators' attitudes, which in turn influence their classroom practices (Liang et al., 2025).

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

According to this model, increased knowledge fosters more positive attitudes, which then lead to consistent and effective practices. In this study, the KAP model underpins the systematic examination of teachers' AI knowledge, attitudes toward AI integration, and actual instructional practices. It also emphasizes the need for targeted capacity-building programs that address all three dimensions to bridge gaps between understanding, perception, and application.

Nonetheless, Technology Acceptance Model (TAM) proposed by Davis explains why educators may or may not adopt AI tools. This model aligns closely with the study's focus on attitude indicators, including openness to innovation, perceived benefits of AI, and confidence in implementation. Further, the study accounts for why educators who may be knowledgeable about AI still hesitate to integrate it in teaching if they perceive it as complex, unreliable, or misaligned with pedagogical goals. (Marín et al., 2024).

Finally, Diffusion of Innovations Theory employed in the study of Jin et al. (2025) examine generative AI adoption across universities globally, demonstrating that institutional uptake is influenced by how AI aligns with existing teaching practices and policies, as well as how effectively information about AI is communicated among stakeholders. Similarly, Zhao (2025) emphasized that AI adoption in higher education follows Rogers' Diffusion of Innovations Theory innovation-decision, process-knowledge, persuasion, decision, implementation, and confirmation-highlighting that educators' perceptions of AI characteristics significantly affect their willingness to integrate these tools into teaching. Supporting this, Singh (2025) applied the Diffusion of Innovations framework to explain why individuals either adopt or reject AI technologies, noting that perceptions of usefulness, compatibility with existing practices, and complexity are critical determinants of adoption behavior.

EduHeart Knowledge Network and Publishing, Inc.
EduHeart
Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

Conceptual Framework

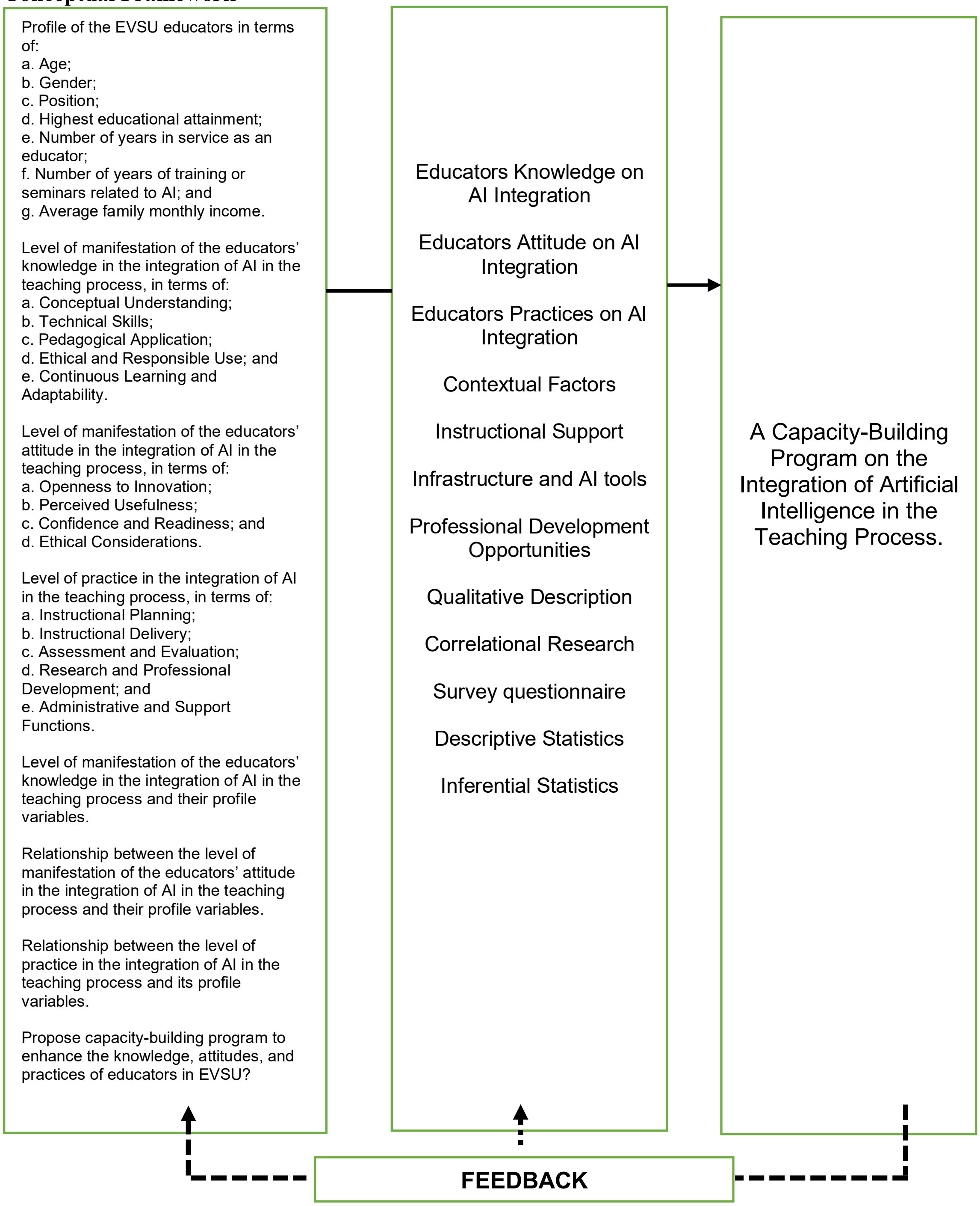

Fig. 1 Paradigm of the Study

The outlined research paradigm of the study is anchored in the Systems Theory approach, specifically utilizing the Input–Process–Output (IPO) model. While originally grounded in systems thinking (Bertalanffy, 1968), the IPO model provides a systematic way to map how initial conditions (Inputs) are transformed through specific actions (Processes) to yield

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2

DOI: https://doi.org/10.66206/eduheart.2026.280

measurable results, (Outputs), (Paredes-Saavedra et al., 2024). Contemporary literature affirms that systems approaches remain relevant in analyzing complex educational processes, particularly in technology integration and instructional effectiveness (Al-Fraihat et al., 2020). Elmourad et al., (2026) emphasized that AI integration in education is influenced by interconnected factors such as teacher competencies, institutional support, and perceived outcomes, highlighting the continued relevance of systems-oriented frameworks in analyzing complex instructional processes.

The input phase consists of the educators' demographic profile, which includes age, gender, highest educational attainment, years of teaching experience, professional position, participation in AI-related training or seminars, and access to digital tools and platforms. These variables function as baseline determinants of educators' readiness and capacity to integrate AI into instruction. Empirical evidence suggests that professional experience, prior exposure to AI-related training, and access to technological resources significantly influence teachers' levels of knowledge and confidence in using artificial intelligence for pedagogical purposes (Celik, 2023; Chiu & Chai, 2023).

The process phase comprises three interrelated components: knowledge, attitudes, and practices related to AI integration. Knowledge of AI refers to educators' understanding of AI concepts and tools, their ability to align AI applications with pedagogical objectives, and their awareness of ethical and responsible AI use. Teachers' knowledge is shaped by demographic factors, prior training, and exposure to AI technologies. Existing literature indicates that while educators often possess general awareness of AI, they frequently demonstrate limitations in technical application and ethical frameworks, highlighting the need for structured and sustained learning opportunities (Zawacki-Richter et al., 2019; Saharuddin et al., 2025).

Attitudes toward AI integration encompass educators' perceptions of AI's usefulness, openness to innovation, confidence in implementation, and ethical considerations. These attitudes are influenced by teachers' level of knowledge, prior experiences, and the degree of contextual and institutional support available. Research consistently shows that positive attitudes increase the likelihood of AI adoption in instructional settings, whereas concerns related to professional autonomy, transparency, and ethical risks may inhibit integration (Ostick et al., 2025; Chardonnens, 2025).

AI practices in teaching refer to the actual application of AI tools in instructional planning, teaching and learning, assessment and evaluation, research-related activities, and administrative or support functions. The framework illustrates that instructional practices are outcomes of educators' knowledge and attitudes, moderated by contextual conditions. Studies report uneven adoption of AI across teaching tasks, often attributed to limitations in training, infrastructure, and policy support (Holmes, Bialik, & Fadel, 2019).

Contextual factors, including institutional policies, availability of digital infrastructure, leadership support, and access to professional development opportunities, act as moderating variables within the framework. These factors influence the extent to which educators can translate AI knowledge and positive attitudes into consistent and meaningful instructional practices. Supportive environments enhance AI integration, whereas inadequate resources and unclear policies may constrain implementation.

The output phase represents the culmination of the input–process system: the development of a structured capacity-building program aimed at strengthening AI integration among educators. The design of this program is informed by identified gaps in educators' knowledge, attitudes, and practices. Specifically, the program seeks to (1) enhance AI knowledge by strengthening conceptual understanding, technical skills, and ethical awareness; (2) foster positive and informed attitudes by promoting confidence, openness to innovation, and ethical mindfulness; and (3) improve AI practices by facilitating practical, classroom-aligned application in instructional planning, teaching, assessment, research, and administrative roles.

Finally, the framework incorporates a feedback loop from educators' AI practices to the capacity-building program, emphasizing the importance of continuous monitoring and evaluation. This mechanism allows for iterative refinement of professional development initiatives, ensuring that the program remains responsive to evolving teacher needs, technological advancements, and institutional priorities.

METHODOLOGY

This section details the level of manifestation and the relationship between the level of manifestation of the educators' knowledge, attitude, and practices of educators in the integration of AI in the teaching process.

Research Design

This study adopted a descriptive-correlational research design to explore the relationships between educators' profiles and their knowledge, attitudes, and practices regarding the integration of Artificial Intelligence (AI) in teaching. The descriptive component provided a comprehensive profile of educators' readiness, while the correlational aspect tested the significance of associations between profile variables and knowledge, attitudes, and practices dimensions. This design was chosen because it allows for both the systematic description of current conditions and the statistical analysis of relationships without manipulating variables, thereby ensuring ecological validity in educational contexts.

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

Research Steps

The study followed a systematic process to ensure a comprehensive study. Beginning with the formulation of the research problem followed by compilation of research literature that are relevant to the research problem, providing strong foundation for understanding the study. Next is the development and content validation of the research instrument from technical experts and educational technology practitioners. A pilot test was conducted to for an improve tool and ensure trustworthy results. After securing necessary approvals, data were collected from the respondents from the external campuses of the Eastern Visayas state University. The data were analyzed using appropriate statistical tools, and interpreted to generate meaningful conclusions and recommendations.

Data Collection and Sample Selection

The study collected data primarily through a validated questionnaire adapted from the works of Robledo et al. (2023) and Serdenia et al. (2025). The research instrument consisted of two parts. Part I focused on the respondents' profiles, including variables such as teaching level, years of teaching experience, and exposure to AI-related tools or training. Part II, on the other hand, addressed the validation of educators' knowledge, attitudes, and practices toward AI integration. This section assessed respondents' understanding of AI concepts and applications, their perceptions and beliefs regarding the use of AI in teaching, and the extent to which they currently integrate or intend to integrate AI into their instructional practices.

Data Analysis Methods

The analysis of data was systematically aligned with the statement of the problems and employed appropriate descriptive and inferential statistical tools to ensure accurate interpretation of findings. The selected statistical treatments were based on the nature of the variables, level of measurement, and objectives of the study. Although the questionnaire employed a 4-point Likert scale based on agreement (1 – Strongly Disagree, 2 – Disagree, 3 – Agree, 4 – Strongly Agree), the interpretation of the results was expressed using descriptive levels (e.g., Very Low to Very High) to better represent the level of knowledge, attitude, and practices. This practice is commonly adopted in quantitative research, where Likert-scale responses are treated as interval data and translated into descriptive categories for clearer interpretation. In this study, "Strongly Disagree" corresponds to a "Very Low" level, while "Strongly Agree" corresponds to a "Very High" level, allowing the findings to reflect not just agreement but the degree to which the construct is manifested.

Statement of the Problem 1, on educator's profile frequency counts and percentages were utilized. This descriptive approach enabled the identification of prevailing characteristics of the study population and served as a basis for subsequent relational analyses. Statement of the Problems 2,3, and 4 on the levels of educators' knowledge, attitudes, and practices toward AI integration were analyzed using the weighted mean and standard deviation. The standard deviation assessed the variability of responses, while the weighted mean resolved the overall level of agreement or extent of manifestation of the identified variables. Kendall's tau-b correlation coefficient and Point-biserial correlation were employed to address the problems 5,6, and 7. Kendall's tau-b correlation coefficient for ordinal variables such as educational attainment, years of service, and professional rank, as it is appropriate for ranked data with possible tied observations. Point-biserial correlation was applied to dichotomous variables such as gender and participation in AI-related training to determine their association with continuous KAP scores. These non-parametric correlation analyses tests were engaged in the study to identify significant associations between educators' profiles and educators' readiness to integrate AI into the teaching process. All inferential analyses were tested at a 0.05 level of significance, and data processing was carried out using a standard statistical software package (e.g., SPSS). The combined use of descriptive and inferential statistics ensured a comprehensive examination of educators' profiles, their levels of knowledge, attitudes, and practices toward AI integration, and the relationships among these variables, thereby providing a sound empirical basis for the proposed capacity-building program.

Research Hypotheses and Validation

The study tested the following hypotheses in its null at 5% level of significance.

1. There is no significant relationship between the level of manifestation of the educators' knowledge in the integration of AI in the teaching process and their profile variables.
2. There is no significant relationship between the level of manifestation of the educators' attitude in the integration of AI in the teaching process and their profile variables
3. There is no significant relationship between the level of practice in the integration of AI in the teaching process and the profile variables.

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

To ensure the integrity, credibility, validity, and reliability of the instrument, it has undergone scrutiny of a panel of specialist comprises in education, research, and artificial intelligence, comprising educational technology specialists familiar with AI integration, systematically evaluating each item for clarity, relevance, and alignment with the study's main purpose.

This pool of experts imparted significant propositions to improve the survey instruments' clarity, relevance, and general structure. The validators' feedback was reviewed and incorporated into the final version of the survey questions. This process not only refined but also strengthened the instrument's quality, ensuring that it evokes accurate and meaningful responses from participants. Such expert-based validation is widely recognized as essential in enhancing instrument credibility and ensuring that collected data genuinely reflect the phenomenon under investigation, particularly in emerging fields like AI in education (Taherdoost, 2021).

Ethical Considerations

Ethical considerations were strictly followed by ensuring informed consent, voluntary participation, and confidentiality, with all data used solely for academic and capacity-building purposes. The study is limited by its reliance on self-reported data and its focus on selected campuses, which may influence the accuracy of responses and limit the generalizability of the findings as it was confined to educators from the external campuses of a single state university and does not conform to the results of other institutional contexts. Second, the use of self-reported measures may have introduced response bias, potentially affecting the accuracy of reported knowledge, attitudes, and practices. Third, the cross-sectional design provides a snapshot of educators' readiness for AI integration and does not capture changes over time in response to evolving technologies and professional development.

RESULTS AND DISCUSSION

This chapter presents, analyzes, and interprets the findings of the study on educators' knowledge, attitudes, and practices (KAP) regarding the integration of Artificial Intelligence (AI) in the teaching process. The data are organized according to the study's specific objectives and presented through tables, followed by concise yet meaningful discussions that highlight key patterns and insights. More than simply describing numerical results, this chapter seeks to bring the data to life—revealing how educators experience AI in real teaching contexts. The interpretation is anchored in existing literature and theoretical frameworks such as the KAP model, TPACK, and the Technology Acceptance Model, allowing the findings to be understood not only statistically but also pedagogically and contextually. Ultimately, this chapter provides the empirical foundation for identifying gaps, strengths, and opportunities that inform the proposed capacity-building program.

1. What is the profile of educators in Eastern Visayas State University in terms of
a. Age;
b. Gender;
c. Position;
d. Highest educational attainment;
e. Number of years in service as an educator;
f. Number of years of training or seminars related to AI; and
g. Average family monthly income?

Table 1. Profile of the Eastern Visayas State University Educators

Profile	Category	Frequency	Percent
Age	Below 25 years old	5	4.1
	25-34 years old	59	48.8
	35-44 years old	35	28.9
	45-54 years old	15	12.4
	55 years old and above	7	5.8
Gender	Male	60	49.6
	Female	50	41.3
	Transgender Female	1	0.8
	Prefer not to say	10	8.3
Position	Instructor I-III	88	72.7
	Assistant Professor I-IV	25	20.7
	Associate Professor I-V	6	5.0

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2

DOI: https://doi.org/10.66206/eduheart.2026.280

Highest Educational Attainment	Bachelor's Degree m	9	7.4
	With Master's Degree Units	40	33.1
	Master's Degree Graduate	36	29.8
	With Doctorate Degree Units	19	15.7
	Doctorate Degree Graduate	17	14.0
Number of years in service as an educator	1-3 years	41	33.9
	3-6 years	22	18.2
	7-10 years	24	19.8
	11-15 years	17	14.0
	16-20 years	9	7.4
	More than 20 years	8	6.6
Number of hours in training or seminars attended related to AI	1-5 hours	66	55.0
	6-10 hours	32	26.7
	11-20 hours	10	8.3
	21-40 hours	4	3.3
	More than 40 hours	8	6.7
Average family monthly income	10,001-20,000	13	10.7
	20,001-30,000	22	18.2
	30,001-40,000	58	47.9
	40,001-50,000	10	8.3
	50,001-75,000	8	6.6
	75,001-100,000	6	5.0
	100,001 and above	4	3.3

The profile of the respondents revealed a teaching workforce that was largely composed of early- to mid-career educators, creating a strong foundation for the integration of emerging technologies such as Artificial Intelligence (AI). Nearly half of the respondents were aged 25–34, followed by those in the 35–44 bracket, indicating that most educators were in a developmental stage characterized by professional growth, adaptability, and openness to innovation. This trend suggested a favorable environment for AI adoption, as younger and mid-career educators have been shown to demonstrate greater receptiveness and confidence in engaging with new technologies (Viberg et al., 2023; Özkan, R., 2025). Gender distribution appeared relatively balanced, reflecting inclusivity within the institution; however, consistent with existing literature, gender did not emerge as a defining factor in technology adoption, as engagement with AI is more strongly influenced by access to training and institutional support rather than demographic differences (Lérias et al., 2024).

In terms of professional characteristics, the majority of respondents held Instructor-level positions and had pursued graduate education, indicating both a developing academic career stage and a solid level of academic preparation. This combination suggested that while educators possessed the intellectual foundation and pedagogical readiness to adopt AI, they may still require structured guidance to translate knowledge into practice. Research has consistently shown that higher educational attainment fosters critical thinking, openness to innovation, and readiness to integrate technology into teaching (Chandra, Y., & Feng, N., 2026). Similarly, the distribution of teaching experience—where a significant proportion had only 1–3 years of service—reinforced the presence of a relatively young and evolving workforce. Studies have noted that early- and mid-career educators are often more experimental and proactive in adopting digital tools, positioning them as key drivers of instructional innovation. Empirical evidence suggests that teachers with less experience are more likely to integrate technology into their teaching practices compared to more experienced educators, reflecting greater openness to innovation and adaptability in instructional approaches (Su, M. et al., 2025)

Despite these strengths, the findings also revealed a critical gap in AI-related professional development. Most educators had participated in only a limited number of training hours, suggesting that their exposure to structured AI learning remained minimal. This lack of sustained training may constrain not only technical competence but also confidence and depth of pedagogical application. As highlighted in the literature, effective AI integration requires continuous and systematic professional development rather than sporadic exposure (Aravantinos et al., 2026). Additionally, the majority of respondents belonged to the moderate-income bracket, which may indirectly reflect varying levels of access to digital resources and professional opportunities. While income provided contextual insight, it was not a primary determinant of AI readiness; instead,

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

factors such as training, experience, and institutional support played a more significant role (Cruz-Cárdenas et al., 2019; Viberg et al., 2023).

Overall, the profile emphasized a compelling picture: educators were generally young, academically prepared, and open to innovation, yet not fully equipped with sufficient AI-specific training. This highlights a central insight of the study that readiness for AI integration is not limited by willingness or potential, but by the availability of structured support systems that can transform capacity into meaningful and sustained practice.

2. What is the level of manifestation of the educators' knowledge in the integration of AI in the teaching process, in terms of:

a. Conceptual Understanding;
b. Technical Skills;
c. Pedagogical Application;
d. Ethical and Responsible Use; and
f. Continuous Learning and Adaptability?

Table 2. Summary of the Level of Manifestation of Educators' Knowledge Toward AI Utilization

Knowledge	Mean	Description
A. Conceptual Understanding	2.87	High
B. Technical Skills	3.05	High
C. Pedagogical Application	3.08	High
D. Ethical and Responsible Use	2.98	High
E. Continuous Learning & Adaptability	3.09	High
Overall Mean	**2.99**	**High**

Legend: 1.00–1.50 – Very Low 1.51–2.50 – Low 2.51–3.50 – High 3.51–4.00 – Very High

Generally, the summarized domains across the Level of Manifestation of Educators' Knowledge Toward AI Utilization are classified as "High", with an overall mean of 2.99. With mean values varying from 2.87 to 3.09, Continuous Learning and Adaptability had the highest mean (M = 3.09, classified as "High"), followed by Pedagogical Application (M = 3.08). Conceptual Understanding had the lowest mean (M = 2.72), however remained interpreted as "High" range. The overall mean of 2.99 indicates that respondents typically exhibited a sufficient level of knowledge on the integration of AI into the teaching process.

3. What is the level of manifestation of the educators' attitude in the integration of AI in the teaching process, in terms of:

a. Openness to Innovation;
b. Perceived Usefulness;
c. Confidence and Readiness; and
d. Ethical Considerations?

Table 3. Summary of the Level of Manifestation of the Educators' attitude in the integration of AI in the teaching process

Attitudes	Mean	Description
A. Openness to Innovation	3.17	High
B. Perceived Usefulness	3.12	High
C. Confidence and Readiness	2.68	High
D. Ethical Considerations	2.76	High
Overall Mean	**2.92**	**High**

Legend: 1.00–1.50 – Very Low 1.51–2.50 – Low (L) 2.51–3.50 – High 3.51–4.00 – Very High

The level of manifestation of educators' attitude toward AI integration is shown in Table 3. All attitudinal domains were interpreted as "High". Openness to Innovation obtained the highest mean (M = 3.17), followed by Perceived Usefulness (M = 3.12). Ethical Considerations yielded a mean score of 2.76, while Confidence and Readiness recorded the lowest mean

EduHeart Knowledge Network
and Publishing, Inc.
EduHeart

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2

DOI: https://doi.org/10.66206/eduheart.2026.280

(M = 2.68). Educators exhibited a consistently positive attitude with an average (Mean = 2.92) toward AI presented in Table 3, particularly in terms of openness to innovation and perceived usefulness, while confidence and ethical concerns showed more cautious responses. This reflects a common paradox in AI adoption: teachers are willing and optimistic but not fully confident or assured in their use of AI.

4. What is the level of manifestation practice in the integration of AI in the teaching process, in terms of:

a. Instructional Planning;
b. Instructional Delivery;
c. Assessment and Evaluation;
d. Research and Professional Development; and
e. Administrative and Support Functions?

Table 4. Summary of the Level of Manifestation of Educators' Practices in AI Utilization

Practices	Mean	Description
A. Instructional Planning	3.12	High
B. Instructional Delivery	3.10	High
C. Assessment & Evaluation	2.94	High
D. Research & Professional Development	3.07	High
E. Administrative & Support	2.90	High
Overall Mean	**3.03**	**High**

Legend: 1.00–1.50 – Very Low 1.51–2.50 – Low 2.51–3.50 – High 3.51–4.00 – Very High

Table 4 presents the summary of the level of manifestation of educators' level of practice in integrating AI into the teaching process. Instructional Planning obtained the highest mean score (M = 3.12), followed by Instructional Delivery (M = 3.10). Research 7and Professional Development recorded a mean of 3.0. Lower mean scores were observed in Assessment and Evaluation (M = 2.94) and Administrative and Support Functions (M = 2.90). The overall mean of 3.03 indicates that educators moderately practiced AI integration across instructional and professional domains. The results indicated a high level of AI-related practices (Mean = 3.03), particularly in instructional planning and delivery, with slightly lower engagement in assessment and administrative applications. This suggested that educators were beginning to integrate AI into their teaching, primarily for efficiency and content support, but remained hesitant to apply it in more complex or high-stakes areas such as assessment. This pattern reflected existing studies showing that AI was often used for supportive tasks rather than deep pedagogical transformation (Holmes et al., 2019; Williamson & Eynon, 2020). The findings implied that while AI was present in practice, its use remained at an emerging and uneven stage.

5. Is there a significant relationship between the level of manifestation of the educators' knowledge in the integration of AI in the teaching process and their profile variables?

Table 5. Relationship Between the Educators' Profile and Their Level of Knowledge Regarding the Integration of AI In the Teaching Process

Profile		Educators' Level of Knowledge Regarding the Integration of AI In the Teaching Process					
		Conceptual Understanding	Technical Skills	Pedagogical Application	Ethical and Responsible Use	Continuous Learning & Adaptability	Overall Mean
Age[a]	τ_B	0.091	-0.054	-0.043	-0.004	-0.063	0.009
	Sig.	0.204	0.460	0.581	0.961	0.393	0.894
Gender[b]	r_{pb}	0.088	0.044	0.108	0.161	-0.023	0.091
	Sig.	0.358	0.650	0.260	0.093	0.811	0.343
Position[a]	τ_B	**.183***	-0.080	0.069	0.063	-0.017	0.092

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

	Sig.	**0.015**	0.295	0.390	0.410	0.821	0.214
Highest Educational Attainment	τ_B	0.074	0.010	0.044	-0.014	0.052	0.061
	Sig.	0.289	0.884	0.556	0.849	0.467	0.378
Number of years in service as an educator	τ_B	**.178****	0.029	0.101	0.036	0.023	0.118
	Sig.	**0.010**	0.682	0.171	0.609	0.751	0.081
Number of hours in training or seminars attended related to AI[a]	τ_B	0.134	**.175***	0.093	**.192****	**.188***	**.205****
	Sig.	0.063	**0.018**	0.233	**0.010**	**0.012**	**0.004**
Average family monthly income	τ_B	0.073	0.114	**.187***	0.043	0.088	0.076
	Sig.	0.298	0.111	**0.013**	0.549	0.224	0.268

[a]Kendall's tau-b [b]Biserial correlation
**Correlation is significant at the 0.01 level (2-tailed).*Correlation is significant at the 0.05 level (2-tailed).

Table 5 results reveal the relationship between the educators' profile and their level of knowledge regarding the integration of AI in the teaching process across five dimensions. The results revealed that most demographic variables, such as age, gender, highest educational attainment, and average family monthly income, show no significant relationship with the overall level of AI knowledge, as reflected by non-significant correlations ($p > 0.05$). However, position and number of years in service are significantly related to conceptual understanding, which indicates that teachers with higher positions and longer teaching experience tend to have better foundational knowledge of AI concepts. Moreover, the number of hours in AI-related training or seminars attended reveals the strongest and most consistent relationships, showing significant positive correlations with technical skills, ethical and responsible use, continuous learning and adaptability, and the overall mean. The result indicated that attendance at training/seminars plays an important role in enhancing teachers' competence in AI integration. Furthermore, the average family's monthly income is significantly associated only with pedagogical application.

6. Is there a significant relationship between the level of manifestation of the educators' attitude in the integration of AI in the teaching process and their profile variables?

Table 6. Relationship Between the Educators' Profile and Their Level of Attitude Toward the Integration of AI in the Teaching Process

Profile		Teachers' Attitude Toward the Integration of AI in the Teaching Process				
		Openness to Innovation	Perceived Usefulness	Confidence and Readiness	Ethical Considerations	Overall Mean
Age[a]	τ_B	-0.048	-0.026	-0.034	-0.100	-0.040
	Sig.	0.509	0.725	0.637	0.161	0.571
Gender[b]	r_{pb}	0.089	0.057	0.013	0.124	0.099
	Sig.	0.357	0.552	0.890	0.196	0.302
Position[a]	τ_B	0.015	-0.039	0.083	-0.055	0.011
	Sig.	0.847	0.607	0.270	0.458	0.879
Highest Educational Attainment[a]	τ_B	0.131	0.063	0.025	-0.046	0.054
	Sig.	0.067	0.380	0.719	0.511	0.436
	τ_B	0.071	**.139***	0.051	-0.115	0.070

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2

DOI: https://doi.org/10.66206/eduheart.2026.280

Number of years in service as an educator[a]	Sig.	0.314	**0.049**	0.468	0.094	0.301
Number of hours in training or seminars attended related to AI[a]	τ_B	**.162***	0.105	0.033	0.043	0.108
	Sig.	**0.029**	0.159	0.656	0.552	0.130
Average family monthly income	τ_B	0.118	**.168***	-0.007	-0.074	0.055
	Sig.	0.099	**0.019**	0.925	0.290	0.421

[a]Kendall's tau-b [b]Biserial correlation

**Correlation is significant at the 0.01 level (2-tailed).*Correlation is significant at the 0.05 level (2-tailed).

Results show that most demographic variables show no significant relationship with teachers' attitudes, as indicated by non-significant correlations between age, gender, position, and highest educational attainment with the overall mean. As shown in Table 6, revealing the relationship between the educators' profiles and their attitude toward the integration of AI in the teaching process across four dimensions. However, several significant associations were observed in selected attitude dimensions. The number of years in service as an educator is significantly related to perceived usefulness (τ_B = 0.139, p = 0.049), which indicates that more experienced teachers are more likely to appreciate the value of AI in teaching. Similarly, the number of hours in AI-related training or seminars attended shows a significant positive relationship with openness to innovation (τ_B = 0.162, p = 0.029), which indicates that greater exposure to AI training enhances teachers' willingness to adopt innovative technologies. In addition, average family monthly income is significantly associated with perceived usefulness (τ_B = 0.168, p = 0.019), which also implies that teachers with higher income levels tend to view AI as more beneficial for instruction.

7. Is there a significant relationship between the level of practice in the integration of AI in the teaching process and its profile variables?

Table 7. Relationship Between the Educators' Profile and Their Practices Toward the Integration of AI In the Teaching Process

Profile		Teachers' Attitude Toward the Integration of AI in the Teaching Process					
		Instructional Planning	Instructional Delivery	Assessment & Evaluation	Research & Professional Development	Administrative & Support	Overall Mean
Age[a]	τ_B	-0.041	-0.007	-0.032	0.005	-0.103	-0.051
	Sig.	0.582	0.929	0.660	0.942	0.163	0.471
Gender[b]	r_{pb}	**.152***	0.084	0.040	0.118	0.004	0.073
	Sig.	**0.037**	0.240	0.570	0.107	0.955	0.288
Position[a]	τ_B	-0.031	-0.043	-0.043	-0.070	-0.024	-0.036
	Sig.	0.696	0.575	0.573	0.374	0.762	0.628
Highest Educational Attainment	τ_B	0.064	0.021	-0.004	0.015	-0.051	0.020
	Sig.	0.381	0.774	0.957	0.839	0.479	0.773
Number of years in service as an educator	τ_B	0.077	0.044	0.058	0.037	-0.034	0.045
	Sig.	0.286	0.536	0.408	0.606	0.637	0.509
Number of hours in training or seminars	τ_B	0.138	**.163***	0.098	0.139	0.049	0.138
	Sig.	0.070	**0.029**	0.185	0.067	0.513	0.055

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

attended related to AI[a]							
Average family monthly income	τ_B	**.152***	0.084	0.040	0.118	0.004	0.073
	Sig.	**0.037**	0.240	0.570	0.107	0.955	0.288

[a]Kendall's tau-b [b]Biserial correlation
**Correlation is significant at the 0.01 level (2-tailed).*Correlation is significant at the 0.05 level (2-tailed).

As presented in Table 7, the relationship between the educators' profiles and their practices toward the integration of AI in the teaching process across six dimensions. In general, most demographic variables show no significant relationship with teachers' AI-related practices, as reflected by the non-significant correlations between age, position, highest educational attainment, number of years in service, and the overall mean. Meanwhile, gender shows a significant positive relationship with instructional planning ($r_{pb} = 0.152$, $p = 0.037$), which indicates that female teachers have a higher level of practice toward the integration of AI in the teaching process. In addition, the number of hours in AI-related training or seminars attended is significantly associated with instructional delivery ($\tau_B = 0.163$, $p = 0.029$), which indicates that greater exposure to professional development enhances teachers' ability to implement AI tools effectively during classroom instruction.

8. What capacity-building program may be proposed to enhance the knowledge, attitudes, and practices of educators in EVSU?

The proposed phased capacity-building program is grounded in the central finding of this study: while educators demonstrate positive attitudes and a generally high level of awareness of Artificial Intelligence (AI), their competence remains uneven and highly dependent on training and professional exposure. This reveals a critical gap—not of willingness, but of capacity. As such, the implementation of this program is both timely and necessary to bridge the divide between educators' readiness and their ability to meaningfully integrate AI into teaching practice. By adopting a structured, progressive approach, the program responds directly to identified needs, ensuring that interventions are not generic but targeted, evidence-based, and responsive to the realities of educators.

Phase	Key Findings Addressed	Focus Area / Module	Timeline	Specific Activities	Key Persons Responsible	Source of Funding	Expected Outcomes
Phase 1: Diagnostic & Awareness	High but uneven knowledge; misconceptions	AI Orientation & Baseline Assessment	Mo. 1	AI orientation seminar (AI capabilities & limitations) Baseline KAP survey AI misconceptions workshop Diagnostic assessment	Head, ICT Coordinator Research Unit, Program Heads	University Research & Extension Fund	Clear identification of competency gaps and training needs
Phase 2: Foundational & Conceptual Deepening	Misconceptions; uneven conceptual depth	AI Literacy & Critical Understanding	Mos. 2–3	Structured modules on AI concepts & limitations Case analysis of AI errors/bias Guided evaluation of AI outputs	AI Experts, Faculty Trainers	CHED Faculty Dev't Grants	Improved conceptual clarity and critical thinking skills

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2

DOI: https://doi.org/10.66206/eduheart.2026.280

Phase 3: Technical & Higher-Order Skill Development	Strong basic skills but weak higher-order competencies	Advanced Technical Skills	Mos. 4–5	Hands-on workshops (prompt engineering, troubleshooting) Problem-based AI tasks Innovation challenges	ICT Team, External Trainers	University Instructional Innovation Fund	Enhanced higher-order skills (analysis, evaluation, innovation)
Phase 4: Pedagogical Integration Lab	Strong readiness but limited independent design	AI in Teaching & Learning Design	Mos. 6–7	AI-assisted lesson design labs Peer teaching demonstrations Curriculum integration workshops	Instructional Designers, Master Teachers	Institutional Research Grants, NGO Partnerships	Independent and effective AI-integrated lesson delivery
Phase 5: Ethical, Policy & Governance Training	Ethical awareness is present but institutional gaps	Ethical & Responsible AI Use	Mo. 8	Data privacy & AI bias workshops Academic integrity training Development of institutional AI policy	Ethics Committee, Research Unit Legal Office	University ICT Infrastructure Budget	Institutionalized ethical AI practices and policies
Phase 6: AI in Assessment & Administration	Weak practices in assessment and administration	Assessment & Administrative Applications	Mos. 9–10	AI-based assessment design training Automated grading tools workshop AI for academic analytics & admin tasks	Registrar, Assessment Committee, ICT Office	Faculty Development Fund	Expanded AI application beyond instruction
Phase 7: Confidence & Mentorship Development	Positive attitude but low confidence	Confidence Building & Peer Support	Mo. 11	Mentorship program (AI champions) Peer coaching sessions Safe experimentation spaces	Senior Faculty, AI Champions	Faculty Development Fund	Increased confidence and willingness to innovate
Phase 8: Continuous Professional Development	Training as strongest predictor of competence	Lifelong Learning & Sustainability	Mo. 12 & Ongoing	Certification programs Communities of practice Continuous modular training	HRD Office, External Partners	External Grants (CHED, International Partners)	Sustained engagement and continuous skill development ment

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

Each phase of the program is intentionally designed to address specific gaps revealed in the findings. The initial diagnostic and awareness phase ensures that misconceptions are surfaced and addressed early, creating a comprehensive phase that focuses on learning. Subsequent phases focus on deepening conceptual understanding, strengthening technical and higher-order skills, and translating these into pedagogical practice. This progression reflects established frameworks such as the Knowledge–Attitude–Practice (KAP) model, which posits that knowledge serves as the foundation for shaping attitudes, while attitudes function as a driving force that ultimately translates into meaningful practice (Liang et al., 2025).The inclusion of ethical, policy, and governance training further ensures that AI integration is not only effective but also responsible and aligned with institutional values.

Moreover, the program recognizes that sustainable change in education requires more than one-time training. By incorporating mentorship, peer support, and continuous professional development, it fosters a culture of collaboration, reflection, and lifelong learning among educators. This is particularly important given that training emerged as the strongest predictor of AI competence in the study. Providing ongoing opportunities for engagement ensures that educators can continuously refine their skills, adapt to emerging technologies, and build confidence in their practice. In doing so, the program moves beyond short-term skill acquisition toward long-term institutional transformation.

Ultimately, the proposed program is established not only to address the current technological demands of the institutions but, to proactively shape the future of teaching and learning. It aligns with national and global priorities on digital transformation, innovation, and quality education, while empowering educators to use AI in ways that are pedagogically sound, ethically grounded, and contextually relevant.

SUMMARY

This study examines the profile of educators of the at Eastern Visayas State University external campuses and examines their level of manifestation in terms of knowledge, attitudes, and practices of Artificial Intelligence in teaching process. Further, it also explored relationship between the educators' profiles and their knowledge, attitude and practices toward the integration of AI in the teaching process, and advances the results to propose a capacity-building program. ChatGPT is the identified generative artificial intelligence (AI) referred to in this study. This AI tool was considered a representative example of generative AI technologies that support instructional planning, content creation, feedback generation, and other teaching-related tasks discussed in the study. This study is embedded in the Technological Pedagogical Content Knowledge Framework, developed by Mishra and Koehler (2006), Knowledge–Attitude–Practice (KAP) Model as suggested by Liang et al., (2025), Technology Acceptance Model (TAM) proposed by Davis (1989), and Diffusion of Innovations Theory developed by Rogers' (2003). The paradigm of the study is anchored in the Systems Theory approach, specifically utilizing the Input-Process-Output (IPO) model. Originally popularized by Ludwig von Bertalanffy (1968) and later adapted for educational and training research (Bushnell, 1990; Stufflebeam, 2003), the IPO model provides a systematic way to map how initial conditions, Inputs are transformed through specific actions (Processes) to yield measurable results (Outputs), (Paredes-Saavedra et al., 2024). A descriptive-correlational research design was used. Employing descriptive (mean and percentages) and inferential statistics (ANOVA, Kendall's tau-b correlation was used for ordinal variables, while point-biserial correlation was utilized for dichotomous variables. These statistical tests determined whether significant relationships existed between educators' profile characteristics and their levels of knowledge, attitudes, and practices. All analyses were conducted at a 0.05 level of significance. Ethical procedures were strictly observed during the conduct of the study. Data were collected using a content validated adapted research instrument from the works of Robledo et al. (2023) and Serdenia et al. (2025). Results solidify the advancement of a comprehensive capacity building program on AI integration among educators.

CONCLUSIONS

1. EVSU teachers generally have high AI knowledge, positive attitudes, and active AI practices, showing readiness to integrate AI in teaching.

2. Professional development and AI training are essential than static educators' profile for effective AI use.

3. Teachers actively use AI in teaching and research, but technical depth, assessment analytics, and ethical frameworks need improvement.
4. Experience and exposure improve understanding of AI and recognition of its value in teaching.

5. Access to resources affects how consistently teachers use AI.

DOI: https://doi.org/10.66206/eduheart.2026.280

6. There is a lack of formal institutional policies, ethical guidelines, and structured support for AI integration
7. Target training and institutional support over background characteristics.

8. A structured, institution-wide capacity-building program that strengthens educators' technical skills, ethical awareness, pedagogical integration, and continuous professional development to ensure effective, responsible, and sustainable use of AI in teaching is needed.

RECOMMENDATIONS

Grounded in the findings and conclusions of this study, the following recommendations are advances:
1. Create professional development programs that cover basic AI knowledge, classroom strategies, ethical use, and hands-on skills. Use real classroom scenarios so teachers can practice and gain confidence.
2. Establish university policies on AI use, ethics, and data privacy. Clear rules help teachers use AI consistently and responsibly
3. Ensure all teachers have reliable internet, devices, and access to AI platforms. Equal access helps teachers innovate, improve teaching, and reduce the digital gap.
4. Customize AI training for early-, mid-, and late-career teachers. Newer teachers may need more practical guidance, while senior staff can focus on advanced applications and leadership strategies.
5.Promote mentorship, team collaboration, and knowledge-sharing networks. Learning from peers strengthens skills and builds a culture of innovation.
6. Work with teacher education programs to include AI skills in pre-service training. This prepares new teachers to use AI effectively and responsibly from the start.
7. Set up systems to track teacher training, classroom AI use, and institutional support. Use data to make improvements and keep programs relevant to teachers' and students' needs.
8. Encourage research and continuous feedback on AI integration. This helps refine policies, training programs, and classroom practices to ensure AI is used effectively.

ACKNOWLEDGMENTS

I offer my most heartfelt gratitude to all the individuals and institutions whose generosity, wisdom, and understanding made this research journey both meaningful and possible. I am profoundly thankful to my academic mentors especially my adviser, Dr. Julio M. Cervantes for his unwavering support, patient mentorship, and insightful critiques that shaped this work into a comprehensive scholarly endeavor. My sincere appreciation also goes to Prof. Gerald F. Pagodpod, MEd, for his meticulous review and constructive recommendations that strengthened the study's methodology and presentation, and to Ma'am Mary Grace of the Pangasinan State University–Open University System for her consistent assistance and responsiveness. I am equally grateful to Professor Bob Roaring and the Statistics Office team for their invaluable guidance in navigating complex statistical aspects. My appreciation extends to the distinguished members of the Oral Examination Committee, led by Dr. Caren O. Ventayen, Chairperson, and Dr. Philip G. Queroda, along with Dr. Grace G. De Vera and Dr. Randy Joy M. Ventayen, whose expertise, critical insights, and commitment to academic rigor significantly enhanced the depth and relevance of this research.

I likewise extend my heartfelt gratitude to the Campus Directors of Eastern Visayas State University Dr. Oscar Erwin Ripalda, Dr. Maricel A. Gomez, Dr. Gerald A. Balanga, Dr. Sheldon Ives Agaton, and Dr. Renato E. Martija, for their trust and approval to conduct this study across their campuses, creating opportunities for this research to flourish. I am deeply appreciative of my expert validators for their scholarly insights and dedication to ensuring the study's rigor, as well as to the campus staff and educator-respondents whose cooperation and honest perspectives became the foundation of this work. To my EVSU Carigara Campus family, thank you for your encouragement and unwavering support throughout this journey. My deepest love and gratitude go to my ABORQUE-MEDINO family—Engr. Marlon, Engr. Rojen, Thirdy, Chloe, Cassy, Ate Joan, and Rienze—whose prayers, strength, and steadfast belief sustained me in every challenge. Above all, I humbly offer this achievement to God Almighty, to Jesus Christ, and to Mama Mary, whose grace, guidance, and providence carried me through every moment of doubt and triumph.

REFERENCES

Al-Fraihat, D., Joy, M., Masa'deh, R. E., & Sinclair, J. (2020). Evaluating E-learning systems success: An empirical study. *Computers in human behavior*, *102*, 67-86.

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2

DOI: https://doi.org/10.66206/eduheart.2026.280

Amemasor, S. K., Oppong, S. O., Ghansah, B., Benuwa, B. B., & Essel, D. D. (2025, May). A systematic review on the impact of teacher professional development on digital instructional integration and teaching practices. Frontiers in Education, 10, 1541031.

Aravantinos, S., Lavidas, K., Papadakis, S., Karalis, T., & Komis, V. (2026). Teachers' artificial intelligence practices, benefits, and challenges: A systematic literature review. Teacher Perspectives and Responsible Practice for Integrating AI in the Classroom, 345–394.

Asanre, A. A., Oguntola, J. I., Ramatea, M. A., & Lawani, A. O. (2026). Enhancing mathematics retention through seeing-AI. European Journal of STEM Education, 11(1), 18.

Bakhadirov, M., & Alasgarova, R. (2024). Factors Influencing Teachers' Use of Artificial Intelligence for Instructional Purposes. *IAFOR Journal of Education*, *12*(2), 9-32.Bergdahl, N., & Sjöberg, J. (2026). Transformation, support needs and AI in K-12 education. Education and Information Technologies, 31(1), 191–212.

Bergdahl, N., & Sjöberg, J. (2026). Transformation, support needs and AI, in K-12 education. *Education and Information Technologies*, *31*(1), 191-212.

Chandra, Y., & Feng, N. (2026). Mapping a decade of AI-driven transformation. Public Management Review, 28(3), 620–654.

Celik, I. (2023). Towards Intelligent-TPACK: An empirical study on teachers' professional knowledge to ethically integrate artificial intelligence (AI)-based tools into education. *Computers in human behavior*, *138*, 107468.

Chardonnens, S. (2025). Adapting educational practices for Generation Z. Frontiers in Education, 10, 1504726.

Chiu, T. K., & Chai, C. S. (2020). Sustainable curriculum planning for AI education. Sustainability, 12(14), 5568.

Commission on Higher Education. (2020). *CHED Memorandum Order No. 4, series of 2020: Guidelines on the implementation of flexible learning*. https://ched.gov.ph

Commission on Higher Education. (2017). *CHED Memorandum Order No. 15, series of 2017: Policies, standards, and guidelines for outcomes-based education (OBE) and typology-based quality assurance*. https://ched.gov.ph

Cruz-Cárdenas, J., Zabelina, E., Deyneka, O., Guadalupe-Lanas, J., & Velín-Fárez, M. (2019). Technology-based consumer behaviors. Technological Forecasting and Social Change, 149, 119768.

Cukurova, M., & Miao, F. (2024). AI competency framework for teachers. UNESCO Publishing.

Demissie, E. B., Labiso, T. O., & Thuo, M. W. (2022). Teachers' digital competencies. Social Sciences & Humanities Open, 6(1), 100355.

Dung, N. T. M., Hieu, P. N. V., Linh, N. T., Han, N. T. N., & Trong, H. (2024). Impact of generative AI on learning motivation. RTD Conference Proceedings, 362–382.

Elmourad, T., Hadjiphanis, L., Christofi, K., Chourides, P., & Kythreotis, A. (2026). AI Adoption in K–12 Education: A Model of Skills Transformation, Productivity, and Institutional Readiness. *Education Sciences*, *16*(2), 337.

Fakhri, M. F., & Pirmansyah, R. (2025). Educators' perceptions of AI and ChatGPT. Tekno-Pedagogi, 15(2), 144–158.

Ghimire, A., Imran, M. A. U., Biswas, B., Tiwari, A., & Saha, S. (2024). Behavioral intention to adopt artificial intelligence in educational institutions: A hybrid modeling approach. *Journal of Computer Science and Technology Studies*, *6*(3), 56-64.

Ghimire, A., & Edwards, J. (2024). Generative AI adoption in classroom in context of technology acceptance model (TAM) and the innovation diffusion theory (IDT). *arXiv preprint arXiv:2406.15360*.

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

Granström, M., & Oppi, P. (2025). Student engagement with AI tools. Frontiers in Education, 10, 1688092.

Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial intelligence in education. Center for Curriculum Redesign.

Howard, S. K., Tondeur, J., Siddiq, F., & Scherer, R. (2021). Teachers' readiness for online teaching. Technology, Pedagogy and Education, 30(1), 141–158.

Jin, Y., Yan, L., Echeverria, V., Gašević, D., & Martinez-Maldonado, R. (2025). Generative AI in higher education: A global perspective of institutional adoption policies and guidelines. *Computers and Education: Artificial Intelligence*, *8*, 100348.

Karpouzis, K., Pantazatos, D., Taouki, J., & Meli, K. (2024). Tailoring education with GenAI. IEEE EDUCON, 1–10.

Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., ... & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and individual differences*, *103*, 102274..

Liang, B., Wang, B., Liang, J., & Sun, X. (2025). Knowledge, attitude, and practice of healthcare professionals toward sarcopenia. *Scientific Reports*, *15*(1), 19826.

Lérias, E., Guerra, C., & Ferreira, P. (2024). AI literacy in higher education. Information, 15(4), 205.

Long, D., & Magerko, B. (2020, April). What is AI literacy? Competencies and design considerations. In *Proceedings of the 2020 CHI conference on human factors in computing systems* (pp. 1-16).

Makwana, D., Engineer, P., Dabhi, A., & Chudasama, H. (2023). Sampling methods in research: A review. *International Journal of Trend in Scientific Research and Development*, *7*(3), 762-768.

Marín Díaz, G., Galán Hernández, J. J., Gómez Medina, R., & Aijón Jiménez, J. A. (2024). Understanding AI adoption in education: A TAM perspective on students' and teachers' perceptions.

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers college record*, *108*(6), 1017-1054.

Mishra, P., Warr, M., & Islam, R. (2023). TPACK in the age of ChatGPT and Generative AI. *Journal of Digital Learning in Teacher Education*, *39*(4), 235-251.

Niess, M. L., & Gillow-Wiles, H. (2017). Expanding pedagogical reasoning. Australasian Journal of Educational Technology, 33(3).

Orr, G. (2003). Diffusion of innovations, by Everett Rogers (1995). *Retrieved January*, *21*, 2005.

Ostick, M., et al. (2025). Nursing education and AI. Nursing Education Perspectives, 46(2), E7–E11.

Owan, V. J., et al. (2023). AI tools in assessment. Eurasia Journal of Mathematics, Science and Technology Education, 19(8), em2307.

Özkan, R. (2025). Integrating AI into EFL classrooms (Master's thesis).

Paredes-Saavedra, M., Vallejos, M., Huancahuire-Vega, S., Morales-García, W. C., & Geraldo-Campos, L. A. (2024). Work team effectiveness. Administrative Sciences, 14(11), 280.

Peikos, G., & Stavrou, D. (2025). ChatGPT for science lesson planning. Education Sciences, 15(3), 338.

Robledo, D. A. R., Zara, C. G., Montalbo, S. M., Gayeta, N. E., Gonzales, A. L., Escarez, M. G. A., & Maalihan, E. D. (2023). Development and validation of a survey instrument on knowledge, attitude, and practices (KAP) regarding the

Asian Research Journal of Education, 2026
E-ISSN: 3028-0842
P-ISSN: 3028-0834
Vol. 3 No. 2
DOI: https://doi.org/10.66206/eduheart.2026.280

educational use of ChatGPT among preservice teachers in the Philippines. *International Journal of Information and Education Technology*, *13*(10), 1582-1590.

Robinos, J. R., Casyao, I. M., Combis, H., Melgar, S. M., Sora, L., & Austria, M. G. (2024). Examining attitudes and perceived usefulness of AI integration in teaching and learning processes. *Journal of Interdisciplinary Perspectives*, *2*(12), 619-626.

Saharuddin, M. H., Nasir, M. K. M., & Mahmud, M. S. (2025). Teachers' TPACK in AI. International Journal of Learning, Teaching and Educational Research, 24(1), 136–151.

Serdenia, J. R. C., Dumagay, A. H., Balasa, K. A., Capacio, E. A., & Lauzon, L. D. S. (2025). Attitude, acceptability, and perceived effectiveness of artificial intelligence in education: A quantitative cross-sectional study among future teachers. *LatIA*, (3), 313.

Singh, S., & Strzelecki, A. (2026). Academics as adopters of generative AI: An application of diffusion of innovations theory. *Education and Information Technologies*, *31*(2), 621-645.

Spyros, A., et al. (2025). AI-based cyber threat intelligence. IEEE Access, 13, 20820–20846.

Su, M., Wijaya, T. T., Miricic, M., Anđić, B., & Lavicza, Z. (2025). AI dependency among teachers. Interactive Learning Environments.

Tabuena, A. C., & Tabuena, Y. M. H. (2025). AI-driven software in education. International Journal of Education, 8(1), 107–120.

Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *How to choose a sampling technique for research (April 10, 2016)*.

Taheri Hosseinkhani, N. (2025). The Productivity Effects of Artificial Intelligence: A Comparative Analysis of a New General-Purpose Technology and its Transfer. *Available at SSRN 5361047*.

Viberg, O., Cukurova, M., Feldman-Maggor, Y., Alexandron, G., Shirai, S., Kanemune, S., ... & Kizilcec, R. F. (2023). Teachers' trust and perceptions of AI in education: The role of culture and AI self-efficacy in six countries. *CoRR*.

Williamson, B., & Eynon, R. (2020). AI in education. Learning, Media and Technology, 45(3), 223–235.

Zaman, S. U., Ali, S. S., Alam, S. H., & Kamal, M. H. (2025). Assessing Student's Behavioral Intentions Towards AI Based Learning Tools. *Journal of Asian Development Studies*, *14*(1), 656-672.

Zhai, X. (2023). ChatGPT for teaching and learning: A review of opportunities and challenges. *Education and Information Technologies, 28*(12), 15345–15369. https://doi.org/10.1007/s10639-023-11709-7

Zhao, J., Li, S., & Zhang, J. (2025). Understanding teachers' adoption of AI technologies: An empirical study from Chinese middle schools. *Systems*, *13*(4), 302.

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education—Where are the educators? *International Journal of Educational Technology in Higher Education, 16*(1), 39. https://doi.org/10.1186/s41239-019-0171-0