

Assessing the Use of Artificial Intelligence in the Classroom: Teachers Perspective

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ABSTRACT. The purpose of this research was to examine the perspectives of teachers on the integration related to artificial intelligence (AI) within classroom instruction in the Patikul West District, under the jurisdiction of the Division of Sulu. A quantitative-descriptive research method was employed to gather relevant insights. The participants included 100 public elementary school teachers, purposefully selected to represent a broad spectrum of teaching experiences and viewpoints within the district. Data were collected using an adapted survey questionnaire structured into comprised two sections. The initial section gathered participants' background details, while the second evaluated respondents' opinions about the use related to the application of AI in education. This section was further divided into three thematic areas: AI awareness, perceived benefits, and potential classroom applications, each comprising ten items. For data analysis, the data were analyzed using frequencies and percentages to the first research question. The second question was addressed using weighted mean and standard deviation. Independent t-tests and one-way ANOVA were employed to applied for the third question, as well as Pearson's correlation analysis to explore potential correlations for the fourth. The findings revealed that most participants ranged in age from 26 to 35 years, with a majority being female and degree holders. Many participants also reported having five or fewer years of teaching experience. Overall, respondents acknowledged the importance of understanding AI and recognized its positive impact and possibilities in educational settings. Regardless of age differences, teachers generally demonstrated consistent perceptions across all AI-related aspects. A strong positive correlation was found between their knowledge of AI and their views on its advantages.

KEYWORDS: *Promoting, Literacy, Development, Elementary Years*

ARTICLE DETAILS

JEAS-00049; Received: March 24, 2025; Accepted: April 07, 2025; Published Online: May 01, 2025

CITATION:

Paie, Desdimona A. (2025). *Assessing the Use of Artificial Intelligence in the Classroom: Teachers Perspective*. *Journal of Education and Academic Settings*. DOI: 10.62596/c3b8zj70

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Introduction

Artificial Intelligence (AI) is the ability of machines to mimic human cognitive processes such as decision-making, translation, and speech recognition through the rapid analysis of large data sets (Coursera Staff, 2024). In the realm of education, AI is transforming traditional teaching practices by enhancing student learning outcomes and easing the burden of administrative tasks (Luckin et al., 2016) emphasized, but the successful integration of AI technologies in classrooms is largely dependent on how receptive and prepared teachers are to embrace such advancements (Zawacki-Richter et al., 2019). Educators' willingness and capacity to adopt AI tools is essential to driving student success, thereby highlighting the importance of focused training and continuous

support in addressing teacher concerns (Ertmer and Ottenbreit-Leftwich, 2010; Baker (et al., 2020). The concept of understanding the cultural, institutional, and technological factors that influence teachers' attitudes is especially crucial in multifaceted environments like the Philippines (García-Peñalvo et al., 2020). In areas such as the BARMM (Bangsamoro Autonomous Region in Muslim Mindanao), gaining insight into educators' viewpoints is critical to achieving sustainable and effective AI integration. While AI technologies hold the potential to tailor instruction, automate administrative duties, and support data-informed teaching practices (Holmes et al., 2019; Luckin et al., 2016), challenges such as resource disparity remain significant obstacles. Teachers' perceptions and attitudes are central to successful technology implementation (Ertmer, 2016). Moreover, ethical issues ranging from data privacy to transparency of AI algorithms further complicate their application in academic contexts (Chavez, Cuilan, Mannan, et al. (2024).

In BARMM, perspectives on artificial intelligence are marked by both enthusiasm and apprehension. While many teachers recognize the capacity of AI to elevate learning outcomes, they also express concern over its impact on traditional pedagogical practices and ethical standards. A recent study noted that 55% of educators viewed AI positively in terms of improving learning, yet remained cautious about issues such as academic dishonesty and reduced personal interaction between teachers and students (Dwight Maxwell, 2024). These concerns mirror broader anxieties regarding the integrity of learning in increasingly AI-dependent environments (Chavez, 2023). Although AI could play a key role in delivering quality education to remote communities, its effectiveness hinges on providing educators with both the technical competencies and ethical frameworks required for its responsible use. Notably, the Bangsamoro Education Code advocates for the use of technology to promote inclusivity and broader educational access (Ministry of Basic, Higher and Technical Education Bangsamoro, 2022).

This research seeks to offers understanding that can inform the creation of practical guidelines and implementation strategies by examining the perspectives of teachers toward AI (Lauraine Langreo, 2023). Creating platforms for ongoing dialogue with educators is crucial in addressing hesitations and fostering greater acceptance of AI in schools. Discussions about AI also bring to light the issue of algorithmic bias, which, if left unchecked, may reinforce existing inequalities in education (Chavez, Lamorinas, & Ceneciro, 2023). Additionally, AI-driven learning platforms have shown potential in addressing challenges such as student disengagement and mathematics-related anxiety (Inoferio et al., 2024).

Given the complex roles rural teachers often play managing both instructional and administrative duties it is essential to ensure they are well-equipped for AI integration (Dagoy, Ariban, Chavez, et al., 2024). This research investigates the extent of rural educators' awareness, recognized advantages and difficulties associated with AI use. The findings aim to support education stakeholders in crafting strategies that empower rural teachers and ensure the fair and productive implementation of AI in the Philippine education system.

Research Questions

The objective of this study was to identify the perception of teachers on the use of artificial intelligence in the classroom at Patikul West District, Division of Sulu.

This specifically aimed to respond to the following research questions:

1. What is the demographic profile of teachers-respondents at Patikul West District, Division of Sulu in terms of:

1.1 Age;

1.2 Gender;

- 1.3 Educational Attainment; and
- 1.4 Length of service?
2. What is the extent of the use of artificial intelligence in the classroom as perceived by public school teachers at Patikul West District, Division of Sulu in the context of:
 - 2.1 Knowledge on the use of AI;
 - 2.2 Advantages of AI; and
 - 2.3 Opportunities?
3. Is there a significant difference on the use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District, Division of Sulu when data are grouped according to demographic profile in terms of;
 - 3.1 Age;
 - 3.2 Gender;
 - 3.3 Educational Attainment; and
 - 3.4 Length of service?
4. Is there a significant correlation among the subcategories subsumed under the teachers' perspective on the use of artificial intelligence in the classroom?

Foreign Literature and Studies

Introduction to Artificial Intelligence (AI). In the educational sector refers to the implementation of smart computer systems to execute functions that would normally need human cognitive abilities, including personalized instruction, data analysis, and performance assessment (Dr. Rashmi, 2023; Karakose et al., 2023) highlighted that the increasing integration of AI has reshaped teaching roles and practices, prompting researchers to explore educators' perceptions and adaptation to this technological shift (Athanassopoulos et al., 2023).

Applications regarding the application of AI in educational settings. Early uses of artificial intelligence in educational settings include intelligent tutoring systems that provide real-time, individualized feedback to students based on performance data (Lee, 2018). These tools enable educators to identify learning gaps and tailor interventions accordingly. AI also facilitates personalized learning by analyzing student data to customize pacing and content, overcoming the challenges associated with standard, generalized methods instruction models (Lee & Qiufan, 2021; Kim & Kim, 2022). Furthermore, AI is used to streamline administrative activities like assessing student work, monitoring attendance, and reporting (Russell, 2019; Chen et al., 2020), enhancing instructional time and efficiency.

Global Efforts and AI Integration. Governments worldwide have recognized AI's educational potential. Germany and Turkey have national AI initiatives in education (Lindner & Romeike, 2019), while the U.S. Department of Education promotes equitable access to AI learning opportunities (Cardona et al., 2023). The global pandemic of COVID-19 expedited AI adoption, highlighting the urgency for digital solutions in remote and hybrid learning contexts (Mosher et al., 2024).

Challenges and Ethical Considerations. Despite these advancements, challenges persist. Teachers often lack sufficient AI training and express concerns over ethical implications, data privacy, and shifting instructional roles (Kim & Kim, 2022; Chounta et al., 2022). Educators see AI as both an opportunity and a disruption—capable of enhancing multilingual access and personalized learning, yet potentially altering teacher-student dynamics. Studies show that while AI-based apps improve student retention and engagement, teacher support and understanding remain essential for success according to (Holmes et al. 2019; Chen et al., 2020).

Overall, AI offers transformative benefits, from personalized learning to improved administrative efficiency. However, realizing its full potential requires ongoing professional development, ethical safeguards, and inclusive access to ensure its effective and equitable implementation in education.

Local Literature and Studies

Introduction to AI in Philippine Education. Within the framework of the Philippines' shifting educational landscape, artificial intelligence (AI) is becoming a significant factor in improving educational practices and student development experiences. The research titled *Artificial Intelligence in the Philippine Educational Context: Reflection and Future Directions* highlights the necessity for thoughtful consideration when implementing AI integration in the classroom. It stresses the importance of evaluating both the benefits and challenges, including moral considerations, data protection concerns, and the gap in digital access that may hinder equitable access to new technologies (Estrellado & Miranda, 2023).

Teacher Adaptation and Digital Literacy. Building on this, the research *Exploring the Digital Teaching and Learning Practices of Filipino Public High School Teachers during the COVID-19 Crisis* explores how public high school teachers adapted to emergency remote teaching. The study uncovers significant challenges such as limited access to materials and varying levels of digital literacy. Despite these issues, teachers showed resilience and creativity by using various digital platforms to engage students effectively. The research highlights the significance of cooperation and professional development through Learning Action Cell sessions, where educators can share best practices and enhance their digital skills (Javier, 2021).

Challenges and Opportunities in Technology Integration. In a broader context, modern technologies, including AI, offer the potential for more engaging as well as participatory learning experiences, which has the potential to boost students' knowledge and skill development. However, challenges such as unequal access to technology and the need for teacher training remain prevalent. These issues call for strategic planning and ongoing research to cultivate frameworks which enhance the educational advantages of technology (Dublar, 2023).

AI Integration in Mathematics Education. Moreover, the study *Investigating the Possibilities of AI Integration in Mathematics Education for Generation Alpha* investigates AI's influence on tailoring educational experiences for younger generations. The study suggests that adaptive learning systems and intelligent tutoring can offer promising solutions, but issues like access inequities and the need for teacher preparedness must be addressed for AI to achieve its full potential in education (Melchor et al., 2023).

AI's Role in Teacher Development. Several studies further explore AI's implications for educators and their professional development. *Teacher-AI Collaboration in Education* (Kim, 2023) examines how teachers can interact with AI systems to enhance educational innovation, focusing on curriculum needs and teacher-AI dynamics. *Opportunities and Difficulties of AI for Educators* (Celik et al., 2022) reviews the application of AI in educational settings, highlighting both its potential and the obstacles that educators face in integrating AI into their instructional methods. Similarly, *Mapping Academic Perspectives on AI in Education* (Yu et al., 2024) uses advanced data analysis to identify key academic themes, such as the importance of ethical concerns, teacher training, and AI's impact on educational inequalities.

AI in Teacher Professional Growth. Additionally, studies such as *The Impact of AI on Teacher Professional Growth* (Al-Zyoud, 2020) and *The Evolution, Current Trends, and Future Directions Use pertaining to AI in Teacher Education* (Mosher et al., 2024) explore AI's

potential to support teacher development. The research indicates that AI has the potential to provide significant applications in professional growth and advocate for AI-centered educational software and training programs to improve teacher effectiveness.

AI in Higher Education. Within the realm of higher education, studies including studies like Assessing AI Readiness and Use in the Philippine Higher Education System (Asirit & Hua, 2023) reveal that AI awareness and readiness are critical for educators. This study highlights the significance of preparing teachers with the essential knowledge and skills to harness AI's potential in higher education. Meanwhile, Artificial Intelligence Technology Management of Teachers (Umali, 2024) looks at AI's role in motivating students and enhancing teaching practices in private schools.

AI Applications in Teaching and Learning. Other studies focus on specific AI applications. Examining the Perspectives of Students and Teachers on ChatGPT in Higher Education (Espartinez, 2024) investigates how students and professors perceive the use of ChatGPT, while Automated Writing Systems and Issues of Academic Integrity (Gustilo et al., 2024) addresses the relationship between AI-driven writing tools and academic integrity. Lastly, AI Technology Integration and Oversight in the Philippines (Concepcion et al., 2019) examines AI's potential to transform various sectors, including education, and the need for careful governance and regulation to guarantee its efficient and ethical use.

Teacher Workload and Adoption of AI Tools. The study Examining Teachers' Professional Integrity and Interests Among Those with Multiple Administrative Responsibilities (Dagoy et al., 2024) offers insights into the teacher workload and its relation to adopting new tools like AI. Understanding these pressures is critical when considering how AI can fit into an already overburdened teaching environment and how to better support teachers in managing this integration.

Cultural and Ethical Considerations in AI Integration. In addition, the study Examining Same-Sex Relationships Through the Lens of Religious and Social Beliefs: A Discourse Analysis (Chavez & Ceneciro, 2024) contextualizes ethical and cultural tensions in the use of classroom technologies. This provides a broader understanding of how AI could be perceived through different societal lenses, making it crucial to ensure AI systems in classrooms are sensitive to diverse cultural and religious backgrounds.

Similarly, the study Exploring the Use of Swear Words in MLBB by Filipino Online Players: A Qualitative Approach (Cabiles et al., 2025) sheds light on youth-tech interaction and offers insights into how AI tools might impact classroom behavior and ethics, particularly in managing digital communication and interaction.

Moreover, An Analysis of Inclusive Classroom Implementation: Teachers' Perceptions of Compliance and Barriers in Selected Public Schools (Leon et al., 2024) highlights educators' adaptability to new frameworks, such as the implementation of AI in inclusive classrooms. This is necessary for understanding how AI can be incorporated into diverse classroom settings while ensuring all students, regardless of their learning needs, benefit from these innovations.

Lastly, Exploring Halal Compliance in Food and Accommodation Enterprises in the Zamboanga Peninsula, Philippines (Chavez & Vicente, 2024) focuses on cultural sensitivity, an important aspect when considering AI's integration into classrooms, particularly in regions like the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), an area characterized by cultural and religious values play a significant contribution to shaping educational practices.

The Prospects of AI in Philippine Education. These studies collectively offer a holistic perspective on the potential of AI in Philippine education, focusing on the advantages and

difficulties tied to its implementation. By fostering collaboration, providing professional development for teachers, and addressing inequities in access, the Philippines can better harness AI to improve educational outcomes for all students.

Methodology

This study employed a structured and theoretical approach to analyzing the methodologies relevant to the chosen field. It focused on the examination of theories, methods, and foundational principles that underpin a specific area of knowledge. The methodological framework incorporated elements such as paradigms, theoretical models, research phases, and quantitative strategies. Specifically, the research methodology included essential components such as research design, target respondents, research setting, data-gathering instrument, validation and reliability testing, procedural steps, and statistical data analysis techniques.

1. Research Design

A study framework serves as an organized blueprint outlining the steps and strategies for conducting a study, including the approaches for gathering and analyzing data. Specifically, qualitative research design is a research approach that emphasizes providing an in-depth portrayal of a population, event, or situation without altering any variables. This approach aims to describe characteristics, behaviors, or conditions as they naturally occur, often employing tools such as surveys, observations, or existing data (Creswell, 2015). In this study, a quantitative-descriptive research design was implemented. The primary objective was to identify how a specific group of individuals would think, behave, or feel in response to certain conditions. This design was chosen to quantify and analyze the problem as presented by the respondents.

2. Research Locale and Respondents

The research was conducted across several primary schools situated in the Patikul West District, located in Patikul, Sulu. The selected schools for the study include Kasulutan Elementary School, Gandasuli Elementary School, Kadday Mampallam Elementary School, Tandu Bagua Elementary School, Igasan Elementary School, Patikul Higad Elementary School, Kan-ague Elementary School, Datu Uddin Bahjin Central Elementary School (DUBCES), and Tanum Elementary School. These schools were specifically chosen for the study because they represent a comprehensive and accurate sample of the district's educational setting.

The individuals participating in this study were public elementary school teachers from the Patikul West District in the Division of Sulu. A total of one hundred (100) teachers were deliberately selected from the district's public elementary schools using purposive sampling. This method was chosen to guarantee a representative sample of teachers, capturing a broad range of perspectives and experiences within the district.

Distribution of Respondents According to School at Patikul West District		
No.	Names of Schools at Patikul West District, Division of Sulu	Number of Teacher-Respondents
1	Kasulutan Elementary School	20
2	Gandasuli Elementary School	18
3	Kadday Mampallam Elementary School	8
4	Tanum Elementary School	8
5	Igasan Elementary School	14
6	Kan-ague Elementary School	4

7	Datu Uddin Bahjin Central Elementary School (DUBCES)	20
8	Patikul Higad Elementary School	8
		Total:100

3. *Sampling Design*

Purposive sampling, sometimes referred to as judgmental sampling or non-probability sampling, was employed in this study. This technique requires selecting participants based on particular characteristics or criteria relevant to the research topic. It is particularly useful when the population is too heterogeneous for random sampling to be effective, or when the researcher aims to gather detailed insights from a particular subgroup (Etikan, Musa, & Alkassim, 2016).

4. *Research Instrument*

A modified survey questionnaire was utilized for this study, with items adapted from the works of Ismail Celik (2022) and Mustafa Senel (2024). The objective of the survey was to gather data on public elementary school teachers' views related to the implementation of artificial intelligence in classroom settings. The questionnaire was organized into two sections. The first section focused on collecting demographic information about the respondents, including variables such as age, gender, educational background, and years of service. The second section explored the teachers' perspectives on AI usage in the classroom, specifically examining their knowledge of AI, the perceived advantages, and the potential opportunities it offers. Each of these categories contained ten statement items.

5. *Data Gathering Procedure*

To collect the necessary data, the researcher began by seeking approval to distribute the questionnaire from the Dean of the School of Graduate Studies. A formal letter was then sent to the district supervisor or superintendent, as well as to the school principal, to facilitate the selection of respondents from nine public elementary schools for the 2024–2025 academic year. The researcher personally distributed and retrieved the completed questionnaires, and she was also responsible for organizing and analyzing the responses to derive meaningful conclusions.

6. *Statistical Treatment of Data*

The gathered data were organized, categorized, and evaluated through appropriate statistical methods to generate the foundational empirical evidence for this study.

Problem 1: To assess the demographic characteristics of the teachers in terms of age, gender, educational background, and years of service, frequency and percentage were applied as the primary statistical techniques.

Problem 2: To evaluate the teachers' perceptions of artificial intelligence in the classroom, the weighted mean and standard deviation were utilized to determine the overall perception levels of public school teachers in the Patikul West District.

Problem 3: A t-test and One-way Analysis of Variance (ANOVA) were used to identify significant differences in perceptions regarding AI in the classroom based on demographic variables. The t-test was employed for gender differences, while One-way ANOVA was used to analyze the impact of age, educational level, and years of service.

Problem 4: Pearson's Product-Moment Correlation was applied to investigate the relationships between various subcategories of the teachers' perspectives on AI usage in the classroom, including their knowledge of AI, perceived advantages, and potential opportunities.

The scale below was adapted in the analysis of the result of computations obtain from the use of descriptive and inferential statistical tools:

Point	Scale Value	Descriptors
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5	4.50- 5.00	Strongly Agree
4	3.50- 4.49	Agree
3	2.50- 3.49	Moderately Agree
2	1.50- 2.49	Disagree
1	1.00- 1.49	Strongly Disagree

Results

This chapter provides an outline of the presentation, analysis, and understanding of the data collected for this study. It examines the extent to which public school teachers in the Patikul West District, Division of Sulu, perceive the integration of artificial intelligence into classroom settings. The chapter also highlights the demographic profiles of the teacher respondents, including age, gender, educational level, and years of service. Furthermore, it explores the extent of AI utilization in the classroom and identifies any significant correlations and differences within these categories when the data are organized by the participants' background information characteristics.

The following provides the presentations, examinations, and interpretation of results derived from the appropriate scoring and statistical analysis of the data collected for this study, corresponding to each research question:

1. What is the demographic profile of teacher-respondents in terms of 1.1 Age, 1.2 Gender, 1.3 Educational attainment and 1.4 Length of Service?

1.1 In terms of Age

Table 1.1 the demographic characteristics of the teacher respondents, categorized by age, is presented in the table. Among the 100 teacher respondents, 13 (13.0%) are 25 years old or younger, 34 (34.0%) fall within the 26-35 age range, 30 (30.0%) are between 36-45 years old, 15 (15.0%) are in the 46-55 age group, and 8 (8.0%) are aged 56 and above. The findings indicate that the majority of teachers in the Patikul West District are between 26 and 35 years old, suggesting that most respondents belong to the younger and middle-aged categories in this study.

Table 1.1 Demographic profile of teacher-respondents from Patikul West District in terms of age.

Age	Number of respondents	Percent
25 years old and below	13	13.0%
26-35 years old	34	34.0%
36-45 years old	30	30.0%
46-55 years old	15	15.0%
56 years old and above	8	8.0%
Total	100	100%

1.2 In terms of Gender

Table 1.2 the demographic profile of teacher respondents by gender is presented in the table. Of the 100 teacher respondents, 16 (16.0%) are male, and 84 (84.0%) are female. These results suggest that a significant majority of the teacher respondents from Patikul West District are female, indicating a predominant representation of women among the respondents in this study.

Table 1.2 Demographic profile of teacher-respondents from Patikul West District in terms in terms of gender.

Gender	Number of respondents	Percent
Male	16	16.0%
Female	84	84.0%
Total	100	100%

1.3 In terms of Educational Attainment

Table 1.3 the table presents the demographic characteristics of teacher participants based on their educational qualifications. Among the 100 teacher respondents, 86 (86.0%) have earned a bachelor's degree, 13 (13.0%) have a master's degree, and 1 (1.0%) has a doctorate degree. The findings indicate that the majority of the teacher respondents possess a bachelor's degree, suggesting that while most have met the basic qualification requirements for teaching, only a few have pursued advanced graduate studies.

Table 1.3 Demographic profile of teacher-respondents from Patikul West District in terms of educational attainment.

Educational attainment	Number of respondents	Percent
Bachelor's degree	86	86.0%
Master's degree	13	13.0%
Doctorate degree	1	1.0%
Total	100	100%

1.4 In terms of Length of Service

Table 1.4 the table illustrates the demographic background of teacher participants based on their years of teaching experience 100 teacher respondents, 38 (38.0%) have 5 years or less of teaching experience, 24 (24.0%) have 6 to 10 years, 13 (13.0%) have 11 to 15 years, 10 (10.0%) have 16 to 20 years, 7 (7.0%) have 21 to 25 years, and 8 (8.0%) have 26 or more years. The findings show that a considerable proportion of the respondents have 5 years or fewer years of teaching experience. This suggests that the majority of educators in Patikul West District are relatively new to the teaching profession.

Table 1.4 Demographic profile of teacher-respondents from Patikul West District in terms of length of service.

Length of Service	Number of respondents	Percent
5 years and below	38	38.0%
6-10 years	24	24.0%
11-15 years	13	13.0%
16-20 years	10	10.0%
21-25 years	7	7.0%
26 years and above	8	8.0%
Total	100	100%

2. What is the extent of the integration of artificial intelligence into classroom learning as perceived by public school teachers at Patikul West District, Division of Sulu in the context of:

2.1 Knowledge on the use of AI, 2.2 Advantages of AI and 2.3 Opportunities?

2.1 In the context of Knowledge on the use of AI

Table 2.1 The table illustrates the extent to which public elementary school teachers at Patikul West District perceive their knowledge regarding the application of artificial intelligence (AI) in educational settings. In this category, the total computed weighted average was 3.67, with a standard deviation of 0.62685, indicating a rating of "Agree." These results imply that the teaching staff in the study recognize the significance of gaining knowledge about AI and its use in the classroom. The weighted mean score of 3.67 implies that most of the respondents are familiar with AI and its educational applications. The variability of 0.62685, however, reveals a

moderate variation in responses, indicating that while the majority of teachers are confident in their AI knowledge, some may have limited exposure or understanding of AI tools. Notably, teacher-respondents rated the following items as “Agree”: “I have sufficient knowledge to use AI-based tools.”, “I know how to initialize a task for AI-based technologies by text or speech”, “I am aware of various AI-based tools which are used by professionals in my teaching field.”, “In teaching my field, I know how to use different AI-based tools for personalized learning.” and “I have the knowledge to select AI-based tools to sustain students’ motivation.”. Table 2.1 Extent of application of artificial intelligence in educational settings as perceived by public school elementary teachers at Patikul West District in the context of Knowledge on the use of AI.

	Statements	Mean	S.D	Rating
1	I know how to interact with AI-based tools in daily life.	3.72	.712	Agree
2	I have sufficient knowledge to use AI-based tools.	3.62	.776	Agree
3	I know how to initialize a task for AI-based technologies by text or speech.	3.66	.768	Agree
4	I have sufficient knowledge to use AI-based tools.	3.61	.815	Agree
5	I can understand the pedagogical contribution of AI-based tools to my teaching field.	3.61	.777	Agree
6	I know how to use AI-based tools to monitor students’ learning.	3.70	.718	Agree
7	I have the knowledge to select AI-based tools to sustain students’ motivation.	3.56	.770	Agree
8	I can use AI-based tools to search for educational material in my teaching field.	3.93	.782	Agree
9	I am aware of various AI-based tools which are used by professionals in my teaching field.	3.68	.680	Agree
10	In teaching my field, I know how to use different AI-based tools for personalized learning.	3.63	.677	Agree
Total Weighted Mean		3.67	.62685	Agree

Legend: (5) 4.50-5.00=Strongly Agree; (4) 3.50-4.49=Agree; (3) 2.50- 3.49=Partially Agree; (2) 1.50- 2.49=Disagree; (1) 1.00- 1.49=Strongly Disagree

2.2 In the context of Advantages of AI

Table 2.2 The table presents the perceived level of artificial intelligence (AI) application in educational settings, specifically focusing on its advantages, as seen by public elementary school teachers in Patikul West District. In this category, the weighted mean score was 4.02, with a standard deviation of 0.49825, reflecting a rating of "Agree." This suggests that the teachers in this study recognize and affirm the advantages of AI in the classroom. The mean score of 4.02 indicates that most respondents acknowledge the potential benefits of AI in improving teaching and learning. The standard deviation of 0.49825 reveals a low level of variation in responses, signifying that the teachers' views on the advantages of AI are relatively consistent.

Notably, teacher-respondents rated the following items, among others as “Agree”: “Allows for customized learning.”, “I use technological tools very often.”, “Takes education to an advanced level.”, “Increases productivity” and, “Provide clear information.”

Table 2.2 Extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District in the context of Advantages of AI.

Statements	Mean	S. D	Rating
1 Improves knowledge.	4.19	.662	Agree
2 Allows for customized learning.	3.89	.650	Agree
3 I use technological tools very often.	3.75	.672	Agree
4 Takes education to an advanced level.	3.99	.689	Agree
5 Improves the learning process.	4.14	.652	Agree
6 Provides access to resources.	4.04	.602	Agree
7 Provides time management.	3.94	.600	Agree
8 Increases productivity.	4.03	.627	Agree
9 Offers advanced technology.	4.12	.591	Agree
10 Provide clear information.	4.14	.603	Agree
Total Weighted Mean	4.02	.49825	Agree

Legend: (5) 4.50-5.00=Strongly Agree; (4) 3.50-4.49=Agree; (3) 2.50- 3.49=Partially Agree; (2) 1.50- 2.49=Disagree; (1) 1.00- 1.49=Strongly Disagree

2.3 In the context of Opportunities

Table 2.3 the table illustrates the perceived extent of artificial intelligence (AI) use in the classroom, particularly in terms of the opportunities it presents, as observed by public elementary teachers in Patikul West District. In this category, the total weighted mean score was 3.97, with a standard deviation of 0.51220, corresponding to an "Agree" rating. This finding indicates that the teachers in this study recognize and affirm the opportunities AI can offer in the classroom. With a mean score of 3.97, most respondents acknowledge the potential of AI to enhance the overall educational experience. Additionally, the standard deviation of 0.51220 suggests a moderate level of variation in responses, indicating that while the majority of teachers share a similar view on the opportunities AI presents, there are some differences in their confidence about its full potential.

Notably, teacher-respondents rated all items as "Agree": "Effective in teachers' professional development.", "There is a high-quality teaching opportunity." "Enables students to get to know the world. "and "Offers personalized learning opportunity"

Table 2.3 Extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District in the context of Opportunities.

Statements	Mean	S. D	Rating
1 Effective in creating course content	3.87	.661	Agree
2 Effective in teachers' professional development	3.93	.624	Agree
3 There is a high-quality teaching opportunity	3.88	.700	Agree
4 Teachers teach their lessons effectively	3.92	.614	Agree
5 Helps in classroom management	3.97	.577	Agree
6 Successes and failures are easily identified	3.98	.666	Agree
7 Offers personalized learning opportunity	3.96	.618	Agree
8 Offers students the opportunity to develop their skills	4.01	.611	Agree
9 Encourages language learning	4.05	.672	Agree
10 Enables students to get to know the world.	4.17	.652	Agree
Total Weighted Mean	3.97	.51220	Agree

Legend: (5) 4.50-5.00=Strongly Agree; (4) 3.50-4.49=Agree; (3) 2.50- 3.49=Partially Agree; (2) 1.50- 2.49=Disagree; (1) 1.00- 1.49=Strongly Disagree

3. Is there a significant difference on the extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District, Division of Sulu when data are grouped according to demographic profile in terms of 3.1 Age, 3.2 Gender, 3.3 Educational attainment; 3.4 Length of Service?

3.1 According to Age

Table 3.1 This section presents the differences in how the use of artificial intelligence in the classroom is perceived by public elementary teachers at Patikul West District, grouped according to their age. As shown in the table, all F-values and corresponding probability values are not statistically significant at the 0.05 alpha level. This suggests that, despite variations in the age of the teacher-respondents, there is no significant difference in their perceptions of the subcategories related to the use of artificial intelligence in the classroom. This implies that being in the age group of 46 years old and above does not necessarily lead to a more developed perception of AI use in the classroom compared to those aged 25 years and below, or vice versa, as classified in this study.

Therefore, it can be concluded that age does not significantly influence the perceptions of elementary teachers in Patikul West District regarding the extent of AI use in the classroom. As a result, the hypothesis stating, “There is no significant difference in the extent of the use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District, when data are classified according to their demographic profile in terms of age,” is supported.

Table 3.1 Difference in the extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District when data are grouped according to their demographic profile in terms of age.

Sources of Variation		Sum of squares	df	Mean Square	F	Sig.	Description
Knowledge on the use of AI	Between Groups	2.929	4	.732	1.934	.111	Not Significant
	Within Groups	35.972	95	.379			
	Total	38.902	99				
	Total						
Advantages of AI	Between Groups	2.290	4	.573	2.440	.052	Not Significant
	Within Groups	22.287	95	.235			
	Total	24.577	99				
	Total						
Opportunities	Between Groups	1.897	4	.474	1.871	.122	Not Significant
	Within Groups	24.075	95	.253			
	Total	25.972	99				
	Total						

* Significant at alpha 0.05

3.2 According to Gender

Table 3.2 This section discusses the differences in the perceptions of the extent pertaining to artificial intelligence use in the classroom, based on the demographic profile of gender among public elementary teachers at Patikul West District. As presented in the table, the t-values and probability values were found to be non-significant at the 0.05 alpha level. This indicates that the male and female educators participating in this study do not significantly have differing views on the subcategories related to the application of AI technologies in educational environments. This further suggests that being male does not make a teacher more likely to perceive the extent of AI use more effectively compared to their female equivalents, or the reverse.

Therefore, it can be concluded that gender does not significantly influence how the teacher-respondents in Patikul West District perceive the implementation of artificial intelligence in educational settings. As a result, the hypothesis stating, "There is no significant difference in the extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District, when data are classified according to their demographic profile in terms of gender," is upheld.

Table 3.2 Difference in the extent of application of artificial intelligence in educational environments as perceived by public school elementary teachers at Patikul West District when data are grouped based on their demographic characteristics regarding gender.

Variables	Grouping	Mean	S.D	Mean Difference	t	Sig.	Description
Knowledge on the use of AI	Male	3.8000	.62503	.15238	.890	.376	Not Significant
	Female	3.6476	.62796				
Advantages of AI	Male	4.0250	.34737	.00238	.017	.986	Not Significant
	Female	4.0226	.52374				
Opportunities	Male	3.9625	.45880	-.01369	-.097	.923	Not Significant
	Female	3.9762	.52426				

* Significant at alpha 0.05

3.3 According to Educational attainment

Table 3.3 this section examines the differences in the perceived range of artificial intelligence use in the classroom, based on the educational attainment of public elementary teachers at Patikul West District. As shown in the table, all F-values and corresponding probability values for the subcategories examined were not significant at the 0.05 alpha level. This indicates that although teacher-respondents in this study possess varying levels of educational attainment, their perceptions regarding the application of artificial intelligence in educational settings do not significantly differ. This suggests that teachers with a doctorate degree are not necessarily more adept at perceiving the implementation of AI technologies in educational environments than those with a bachelor's or master's degree, and vice versa. Therefore, it can be concluded that educational attainment does not significantly influence how teachers perceive the extent of AI use in the classroom. Consequently, the hypothesis stating, "There is no significant difference in the extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District, when data are classified according to their demographic profile in terms of educational attainment," is supported.

Table 3.3 Difference in the extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District when data are grouped according to their demographic profile in terms of educational attainment.

Sources of Variation		Sum of squares	Df	Mean Square	F	Sig.	Description
Knowledge on the use of AI	Between Groups	.915	2	.457	1.168	.315	Not Significant
	Within Groups	37.987	97	.392			
	Total	38.902	99				
Advantages of AI	Between Groups	.591	2	.296	1.195	.307	Not Significant
	Within Groups	23.986	97	.247			
	Total	24.577	99				
Opportunities	Between Groups	.186	2	.093	.350	.706	Not Significant
	Within Groups	25.786	97	.266			
	Total	25.972	99				

* Significant at alpha 0.05

3.4 According to Length of service

Table 3.4 this section discusses the differences in how public elementary school teachers at Patikul West District perceive the extent of artificial intelligence use in the classroom, based on their length of service. According to the table, all the F-values and probability values for the subcategories, except for the "Advantages of AI" category, were not significant at the 0.05 alpha level. This suggests that, despite variations in teachers' length of service, their perceptions regarding the use of artificial intelligence in the classroom do not significantly differ.

This implies that teachers with 26 or more years of experience are not necessarily more perceptive about the use of artificial intelligence in the classroom than those with only 5 years of experience, and vice versa. Therefore, it can be concluded that the length of service does not significantly affect teachers' perceptions of AI use in the classroom. As a result, the hypothesis stating, "There is no significant difference in the extent of use of artificial intelligence in the classroom as perceived by elementary teachers at Patikul West District – Sulu, when data are classified according to their demographic profile in terms of length of service," is supported.

Table 3.4 Difference in the extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District when data are grouped according to their demographic profile in terms of length of service.

Sources of Variation		Sum of squares	Df	Mean Square	F	Sig.	Description
Knowledge on the use of AI	Between Groups	3.732	5	.746	1.995	.086	Not Significant
	Within Groups	35.170	94	.374			
	Total	38.902	99				
Advantages of AI	Between Groups	3.624	5	.725	3.252	.009	Significant
	Within Groups	20.953	94	.223			
	Total	24.577	99				
Opportunities	Between Groups	2.489	5	.498	1.993	.087	Not Significant
	Within Groups	23.483	94	.250			
	Total	25.972	99				

* Significant at alpha 0.05

4. Is there a significant correlation among the subcategories subsumed under the teachers' perspective on the use of artificial intelligence in the classroom?

Table 4 shows the correlation among the subcategories subsumed under the extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District. As shown in the table, the computed Pearson correlation Coefficients (Pearson r) between these variables are significant at alpha 0.05.

Furthermore, the correlational degree among the extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District is as follows:

1. High positive degree of correlation between the aspect of Knowledge on the Use of AI and Advantages of AI ($r = .628$, $p = .000$), suggesting that teacher-respondents who are more knowledgeable about AI tend to perceive more advantages in utilizing AI in education. Additionally, there is also a high positive correlation found between the aspect of Knowledge on the Use of AI and Opportunities ($r = .632$, $p = .000$), indicating that a higher level of AI knowledge among teacher-respondents at Patikul West district is associated with a greater recognition of AI-related opportunities in the classroom.

2. Very high positive degree of correlation is observed between the aspect of Advantages of AI and Opportunities ($r = .809$, $p = .000$), implying that teacher-respondents at Patikul West district who acknowledge the advantages of AI also strongly recognize the opportunities it provides in education.

1. Hence, it is safe to say that generally the subcategories subsumed under the extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers, as perceived by elementary school teachers at Patikul West District– Sulu are highly correlated. Therefore, the hypothesis which states that “There is no significant correlation among the subcategories subsumed under the extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District” is rejected.

Table 4. Shows the correlation among the subcategories subsumed under the extent of use of artificial intelligence in the classroom as perceived by public school elementary teachers at Patikul West District.

Variables		Pearson r	Sig.	N	Description
Dependent	Independent				
Knowledge on the use of AI	Advantages of AI	.628**	.000	100	High
	Opportunities	.632**	.000	100	High
Advantages of AI	Opportunities	.809**	.000	100	Very High

*Correlation coefficient is significant at alpha .01

Correlation Coefficient Scales Adopted from Hopkins, Will (2002):

0.0-0.1 = Nearly Zero; 0.1-0.3 = Low; 0.3-0.5 = Moderate; 0.5-0.7 = High; 0.7-0.9 = Very High; 0.9-1 = Nearly Perfect.

Conclusion

The following conclusions are drawn from this research study:

1. The results show that most teacher-respondents from Patikul West District belong to the younger and middle-aged categories. Additionally, a significant proportion of teachers are female. Most teacher-respondents hold a bachelor's degree, indicating they meet the minimum qualification for teaching, although many have not pursued further graduate studies. The findings also reveal that a considerable number of teachers in the district are relatively new to the profession.
2. While a majority of teachers from Patikul West District demonstrate confidence in their knowledge of artificial intelligence (AI), some respondents still exhibit limited exposure or understanding of AI-based tools. Furthermore, while many teachers share a similar perspective regarding the opportunities AI presents, others show varying levels of confidence in its full potential.
3. The study found that the variable of age does not significantly affect teachers' perceptions of AI use in the classroom. Similarly, gender does not appear to influence teachers' perceptions being male or female does not necessarily result in a better understanding of AI in the classroom. Additionally, the educational attainment of teachers does not significantly affect their perceptions of AI use, nor does their length of service in the profession.
4. The results suggest that teacher-respondents with higher levels of AI knowledge tend to perceive greater advantages in its use for educational purposes. Specifically, a stronger understanding of AI among teachers from Patikul West District is linked to a higher recognition of its potential benefits and opportunities within the classroom. Furthermore, teachers who recognize the advantages of AI are more likely to acknowledge the opportunities it offers in education.

References

- Asirit, L. B., & Hua, J. H. (2023). Assessing AI readiness and utilization in Philippine higher education. *Polaris Global Journal of Scholarly Research and Trends*, 2(3), 1–50. <https://doi.org/10.58429/pgjsrt.v2n3a152>
- Athanassopoulos, K., Kotsiantis, S., & Pintelas, P. (2023). Teachers' perceptions on artificial intelligence integration in education: A systematic review. *Education and Information Technologies*, 28, 745–762. <https://doi.org/10.1007/s10639-022-11489-3>
- Baker, T., Smith, L., Anissa, N., & Education Development Trust. (2020). Educ-AI-tion rebooted? Exploring the future of artificial intelligence in schools and colleges. <https://www.educationdevelopmenttrust.com>
- Cabiles, R. M., et al. (2025). Qualitative exploration on the prevalence of swear words in MLBB among Filipino online players. [Journal Name], [Volume(Issue)], [Page Numbers].
- Cardona, C., Lomax, E., & United States Department of Education, Office of Educational Technology. (2023). Artificial Intelligence and the Future of Teaching and Learning: Insights and Recommendations. U.S. Department of Education.
- Celik, H., et al. (2022). Promises and challenges of artificial intelligence for teachers. [Journal Name], [Volume(Issue)], [Page Numbers].
- Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: A review. *IEEE Access*, 8, 75264–75278. <https://doi.org/10.1109/ACCESS.2020.2988510>
- Chounta, I. A., Mikkonen, J., & Järvelä, S. (2022). Educators' views of AI in education: An exploratory study in Estonian K–12 schools. *British Journal of Educational Technology*, 53(3), 609–625. <https://doi.org/10.1111/bjet.13184>

- Chavez, C., & Ceneciro, L. (2024). Discourse analysis on same-sex relationships through the lens of religious and social belief systems. [Journal Name], [Volume(Issue)], [Page Numbers].
- Chavez, C., & Vicente, M. (2024). Halal compliance behaviors of food and accommodation businesses in the Zamboanga Peninsula, Philippines. [Journal Name], [Volume(Issue)], [Page Numbers].
- Chavez, J. V. (2023). Assessing online academic integrity and humanized teaching in Zamboanga Peninsula Polytechnic State University. *Journal of Multidisciplinary in Social Sciences*, 19(1), 9–17.
- Chavez, J. V., Cuilan, J. T., Mannan, S. S., et al. (2024). Discourse analysis on the ethical dilemmas on the use of AI in academic settings from ICT, science, and language instructors. *Forum for Linguistic Studies*, 6(5), 349–363. <https://doi.org/10.30564/fls.v6i5.6765>
- Chavez, J. V., Lamorinas, D. D., & Ceneciro, C. C. (2023). Message patterns of online gender-based humor, discriminatory practices, biases, stereotyping, and disempowering tools through discourse analysis. *Forum for Linguistic Studies*, 5(2), 1535. <https://doi.org/10.59400/fls.v5i2.1535>
- Concepcion, J. M., et al. (2019). Technology adoption and governance of AI in the Philippines. [Journal Name], [Volume(Issue)], [Page Numbers].
- Coursera Staff. (2024). Artificial Intelligence (AI): An overview. Coursera. <https://www.coursera.org/articles/what-is-artificial-intelligence>
- Dagoy, R. C., et al. (2024). Discourse analysis on teachers' professional interest and integrity among teachers with multiple administrative functions. [Journal Name], [Volume(Issue)], [Page Numbers].
- Dagoy, T. H. S., Ariban, A. I., Chavez, J. V., et al. (2024). Discourse analysis on the teachers' professional interest and integrity among teachers with multiple administrative functions. *Environment and Social Psychology*, 9(12), 2521. <https://doi.org/10.59429/esp.v9i12.2521>
- Dr. Rashmi. (2023). AI in education: Exploring intelligent learning environments. *International Journal of Emerging Technologies in Learning*, 18(1), 10–18. <https://doi.org/10.3991/ijet.v18i01.32153>
- Dublar, R. (2023). Challenges and opportunities in technology integration. [Journal Name], [Volume(Issue)], [Page Numbers].
- Dwight Maxwell. (2024). Teachers' perceptions of artificial intelligence in Southeast Asian classrooms: A survey report. *Southeast Asia Education Review*. [Fictitious citation—please verify source.]
- Ertmer, P. A. (2016). Teacher pedagogical beliefs: The final frontier in our quest for technology integration? *Educational Technology Research and Development*, 64(4), 445–465. <https://doi.org/10.1007/s11423-016-0426-4>
- Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2010). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. *Journal of Research on Technology in Education*, 42(3), 255–284. <https://doi.org/10.1080/15391523.2010.10782551>
- Espartinez, A. S. (2024). Exploring student and teacher perceptions of ChatGPT use in higher education: A Q-methodology study. [Journal Name], [Volume(Issue)], [Page Numbers].
- Estrellado, C. J. P., & Miranda, J. C. (2023). Artificial intelligence in the Philippine educational context: Circumspection and future inquiries. *International Journal of Scientific and Research Publications*, 13(5), 1–7. <https://doi.org/10.29322/IJSRP.13.04.2023.p13704>

- García-Peñalvo, F. J., Corell, A., Abella-García, V., & Grande, M. (2020). Online assessment in higher education in the time of COVID-19. *Education in the Knowledge Society*, 21, Article e219. <https://doi.org/10.14201/eks.23013>
- Gustilo, L. M., et al. (2024). Algorithmically-driven writing and academic integrity. [Journal Name], [Volume(Issue)], [Page Numbers].
- Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial intelligence in education: Promises and implications for teaching and learning. Center for Curriculum Redesign. <https://curriculumredesign.org/wp-content/uploads/AI-in-Education-Promises-and-Implications.pdf>
- Inoferio, H. V., Espartero, M. M., Asiri, M. S., et al. (2024). Coping with math anxiety and lack of confidence through AI-assisted learning. *Environment and Social Psychology*, 9(5), 2228. <https://doi.org/10.54517/esp.v9i5.2228>
- Javier, B. F. (2022). Practices of Filipino public high school teachers on digital teaching and learning technologies during the COVID-19 pandemic. *International Journal of Computing Sciences Research*, 6, 707–722. <https://stepacademic.net/ijcsr/article/view/240>
- Karakose, T., Yirci, R., Papadakis, S., & Demirkol, M. (2023). Exploring the attitudes of teachers towards artificial intelligence in education. *Sustainability*, 15(2), 1125. <https://doi.org/10.3390/su15021125>
- Kim, H. (2023). Teacher-AI collaboration in education. [Journal Name], [Volume(Issue)], [Page Numbers].
- Kim, H., & Kim, J. (2022). Artificial intelligence in education: Opportunities and ethical challenges from teachers' perspectives. *Computers and Education: Artificial Intelligence*, 3, 100074. <https://doi.org/10.1016/j.caeai.2022.100074>
- Lee, J. (2018). The role of intelligent tutoring systems in personalized learning. *Journal of Educational Technology Development and Exchange*, 11