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TEACHERS' VIEWS ON ARTIFICIAL INTELLIGENCE: A BASIS FOR CAPACITY BUILDING

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ABSTRACT

The study aimed to assess teachers' perceptions of artificial intelligence (AI), their understanding of its potential advantages and disadvantages, and the specific training needs necessary for successful AI integration. The study aimed to assess teachers' perceptions of artificial intelligence (AI), their understanding of its potential advantages and disadvantages, and the specific training needs necessary for successful AI integration. A mixed-method research design was used in collecting and analyzing quantitative and qualitative data. Descriptive statistics was utilized to delineate teachers' perspectives on AI in education. Open-ended questions were employed to gather insights into the challenges teachers encounter when using AI in the classroom. The findings revealed that teachers' experiences with AI present opportunities and challenges in integrating technology into the classroom. While teachers expressed optimism about AI's potential to enhance education, citing benefits such as personalized learning, educator support, and administrative efficiency, they also voiced concerns about increased workload, excessive student reliance on technology, algorithmic bias within AI systems, and data privacy. A balanced approach to AI integration is recommended not only that complements traditional teaching methods and addresses privacy and algorithmic bias. Schools are encouraged to offer comprehensive professional development programs for teachers to introduce AI technologies, address the ethical and practical challenges associated with their use in education, ensure equitable access to AI tools, and improve technological infrastructure.

KEY WORDS : *Artificial Intelligence, Capacity building ,Educators, Education, private schools,*

INTRODUCTION

Artificial intelligence (AI) has rapidly emerged as one of the most transformative technologies in recent history, affecting a broad range of sectors including education. As AI continues to evolve, its application within education systems holds the potential to revolutionize learning environments by personalizing instruction, automating administrative tasks, and enhancing overall student engagement. The well-known quote from Andrew Ng, "Artificial intelligence is the new electricity" (Ng, 2016), underscores AI's revolutionary nature, drawing parallels to how electricity transformed industries in the early 20th century. The rapid adoption of AI by companies worldwide, as evidenced by IBM's study indicating that over one-third of companies already use AI, with another 42% exploring its use, highlights the importance of this technology in shaping future practices across various domains, including education (IBM, 2022).

In the context of the Philippines, ranked 54th out of 166 countries in the United Nations Conference on Trade and Development's (UNCTAD) Technology and Innovation Report 2023, there is growing interest in how prepared the country is to adopt AI in its educational systems. The report's readiness index evaluates countries based on five building blocks: ICT deployment, skills, R&D activity, industry activity, and access to finance (UNCTAD, 2023). However, as AI-driven technologies such as personalized tutoring systems, learning analytics tools, and augmented reality (AR) become more widespread, it raises critical questions about the readiness of schools and educators in the Philippines to integrate such tools effectively into classrooms.

This study explores the readiness of schools and teachers in the Philippines, particularly in selected private schools, to embrace AI technologies in education specifically Generative AI. It seeks to assess teachers' perceptions of AI, their understanding of its potential benefits and drawbacks, and the specific training needs required to facilitate AI integration. Teachers' roles are vital in ensuring the successful and ethical use of AI in classrooms, and this research intends to provide insights that will guide the development of training programs, instructional materials, and technical assistance that educational institutions can offer.

The study is structured around several specific objectives:

1. To gather baseline demographic data on teachers, including their age, area of specialization, gender, years of teaching experience, and educational attainment.
2. To identify the challenges teachers face when attempting to integrate AI into the classroom, such as a lack of training, insufficient resources, and technological issues.

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3. To determine the specific training needs that would enable teachers to use AI tools effectively in their teaching practices.
4. To develop training modules and instructional materials to introduce teachers to the basics of AI.

The research addresses the following key questions:

1. What are the demographic characteristics of teachers in the selected private schools?
2. To what extent do teachers believe that AI can improve education?
3. What are the primary challenges teachers encounter when using AI technologies in the classroom?
4. What type of training modules do teachers require to effectively incorporate AI into their teaching practices?

Materials and Methods

The study adopted a mixed-method research design, employing quantitative and qualitative approaches to gather and analyze data (Creswell & Plano Clark, 2018). A purposive sampling method was used to select three private schools that are partnered with the Nueva Ecija University of Science and Technology (NEUST) through formal agreements. Data was gathered through surveys distributed to teachers via school heads, with interviews conducted to supplement the quantitative data obtained from the questionnaires. The survey instrument was designed to capture teachers' demographic data, their perceptions of AI, and the challenges they face in its implementation. Descriptive statistics, such as frequency counts and percentages, were used to analyze the results.

Ethical Consideration

In conducting the study, several ethical principles were prioritized to ensure the integrity of the research and to protect the participants. Informed consent was obtained, and participants were assured that their involvement was voluntary, with the right to withdraw at any time. Confidentiality and anonymity were strictly maintained, with data securely stored and anonymized. The study was conducted transparently, avoiding any harm or discomfort to participants while respecting their cultural and professional contexts

Theoretical Framework

The combination of three frameworks—TPACK, Theory of Planned Behavior and Self-Efficacy Theory, offered a thorough basis for our study, directing the gathering and analysis of data and assisting in the creation of focused teacher training materials.This study used the Technological Pedagogical Content Knowledge (TPACK) paradigm to assess teachers' opinions on the benefits and drawbacks of artificial intelligence (AI) in education(Mishra & Koehler,2006). TPACK is perfect for learning how teachers can successfully integrate AI into their teaching practices since it places a strong emphasis on the integration of technology, pedagogy, and topic knowledge. This framework assisted in analyzing how teachers view AI's role in improving educational results while taking into account their current knowledge and skills, given the. goals—such as determining training needs and creating instructional materials.

Teachers' opinions of AI in the classroom was evaluated using the Theory of Planned Behavior (Ajzen,1991). According to this hypothesis, attitudes, perceived behavioral control, and subjective norms all have an impact on behavior. You may learn more about teachers' inclination to embrace AI technologies by looking at their opinions on the technology's potential to enhance education as well as the difficulties they encounter when putting it into practice. By emphasizing the elements that affect teachers' intentions to utilize AI successfully, this framework will also help to achieve the goal of pinpointing particular training requirements.Finally, by emphasizing instructors' confidence in their capacity to use AI tools in the classroom, Self-Efficacy Theory components enhanced the analysis(Bandura, 1977).Knowing self-efficacy can help in identifying the obstacles instructors face, including a lack of resources or training, which is in line with the goal of identifying the particular difficulties they confront.

Systematic Instructional Design Framework

The ADDIE model was used in designing the training module for teachers. As a systematic instructional design framework, ADDIE consists of five key phases: Analysis, Design, Development, Implementation, and Evaluation (Bouchrika,2024).. Each phase plays a crucial role in ensuring that the training is effective and tailored to meet the specific needs of educators.It is well aligned with the theoretical frameworks of Technological Pedagogical Content Knowledge (TPACK), Theory of Planned Behavior, and Self-Efficacy Theory in research on teachers' views regarding artificial intelligence (AI) in education. In the Analysis phase of ADDIE, researchers assessed the teachers' existing knowledge and skills related to technology, pedagogy, and content, which complements the TPACK framework. This initial assessment helped identify gaps that can be addressed during the Design and Development phases, where tailored training modules were created to facilitate effective AI integration in teaching practices.

Teachers' current artificial intelligence (AI) knowledge and abilities, as well as their training goals and needs, were determined by instructional designers during the analysis phase. This fundamental stage made it possible to guarantee that the next stages meet the needs of the teachers. Based on the analysis's findings, interesting and pertinent training materials can be produced throughout the Design and Development stages. These training modules can be delivered during the Implementation phase, and their efficacy can be evaluated and inputs can be gathered for further development during the Evaluation phase. All things considered, applying the ADDIE model provides an organized method for creating thorough and effective teacher training programs, guaranteeing that they are prepared to successfully include AI into their teaching methods.

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II . RESULTS AND DISCUSSION

Table 1 . Age of the Respondents

Age Group	Frequency	Percentage
Under 25	30	49%
25-34	26	43%
35-44	3	5 %
45-54	0	0
55 above	2	3 %
Total	61	100 %

The data demonstrates a clear trend toward younger teachers in this private school setting. The majority (49 5%) of teachers fall within the "under 25" (30) and "25-34" (26) age groups. Notably, the "45-54" age group is absent, and the older age groups ("35-44" and "55 or Above") have significantly lower frequencies (2 individuals each), representing only 3% of the sample.

Table 2. Subject Taught by Respondents

Subject Taught	Frequency	Percentage
Science	25	40.98%
Mathematics	14	22.95%
Language and Arts	10	16.39%
Social Studies	7	11.47%
Others : (Values education, MAPEH ,TLE)	5	8.19%
Total	61	100%

This data suggests that science appears to be the most common subject area taught by teachers, with a frequency of 25 Mathematics (14) and Language and Arts (10) follow closely behind. Social Studies a frequency of 7, and "others" encompasses 5 5teachers across various subjects.

The prominence of science, mathematics, and Language and Arts in a school suggests a specialization in these areas, possibly catering to specific student interests. The frequency of these subjects suggests a focus on interdisciplinary learning, driven by student demand or available resources .It might suggest a focus on interdisciplinary learning. Studies like those by Sahlberg (2011) highlight the growing trend of integrating subjects to create a more holistic learning experience. This could explain the prevalence of these potentially interconnected areas.

Table 3. Gender of the respondents

Gender	Frequency	Percentage
Male	19	31%
Female	40	66%
Non-Binary/Third Gender	2	3%
Prefer Not to Say	0	0
Total	61	

As evident, females make up the largest group (40; 66 %), followed by males (19; 31.%). Notably, there are a small number of teachers identifying as non-binary/third gender (2; 3%) and none who chose "Prefer Not to Say."

The causes of gender disparities in the teaching profession include poor income, a lack of prestige, physical contact with children, gender norms and stereotypes, historical events such as industrialization and urbanization, and perceived stigma (Johnson , 2008). These elements lead to the idea that teaching is connected with care and nurturing, which are typically regarded as feminine qualities. The study emphasizes the intricate interplay of economic, social, and historical elements that contribute to the gender gap. Furthermore, Limited career advancement opportunities combined with recruitment initiatives that broadly target teaching quality rather than male representation specifically, further contribute to the low number of male teacher (McNamara et al., 2008).

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Table 4. Years of Teaching Experience

Years	Frequency	Percentage
LESS THAN 1 YEAR	22	36%
1-5 YEARS	30	49%
6-10 YEARS	5	8%
11-20 YEARS	2	3%
MORE THAN 20 YEARS	2	3%
. Total	61	100%

The data on teacher experience reveals a concentration of teachers in the early stages of their careers at this private school. As shown in the table above, (30; 49 %) have 1-5 years of experience, followed by those with less than 5 years (22; 36 %). Notably, there are a smaller number of teachers with 6-10 years (2; 3 %) and only 2 (3%) with more than 20 years of experience.This distribution suggests a potential preference for hiring less experienced teachers in this private school setting.

The findings on private schools' hiring practices indicate that private institutions have seen a faster teacher hiring rate than public schools, driven by lower student-teacher ratios and higher turnover rates. This turnover is often due to relatively lower compensation and fewer benefits in private schools, which leads to a continuous demand for new hires to maintain staffing levels and small class sizes (Ingersoll, Merrill, & Stuckey, 2014).

Table 5. Highest Educational Attainment

Highest Educational Attainment	Frequency	Percentage
BACHELORS' DEGREE	42	68.85%
MASTERS' DEGREE	0	0
DOCTORATE DEGREE	0	0
MASTER UNITS EARNED	19	31.14%
DOCTORAL UNITS EARNED	0	0
Total	**61**	**100%**

The data on teacher educational attainment reveals a surprising trend in this private school setting., Findings revealed that majority of teachers (42) hold a Bachelor's degree as their highest qualification. Notably, there are no teachers with a Master's or Doctoral degree, although none have earned Master's units and none have Doctoral units.

The distribution of qualifications at a private school is unexpected, as many would expect a higher prevalence of advanced degrees. Possible explanations include the school's focus on hiring recent graduates who may be more adaptable, as well as their value of other qualifications such as teaching experience, specialized certifications, or innovative teaching approaches over the highest degree attained.

A study by Zuzovsky (2003) delved into the correlation between teacher qualifications and student outcomes. The findings suggest that a teacher's highest degree may have less impact compared to factors such as experience and expertise in the subject matter. This aligns with the possibility that this private school values factors beyond the highest degree attained by its educators.

PART II. TEACHERS 'VIEWS ON ARTIFICIAL INTELLIGENCE

Table 6. Extent on AI can Improve Education

Response	Frequency	Percentage
Not at all	12	20%
Slightly	13	21%
Moderately	22	36%
Very Much	9	15%
Extremely	5	8%
Total	61	100%

The current study explores educators' perspectives on the potential of AI to improve education. The findings reveal a heterogeneity of opinions, mirroring the diversity of views. Notably, 20% of educators anticipate minimal impact, aligning with previous studies highlighting teacher concerns about AI's impact on emotional connections and data privacy (Uygun, 2024) Conversely, 36% of educators expressed confidence in AI's ability to moderately enhance learning, which resonates with the growing interest in personalized learning and accessibility facilitated by AI. However, a significant portion (41%) remains unsure of the potential impact, reflecting broader anxieties regarding the effectiveness and implementation of AI in

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classrooms. Studies revealed that teachers are hesitant about using AI due to concerns about ethical issues, and the potential impact on teacher-student relationships. Teachers worry that AI could create a less emotionally connected learning environment, raising questions about the role of human interaction in education. Additionally, there are apprehensions about data security, as well as uncertainty about AI's reliability in safeguarding student information, which makes teachers cautious about its adoption (Uygun, 2024)

Table 7. Extent can AI improve the delivery of instruction

Response	Frequency	Percentage
Not at all	3	5%
Slightly	9	15%
Moderately	35	57%
Very Much	14	23%
Extremely	0	0%
Total	61	100%

Educators' views on the potential of Artificial Intelligence (AI) to improve instruction delivery reveal a mix of optimism and caution. Most (57%) believe AI can moderately enhance instruction, reflecting a growing recognition of its potential in classrooms This aligns with research by Hooda et al., (2022) explored the benefits of AI that significantly enhances educational assessment and instruction by providing real-time feedback and enabling personalized learning experience. However, a significant portion (23%) holds a positive view, while 15% anticipate minimal impact. This mirrors findings from previous surveys highlighting a spectrum of educator perspectives (Uygun, 2024). The absence of educators in the "Extremely Positive" category might suggest cautious optimism or a lack of experience with powerful AI tools.

These results raise several key discussion points. Educators need to identify specific AI applications that promise to improve instruction, such as adaptive learning platforms or automated feedback systems. Additionally, ensuring equitable access to AI tools and addressing concerns about teacher workload and student dependence on technology are crucial.

While highlighting the significance of preserving the role of human knowledge in the educational process, artificial intelligence (AI) holds great promise for revolutionizing education by enhancing learning outcomes, assisting teachers, and producing captivating learning experiences. (Stephen et al. , 2024).

Table 8. Extent on the potential benefits of artificial intelligence in teaching and learning

Response	Frequency	Percentage
Not at all	0	0%
Slightly	9	15%
Moderately	26	43%
Very Much	24	39%
Extremely	2	3%
Total	61	100%

As shown in Table 8, educators' views on the potential benefits of Artificial Intelligence (AI) in teaching and learning reflect a mix of optimism and caution. A significant majority (82%) believe AI can bring advantages. This breaks down further, with 43% anticipating moderate benefits and a sizeable group (39%) seeing a strong potential for positive change. This aligns with the research of Hooda et al., (2022) who explored the advantages of AI for personalized learning and assessment, both of which can improve educational experiences.

However, there's also a range of viewpoints. A small portion (15%) anticipates a slight impact, and none of the respondents (0%) believe AI will bring no advantages at all. This highlights the need for further exploration and discussion among educators on how AI can fundamentally transform educational practices and outcomes through data-driven decision-making and innovative teaching methodologies, emphasizing the need for strategic planning and collaboration among stakeholders to fully harness AI's benefits in education(Milad et al., 2024;Haomin ,2023). Interestingly, only 3% of educators expressed extremely positive views, which might indicate cautious optimism or a lack of experience with powerful AI tools in education.

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Table 9. Extent that AI can bring more disadvantages in teaching and learning

Response	Frequency	Percentage
Not at all	7	11%
Slightly	21	34%
Moderately	23	38%
Very Much	10	16%
Extremely	0	0%
Total	61	100%

Educators' perspectives on the potential drawbacks of Artificial Intelligence (AI) in teaching and learning, as shown in Table 8, reveal a mix of cautious optimism and concern. A significant majority (83%) of educators anticipate some disadvantages, with 38% expecting moderate drawbacks and 34% perceiving slight concerns. This aligns with the need for thoughtful implementation strategies, that prioritize equity, inclusivity, and ethics. (Milad et al., 2024). However, the range of concerns varies. A notable portion (11%) believes the disadvantages will be slight, and none of the respondents hold extremely negative views. This highlights the importance of responsible use of AI which is crucial for reducing biases and ensuring equal opportunities. (Sarabjot et al., 2023). Interestingly, the absence of responses in the "Extremely Negative" category might suggest a willingness to explore AI's potential while maintaining a cautious approach.

These findings raise several key areas for further discussion. First, identifying and mitigating educator concerns is crucial. These might include potential issues like student dependence on technology (Sarabjot et al.,2023), ethical technology use, maintaining academic integrity, safeguarding personal information, and other potential concerns (Irina, 2023). Developing strategies to address these concerns is essential for successful AI integration in classrooms. Second, ensuring transparency and open communication throughout the implementation of AI tools is critical. Collaboration between educational authorities and the teaching profession serves as a starting point for discussions and guidelines on artificial intelligence in education (OECD, 2023). Finally, developing ethical guidelines for using AI in education is paramount. Effective guidelines or policies in the use of AI will promote the ethical and responsible use of AI, reduce legal risks, and ensure a safe and inclusive learning environment for all students. (Irina,2023).

Table 10. Extent that AI can bring more benefits to students

Response	Frequency	Percentage
Not at all	3	5%
Slightly	14	23%
Moderately	28	46%
Very Much	12	20%
Extremely	4	7%
Total	61	100%

As gleaned from Table 10, the teacher respondents are generally optimistic about the potential benefits of artificial intelligence (AI) for students. A significant majority (73%) believe AI can bring at least moderate advantages. This breakdown includes nearly half (46%) anticipating moderate benefits, a sizeable group (20%) seeing very strong potential, and an additional 4% expressing extremely positive views. This aligns with the findings of Mete (2024) that generative AI enhances student learning by personalizing assessments, facilitating teacher-student collaboration, and fostering inclusion and experiential understanding .

However, there's a range of opinions among educators. A small portion (28%) believes the impact will be slight or none at all (5%). This highlights the need for further exploration and discussions about effectively integrating AI into classrooms. These discussions, as highlighted by Carlos et al., (2023), should address teacher concerns and ensure equitable access for all students.AI offers multiple benefits for education but requires careful implementation to maximize its advantages and mitigate potential risks (Carlos, 2023). Interestingly, the presence of educators in the "Extremely Positive" category (4%) suggests an enthusiastic minority who view AI as a transformative tool.

Several key discussion points emerge from these findings. First, educators need to identify the most promising AI applications for enhancing student learning. Examples include personalized learning platforms, intelligent tutoring systems, and AI-powered learning analytics. Second, empowering educators to use AI tools effectively is crucial. This might involve workshops on integrating AI into lesson plans, understanding student data privacy, and fostering a human-centered approach to AI in educatio

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Table 11. Extent that AI can bring more risks to students

Response	Frequency	Percentage
Not at all	0	0%
Slightly	5	8%
Moderately	17	28%
Very Much	24	39%
Extremely	15	25%
Total	61	100%

Table 11 explores educator perspectives on potential risks posed by artificial intelligence (AI) to students. The results reveal that a significant majority (82%) of educators expressed concerns. This breaks down further, with a sizeable portion (39%) anticipating very serious risks and another portion (28%) expecting moderate drawbacks. This aligns with the need for careful consideration of ethical issues and responsible AI implementation to safeguard students (Carlos, 2023).

There's a range of concern severity, however. While concerns are prevalent, a small portion (8%) believe the risks will be slight, and none of the respondents indicated any risks at all. This highlights the importance of open communication with educators to address specific concerns and develop mitigation strategies. Interestingly, a notable portion (25%) falls into the "extremely negative" category, suggesting anxieties about student data privacy, the potential for bias in algorithms, or the unknown long-term effects of AI on education.

These findings raise several key areas for discussion. First, identifying and mitigating specific risks is crucial. These might include student data privacy concerns, the potential for algorithmic bias, or over-reliance on technology, and decreased human interaction (Larysa, 2024). Strategies to address these risks are essential for responsible AI integration.

Second, ensuring transparency and communication throughout AI implementation is critical. Open communication with educators and students about potential risks and safeguards is necessary. Finally, developing ethical frameworks for using AI in education is paramount. These frameworks should address student data privacy, and algorithmic bias, and ensure AI complements, not replaces, human educators (Mohammadi et al., 2020).

Further research is needed to explore educator concerns in more detail, investigate the potential negative impacts of AI on students, and develop comprehensive ethical frameworks that prioritize student well-being and educational equity.

Table 12. Professional development in AI in education Trainings if teacher attended AI training

Response	Frequency	Percentage
Yes	5	8
No	56	92
Total	61	100%

Table 12 reveals that a large majority (92%) of educators have not attended trainings in AI. This could stem from a lack of awareness or available programs, or a perception about existing AI training which may not be relevant to their teaching practice.To bridge this gap, further research is needed to understand educator perspectives and identify barriers to participation in current training (Mohammadi et al., 2020). Additionally, research should explore strategies for developing effective training programs and promoting awareness about the benefits of AI in education. The research underscores the importance of a strategic approach to leveraging big data and AI to improve educational practices and outcomes.

Collaboration is key to addressing this need. Policymakers, educational institutions, and professional development providers should work together to create informative programs that empower educators to leverage AI effectively in the classroom. Targeted outreach campaigns through educational organizations and teacher unions can raise awareness about these programs and the potential of AI to enhance student learning. By understanding educator perspectives, developing effective training, and raising awareness, we can ensure educators have the tools and knowledge to harness the power of AI for the benefit of their students.

Table 13. Preferred formats for AI Training or professional development

Response	Frequency
In person workshops	33
Online courses	8
Webinars	15
Self-paced modules	5
Total	61

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Educators have a clear preference for interactive learning formats when it comes to professional development on Artificial Intelligence (AI) in education, as shown in Table 13 (Boettcher & Conrad, 2016). In-person workshops reign supreme, with 54% of educators favoring this format. This suggests a desire for face-to-face interaction, hands-on activities, and the opportunity to learn and network with colleagues.

However, educator preferences are not monolithic. Webinars (25%) and online courses (13%) garnered a significant portion of interest, highlighting the value some educators place on the flexibility and convenience of remote learning options. Self-paced modules were the least preferred format (8%), indicating a desire for more structured learning experiences with opportunities for interaction (Boettcher & Conrad, 2016).

These findings present key challenges and opportunities for professional development providers and educational institutions. First, how can these entities cater to the in-person workshop preference while also offering options for educators who prefer online learning or a blended approach? Second, all training formats, regardless of delivery method, should be designed to be interactive and engaging. This could involve incorporating hands-on activities, group discussions, and opportunities for educators to ask questions and share experience. By understanding these nuances and designing effective training programs and strategies educators will be well-equipped to develop their AI knowledge and skills, ultimately maximizing the potential of AI to benefit students (Llaudett et al.,2024)

PART III. THE CHALLENGES THAT TEACHERS FACE IN USING AI IN THE CLASSROOM

The thematic analysis of teachers' experiences with AI in the classroom reveals several challenges and insights. One significant finding is the dominance of specific generative AI tools such as QuillBot, Grammarly, and ChatGPT. QuillBot is commonly used for paraphrasing, Grammarly enhances writing, and ChatGPT plays a central role in content generation, answering queries, and lesson planning. Teachers also employ a diverse range of tools, such as Socrative, Kahoot, Quizizz, Canva, and Powtoon, to support student interaction, visual aids, and assessments. However, there are disparities in the adoption of these tools, suggesting a potential gap in familiarity or access to AI technologies.

Teachers also perceive AI as a valuable time-saving resource, highlighting its role in efficiency and reducing the burden of lesson planning and administrative tasks. Many see AI as a powerful source of readily available materials that improve lesson delivery and resource management. Furthermore, AI is viewed as a tool that can enhance student engagement, motivation, and participation through interactive activities. Some respondents also recognize AI's potential to innovate teaching strategies and support professional development, though the specific functionalities of these tools are not always fully explored.

The analysis also reveals concerns and challenges associated with AI. Teachers express worries about over-reliance on AI, potentially leading to a decrease in teacher effort and critical thinking. Some fear that AI might hinder creativity and limit the development of innovative teaching methods. Concerns about the accuracy of AI-generated information and the risk of misinformation or plagiarism are also prominent. Additionally, technical challenges like connectivity issues and the possibility of AI disrupting the teacher-student relationship were highlighted, emphasizing the importance of maintaining personal connections in education.

One of the key challenges identified is the need for equitable access to AI and teacher training in using these tools. Disparities in technological literacy may lead to unequal integration of AI in classrooms, with some teachers struggling to use AI effectively. Many teachers express concerns about AI replacing educators, fearing that an overreliance on AI might undermine the essential role of human educators. To address these challenges, teachers call for professional development that helps them balance the benefits of AI while preserving the personal and emotional elements of teaching.

Regarding teacher training needs, respondents emphasized the importance of foundational knowledge in AI, with practical, hands-on training sessions that demonstrate the effective application of AI in lesson planning. Ethical considerations and responsible use were recurring themes, as teachers expressed a need for clear guidelines on AI's pros, cons, and potential risks. Many also called for interdisciplinary AI training that covers various subject areas, alongside continuous professional development to stay updated on emerging AI tools and technologies.

Overall, the findings suggest that AI holds considerable potential to enhance education by improving efficiency, providing resources, and engaging students. However, significant challenges remain, including the need for teacher training, addressing concerns about over-reliance, and ensuring equity in AI access. Effective integration of AI into teaching requires support systems, ongoing training, and careful consideration of its impact on creativity, critical thinking, and teacher-student relationships.

PART IV-TRAINING MODULE FOR TEACHERS INTEGRATING AI IN TEACHING AND LEARNING

The findings underscore the need for a thoughtful approach in creating a training module about integrating generative AI in teaching and learning.The concerns raised by the respondents while fostering a supportive environment for technology-enhanced learning.Thus the training module that was crafted by the researchers included beginners guide to generative Ai.This is an introductory module which can be utilized through interactive workshops and hands-on sessions.Group discussions and collaborative projects or through webinars such as access via online resources and a community forum for continued

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support.By adopting this training module, NEUST can empower teachers to harness the potential of AI in their classrooms while addressing the associated challenges. This approach will ensure that educators are well-prepared to integrate technology in a way that enhances learning experiences and maintains the core values of education.

The Beginner's Guide to Generative AI for Teachers offers a foundational overview of generative AI and its common tools, emphasizing their role in lesson planning and classroom engagement. It includes practical applications of AI, with hands-on workshops for using these tools in lesson creation and assessments, while enhancing student interaction. Ethical considerations are discussed, focusing on the pros and cons of AI, guidelines to avoid over-reliance, and issues of accuracy. The module promotes 21st century skills and balancing AI with traditional teaching approaches and maintaining personal connections. It also addresses equitable access and technological literacy, identifying disparities and supporting continuous professional development. Finally, interdisciplinary AI trainings are highly encouraged and collaboration across subject promoting ongoing exploration of AI tools in education.

CONCLUSIONS AND RECOMMENDATIONS

The majority of the respondents are young and have less than five years of experience, suggesting a preference for less experienced teachers of private schools. Teachers' experiences with AI reveal opportunities and challenges in integrating technology into the classroom. Teachers believe that AI can improve education by supporting educators, personalizing learning, and enhancing administrative efficiency; they also express concerns about its potential drawbacks, such as increased workload, student dependence on technology, algorithmic bias, and data privacy. Findings also revealed that the majority of teachers have no formal training in AI, suggesting a gap between current training and teachers' needs

Based on the study's findings, it is recommended that AI training and workshops for teachers be offered as part of the professional development program of the school. The importance of collaboration among school officials, policy makers, educational institutions, and professional development providers plays a crucial role in the creation of informative programs for AI that will empower teachers for the effective utilization of AI in education. Moreover, conducting outreach campaigns using modules or manuals to raise awareness of AI's potential benefits in the educational system.

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