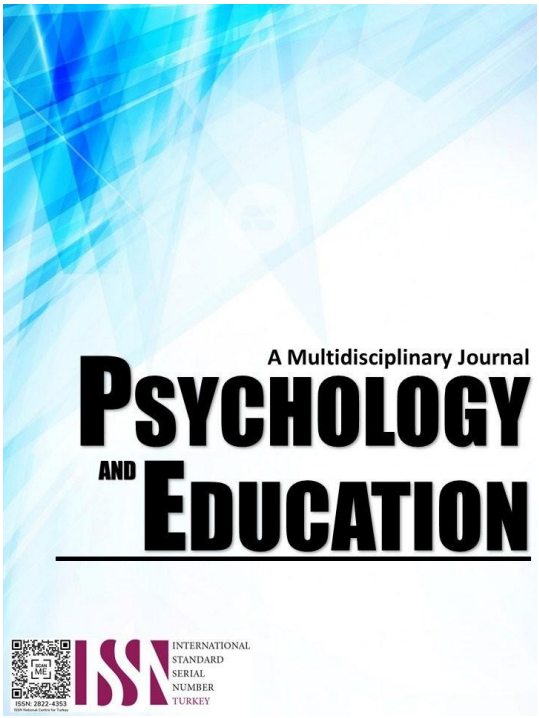
UNDERSTANDING TEACHERS' EXPERIENCES IN USING ARTIFICIAL INTELLIGENCE



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Research Article

Understanding Teachers' Experiences in Using Artificial Intelligence

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Abstract

Artificial Intelligence (AI) is transforming education by reshaping instructional practices, enhancing student engagement, and streamlining administrative tasks. This study aimed to explore the lived experiences of senior high school teachers in public schools in Caloocan City as they integrate AI into their professional practice. Using a hermeneutic phenomenological approach, the experiences of 15 teachers were examined through three core research questions focused on their AI usage, the challenges they encountered, and their interpretations of these experiences. Grounded in Social Constructivism, the Technology Acceptance Model (TAM), and the Technological Pedagogical Content Knowledge (TPACK) framework, this qualitative research employed in-depth interviews as the primary method of data collection. Triangulation was achieved through classroom observations, field notes, and a reflexive journal, which enhanced the credibility and validity of the research. Data were analyzed using Moustakas' (1994) thematic analysis procedures, leading to the emergence of six major themes: (1) Enhancing Productivity and Balance, (2) Motivating Learning and Performance, (3) Navigating Technological Change with Ethics, (4) Innovating Amidst Resource Challenges, (5) Collaborative Empowerment Through AI, and (6) Promoting Access and Quality. The findings revealed that teachers' perceptions and attitudes toward AI were shaped by their distinct lived experiences. These included clear understandings of AI's role in teaching, the challenges faced during integration, the rationale behind those challenges, and the creative strategies employed to address them. The participants also offered recommendations for future AI adoption, which were categorized and analyzed by the researcher to inform policy, practice, and further research.

Keywords: *artificial intelligence, teachers' lived experiences, hermeneutic phenomenological approach, AI in education*

Introduction

Artificial Intelligence (AI) is increasingly transforming education by reshaping instructional strategies, enhancing student engagement, and streamlining administrative functions (Olatunde-Aiyedum, 2024; Wardat et al., 2024). Globally, the integration of AI into educational systems has shown promising results, yet its implementation in the Philippine context remains limited.

Schools across the country—particularly in the public sector—are experiencing slow adoption due to several constraints, including ethical concerns, limited awareness, inadequate infrastructure, and a lack of readiness among educators (Cadiz et al., 2024; Zhang & Aslan, 2021). One critical obstacle is the insufficient training and professional development opportunities for teachers in utilizing AI tools, which directly affects the quality and effectiveness of their integration in classrooms (Kim, 2024).

Despite the global momentum toward AI-enhanced education, many Philippine public senior high schools are left behind, exacerbating existing educational inequalities. Teachers, as frontliners of instructional innovation, are often expected to adopt AI technologies without the necessary guidance, technical support, or institutional preparedness. This disconnect results in missed opportunities for enhancing student learning through personalized and adaptive educational experiences.

Moreover, the lack of empirical studies on Filipino teachers' actual experiences with AI creates a significant research gap, especially in understanding the challenges they face in real-world educational settings (Saputra et al., 2023).

While AI holds great promise for personalizing learning and optimizing outcomes, underutilization remains a pressing issue due to gaps in teacher training and unequal access to resources (Chan, 2023). These limitations not only increase teacher workload but also reduce students' chances of benefiting from customized, data-informed learning environments. As education systems strive to keep pace with technological advancements, understanding the lived experiences of teachers becomes essential for developing targeted professional development programs and crafting policies that support inclusive and sustainable AI integration (Michel-Villarreal et al., 2023; Ng et al., 2023).

This study seeks to address the identified gap by exploring the lived experiences of Senior High School teachers in Caloocan City who are currently utilizing or attempting to integrate AI into their educational practices. Through a qualitative approach, the research aims to gain deeper insights into the challenges, strategies, and perceptions of teachers as they navigate AI technologies within the constraints of the local educational context.

Findings from this study will provide valuable guidance for educational leaders and policymakers to design more effective interventions, training programs, and support systems that facilitate meaningful and equitable use of AI in Philippine classrooms.

Research Questions

This study examined the lived experiences of Senior High School teachers in Caloocan City, utilizing artificial intelligence (AI). The study sought to answer the following questions:

1. What are the lived experiences of teachers using AI?
2. What challenges do they encounter?
3. How do teachers interpret the meaning of their AI experiences?

Literature Review

AI was Not All About ChatGPT

In healthcare, AI technologies enhance scientific writing, streamline workflows, and improve patient care, including diagnosis and treatment recommendations (Sallam, 2023; Alowais et al., 2023; Dave et al., 2023). Ethical considerations highlight the need for a nuanced understanding beyond single AI models. Similarly, in agriculture, generative AI improves practices by addressing diverse challenges (Nah et al., 2023). Drug discovery benefits from AI's role in chemical representation and development processes, showcasing AI's multifaceted research landscape (Benos et al., 2021).

Perceptions and Attitudes Toward AI Integration in Education

In education, research demonstrates an optimistic perception of AI integration, highlighting its potential to personalize learning, enhance student engagement, and address challenges like achievement gaps and teacher retention (Chan, 2023; Schepman & Rodway, 2020; Prather et al., 2023). AI is broadly viewed as a complement to teachers, augmenting rather than replacing their roles (Chiu et al., 2021; Crawford et al., 2023). The effective incorporation of AI requires interdisciplinary collaboration between educators and AI developers to ensure tools are educationally relevant (Lund et al., 2023; Zhai et al., 2021).

Studies emphasize that AI-enabled adaptive learning and immersive experiences depend not just on technology but also on understanding learning sciences, which fosters improved teaching and learning outcomes (Lund et al., 2023; Cao et al., 2021). The consensus emphasizes the importance of fostering partnerships and co-development to maximize the benefits of AI in education, thereby preparing students for an AI-influenced future while creating more effective and engaging learning environments.

Impact of AI on Teaching Practices and Professional Development

A significant factor influencing educators' acceptance of AI integration in education is trust. Addressing teachers' misconceptions and fears through effective professional development fosters openness to AI-powered tools (Nazaretsy et al., 2022). Trust and positive perceptions are as crucial as technological advances for successful AI adoption.

AI's potential as an educational aid was demonstrated by ChatGPT's ability to pass the US Medical Licensing Examination without specialized training, suggesting AI can provide personalized, accessible knowledge that allows teachers to focus on fostering higher-order thinking skills (Kung et al., 2022). AI tools can also generate formative assessment prompts and deliver ongoing feedback, creating interactive learning environments that shift educators' roles toward facilitating critical thinking and problem-solving (Baidoo-Anu & Ansah, 2023).

Research emphasizes the need for customized professional training to deepen teachers' understanding of AI and address their concerns, thereby enhancing student outcomes and supporting personalized learning (Nazaretsky et al., 2022; Tapalova et al., 2022). In higher education, AI applications, such as chatbots and personalized scaffolding tools, show promise in enhancing student engagement and learning efficiency (Yan, 2023; Ng et al., 2022).

Technical and Resource-Related Challenges

AI use in education faces challenges such as misinformation and bias, as generative AI can produce inaccurate or prejudiced content (Baidoo-Anu & Ansah, 2023; Qadir, 2023). Ethical concerns include risks to academic integrity, where misuse of AI tools may lead to misrepresentation of student work (Skavronskaya et al., 2023; Akgun & Greenhow, 2021). Protecting data privacy and ensuring secure handling of student information are critical for building trust (Baidoo-Anu & Ansah, 2023).

Adapting curricula and assessments to integrate AI requires new strategies to maintain fairness and address potential biases in AI evaluations (Zhang et al., 2022). Furthermore, substantial professional development and infrastructure support are needed to overcome barriers such as insufficient training and cultural resistance (Morley et al., 2021; Labadze et al., 2023).

Pedagogical and Ethical Challenges

While AI offers opportunities for personalized and engaging learning, concerns persist regarding academic honesty, critical thinking, and assessment (Mitchel-Villarreal et al., 2023; Chan & Hu, 2023). Educators are especially concerned about maintaining academic integrity and ensuring AI does not undermine critical thinking skills, highlighting the need for clear institutional policies and guidelines (Yan, 2023; Crawford et al., 2023).

Issues such as data privacy and AI transparency are vital for fostering trust, amidst mixed feelings about AI's impact on job security and learning experiences (Yu et al., 2023). Despite these concerns, studies indicate a generally positive reception to AI in fields such as computing and STEM education, where AI tools enhance teaching methods and support for students (Prather et al., 2023; Firat, 2023).

Ethical challenges include the risk of AI-generated academic dishonesty (Lund et al., 2023; Grassini, 2023). Clear governance frameworks are needed to promote responsible AI use and encourage critical thinking (Chan & Hu, 2023). Zhai et al. (2021) further emphasize the need to balance AI's transformative potential with its ethical implications through comprehensive development, application, and integration strategies.

Effects of AI in Teaching Practices

Research by Chen et al. (2020) indicates that educational institutions are increasingly utilizing AI to automate administrative tasks, such as grading and reviewing assignments. This automation allows teachers to dedicate more time to direct student engagement, improving educational outcomes. AI-driven adaptive learning systems further enable personalized curricula tailored to individual student needs, resulting in better retention and enhanced learning quality (Chen et al., 2020).

The use of AI chatbots has demonstrated promise in mimicking human interactions and supporting the learning process, though ethical and practical challenges remain (Adiguzel et al., 2023). Chatbots have been effective in creating supportive environments, especially in language learning, but their success depends on individual learner factors (Ng et al., 2023).

Building trust among educators is crucial for the adoption of AI. Addressing teachers' fears and misunderstandings through targeted professional development fosters positive attitudes toward AI (Huang et al., 2023). Supportive teacher-student interactions with AI tools also enhance student motivation and engagement (Nazaretsky et al., 2022).

Emotional and Cognitive Reflections on AI Usage

Educators' emotional responses to AI significantly influence their willingness to adopt these technologies. Mantello et al. (2021) identify fears and misconceptions as significant barriers, linking trust directly to emotional engagement. Professional development programs addressing these emotional concerns can build confidence and foster positive attitudes toward AI (An et al., 2022).

Teachers' anxiety often stems from concerns about AI's human-like features and its impact on their roles, with self-efficacy playing a key role in these feelings (Mantello et al., 2021; Nazaretsky et al., 2021). When educators develop positive emotional connections to AI, acceptance and effective use increase.

Studies also reveal mixed emotions: excitement about AI's potential to improve teaching contrasts with worries over its effect on traditional teaching roles (Iqbal & Bhatti, 2020). For example, university teachers' perceptions of AI-generated assessment content range from skepticism to acceptance, reflecting deeper insecurities about maintaining their professional authority (Farazouli et al., 2023). Ethical and responsible integration approaches, emphasizing support for educators, are crucial during this transition (Ugbolue et al., 2020).

Methodology

Research Design

This study adopted a qualitative research design, as conceptualized by Creswell (1998), which emphasizes the exploration and interpretation of individuals' lived experiences. Creswell's framework offers a systematic and accessible approach to qualitative inquiry, making it particularly suited for studies that aim to capture in-depth personal narratives. Supporting this approach, Pyo et al. (2024) emphasized that qualitative research focuses on the richness of human experiences and the contextual factors surrounding them. Lim (2025) further defined qualitative research as a methodology that prioritizes understanding behaviors, meanings, and social phenomena through non-numerical data, offering depth and contextual insight. Anchored in this paradigm, the present study examined the lived experiences of senior high school teachers who engage with artificial intelligence (AI) in educational settings.

The research was grounded in hermeneutic phenomenology, an interpretive approach inspired by the philosophical works of Martin Heidegger (1927). Unlike descriptive phenomenology, which aims to capture experiences as they are, hermeneutic phenomenology emphasizes interpretation and meaning-making. This methodology combines phenomenology's focus on lived experience with hermeneutics' emphasis on understanding how individuals interpret their world through language and context (McLeod, 2025). It aligns well with the study's aim to uncover how teachers make sense of their experiences with AI in their teaching practices. As demonstrated by Hammer (2024) in similar educational inquiries, this approach enables researchers to reveal deeper meanings embedded in narratives—meanings often shaped by cultural, institutional, and relational contexts.

Participants

The study's sample consisted of 15 participants or until data saturation was reached, an ideal size for obtaining rich, in-depth data appropriate for exploring lived experiences. Participants were permanent or full-time teachers at the selected public senior high schools

who had used artificial intelligence for at least five years. The selection criteria ensured that meaningful and valid contributions were made to the understanding of the phenomenon. These criteria included being currently employed as a public senior high school teacher at Grade 11 or 12 levels, having a minimum of five years teaching experience to ensure familiarity with traditional pedagogical methods, prior exposure to artificial intelligence with use at least once a month in the past year, representation from diverse disciplines to capture varied experiences, willingness to provide informed consent and participate voluntarily, and openness to discuss personal experiences, challenges, and benefits of AI integration.

Instrument

To comprehensively explore the lived experiences of senior high school teachers using AI, the study employed multiple qualitative data collection methods: phenomenological in-depth interviews, classroom observations, field notes, and a reflexive journal.

The in-depth interviews followed phenomenological principles, treating participants as experts of their own experience while positioning the researcher as a learner. This participant-led approach encouraged authentic storytelling and minimized researcher bias. As noted by Hammer (2024), phenomenological interviews are compelling for capturing both conscious reflections and underlying emotional responses, which are especially valuable when exploring complex themes such as attitudes toward AI. Observations of non-verbal cues, including gestures, facial expressions, and tone, complemented the verbal narratives and revealed subtleties such as enthusiasm, hesitation, or uncertainty. The flexible, open-ended format enabled the researcher to explore significant topics that emerged naturally, ensuring that the data accurately reflected participants' genuine experiences.

Classroom observations provided firsthand insight into how AI tools were applied in real educational contexts. Observing teachers in their natural environment allowed the researcher to witness both the challenges and successes of AI integration, including technical difficulties, pedagogical adaptations, and student engagement. These observations enriched the data by capturing dynamic interactions between teachers, students, and AI technologies. Moreover, they supported triangulation by validating and cross-referencing information obtained during interviews.

Field notes were written immediately after each session to document impressions, contextual information, and researcher reflections. Consistent with the interpretive nature of hermeneutic phenomenology, these notes enhanced the depth and reliability of data analysis by linking spoken responses to the broader environmental and emotional contexts of each encounter.

A reflexive journal was also maintained to document the researcher's thoughts, assumptions, and emotional responses throughout the data collection process. Hermeneutic phenomenology acknowledges the researcher's active role in interpreting meaning; thus, journaling was essential for maintaining transparency, critical self-awareness, and analytic rigor. This ongoing reflection ensured that findings were grounded not only in participant narratives but also in the researcher's evolving understanding of the phenomenon.

Procedure

The data collection procedure began with obtaining the necessary permissions from the Division Office, school principals, and participating schools. Teachers who met the selection criteria were invited to participate in one-on-one in-depth interviews and classroom observations, with arrangements made to accommodate their schedules and locations. Prior to participation, each teacher signed an informed consent form and received an orientation on the research process. The interviews and observations lasted approximately one hour each. With participants' consent, sessions were audio-recorded and video-recorded to capture verbal and non-verbal data. The interviews were transcribed verbatim, and the transcripts were shared with participants for review and validation. Any participant feedback was incorporated to ensure accuracy and ethical use of their data. Classroom observations were documented through detailed notes on the integration of AI in teaching practices. Field notes were taken immediately following each session to record reflections and contextual insights. Throughout the data collection period, the researcher continuously maintained the reflexive journal to enrich data interpretation and ensure methodological rigor.

Data Analysis

Following the completion of the interviews, the audio recordings were transcribed verbatim. The researcher then meticulously reviewed the transcripts to gain a deep understanding of the phenomenon under study. Key statements and significant phrases that captured the essence of the participants' experiences were highlighted. Patterns and recurring elements among the teacher-participants were identified, and these responses were systematically coded and categorized to develop overarching thematic structures.

The data analysis adhered to Moustakas' (1994) phenomenological procedures. The initial step involved epoche, where the researcher consciously set aside personal biases and assumptions to remain fully open to the participants' perspectives. This was followed by phenomenological reduction, which required the careful and faithful description of participants' lived experiences, exactly as they were conveyed. Next, imaginative variation was employed to explore multiple meanings and perspectives, thereby deepening the understanding of the experience. Finally, these insights were synthesized to reveal the essential meaning or core structure of the experience.

The analysis process began with horizontalization, wherein all statements were given equal consideration and importance. From this, invariant horizons—key, non-redundant insights—were identified and subsequently grouped into thematic clusters. A textural

description was then developed, detailing the "what" of the lived experiences and enriched with direct participant quotations to preserve the richness and authenticity of their subjective realities. This was complemented by a structural description that examined the contextual factors influencing the experiences, including elements such as time, space, relationships, and causality. Integrating these descriptions, the researcher analyzed the data to uncover deeper meanings and patterns, elucidating how participants interpreted and made sense of their experiences. Ultimately, these descriptions were synthesized into a concise narrative capturing the essence of the shared lived experiences of the teachers.

Ethical Considerations

Ethical principles were strictly adhered to in order to protect the rights and well-being of all participants. The researcher ensured that informed consent was fully explained and obtained before participation. The purpose, procedures, potential risks, and benefits of the study were transparently communicated, allowing participants to make an informed decision. They were also informed of their right to withdraw at any time without any negative consequences. Consent forms were signed, and participants received an orientation on confidentiality measures prior to interviews.

All data, including audio recordings and transcripts, was securely stored on password-protected devices to prevent unauthorized access. Identifying information was carefully protected, and any visual materials were edited to obscure participant identities. Only personnel directly involved in the research had access to sensitive data.

Participation was entirely voluntary and free from coercion, with respect for participants' autonomy emphasized throughout the study. Potential risks, whether physical or emotional, were carefully considered and minimized, and contingency plans were in place to address unforeseen issues.

The researcher maintained integrity and honesty by reporting findings truthfully, acknowledging contributions appropriately, and ensuring that no data were manipulated to fit preconceived expectations. Participants were provided with transcripts for verification to confirm the accuracy and completeness of their statements. Transparency extended to the use of AI tools in the study, with the researcher taking care to review AI-generated outputs for bias and informing participants of AI's role in the research process.

Ultimately, respect and empathy were consistently demonstrated in all interactions. The researcher endeavored to treat participants with dignity and fairness, valuing their time, insights, and contributions, thereby fostering an environment of trust and meaningful engagement throughout the research journey.

Results and Discussion

This section details the operational aspects of the research, including data collection, analysis, participant demographics, and the methodological process for deriving themes. The data were gathered through in-depth interviews, classroom and behavioral observations, and reflexive journaling, which were then analyzed using Moustakas' Thematic Analysis.

Participants' Demographic Profile

The participants' demographic profile consisted of 15 senior high school teachers from various disciplines across different public schools in Caloocan City. All participants were active AI users in their classrooms, integrating it into activities such as lesson planning, personalized learning, assessments, virtual reality, and administrative tasks. They varied in educational attainment, years of teaching experience, and subject specializations. Each teacher willingly participated in the interviews and signed consent forms.

Overall, this section established a rigorous and ethically grounded research process that ensured the credibility and reliability of the data. The insights collected served as the foundation for identifying themes related to the lived experiences of public senior high school teachers in their use of artificial intelligence.

Table 1. *Qualitative Findings*

Indicators	*Themes*
Lived Experiences of Teachers in Using AI	Enhancing Productivity and Balance Motivating Learning and Performance
Challenges Encountered by Teachers in Using AI	Navigating Tech with Ethics Innovating Amidst Resource Challenges
Interpretation of Teachers' Experiences with AI	Collaborative Empowerment Through AI Promoting Access and Quality

For Research Question 1, which explored the lived experiences of teachers using AI, two themes emerged:

Theme 1: Enhancing Productivity and Balance

The theme highlighted three key areas in how teachers engage with AI tools. First, Efficiency is crucial, as AI helps teachers manage workloads, improve productivity, and maintain work-life balance. Second, Organization plays a significant role; teachers with greater awareness of AI capabilities—such as automated grading and personalized learning—experience increased productivity and reduced burnout by streamlining administrative tasks. Lastly, the Process aspect demonstrates that AI tools enhance teachers' analytical

thinking, enabling them to track student performance more effectively, identify learning gaps, and tailor instruction more precisely.

Theme 2: Motivating Learning and Performance

The theme revealed how AI enhances various aspects of teaching and learning. Under Learning, AI promotes adaptability by tailoring instruction to student progress, allowing for dynamic adjustment of task difficulty, pacing, and resources. In terms of Motivation, AI tools boost student confidence through real-time, personalized feedback that encourages continued engagement. Regarding Evaluation, AI transforms assessment by providing a comprehensive analysis of student performance, offering deeper insights into strengths and weaknesses. Lastly, in Performance, AI accelerates learning by enabling students to progress at their own pace and engage with content more frequently, leading to faster mastery of concepts.

For Research Question 2, which focused on the challenges encountered by teachers in using AI, the following themes were identified:

Theme 3: Navigating Tech with Ethics

The theme illustrated how AI is reshaping education across multiple dimensions. In Technology, AI shifts teachers' roles from traditional instructors to facilitators by automating tasks like grading and lesson planning, enhancing personalized learning. Under Innovation, AI fosters teacher creativity through dynamic lesson planning and real-time feedback. For Development, AI provides insights into student behaviors, helping teachers refine their methods with targeted interventions. The category Advancement highlighted rapid growth in educational tools and strategies, enabling adaptive teaching and deeper engagement. However, Security concerns remain significant, with teachers emphasizing the need to protect sensitive student data from misuse. Finally, in Sustainability, AI supports global education access, breaking down barriers and fostering connected learning communities for a more inclusive future.

Theme 4: Innovating Amidst Resource Challenges

The theme uncovered both opportunities and challenges teachers face with AI integration. In Creativity, teachers embrace innovative approaches, rethinking lesson plans and teaching styles to incorporate AI meaningfully. Under Challenge, technical issues like inefficiencies and software incompatibilities disrupt classroom use and cause frustration. The Adaptation category emphasized the importance of culturally sensitive AI tools that align with diverse student backgrounds to prevent misunderstandings. Regarding Flexibility, teachers seek a balance between traditional methods and AI advantages, cautious not to lose human connection and critical thinking. Many reports have linked Discomfort to skepticism about AI's effectiveness and ethical concerns, as people feel uncertain about technology replacing interpersonal teaching roles. Finally, Ethics emerges as a critical focus, with teachers emphasizing vigilance against bias and inequality in AI systems through ongoing evaluation and transparency.

For Research Question 3, concerning the interpretation of teachers' experiences with AI, two interpretative themes emerged:

Theme 5: Collaborative Empowerment Through AI

The theme highlighted how AI enhances collaboration, communication, and support among educators. In Collaboration, AI platforms enable seamless teamwork and sharing of resources across schools. Under Communication, teachers are impressed by AI's ability to deliver instant, personalized feedback, improving student interactions. The Support category highlights the crucial role of technical, emotional, and pedagogical support from peers and institutions in the successful adoption of AI. AI also boosts Engagement by making learning more dynamic and capturing students' attention, particularly benefiting those previously disengaged. Ultimately, Empowerment emerges as a key outcome, with AI freeing teachers from repetitive tasks and enabling them to tailor instruction and nurture student relationships more effectively.

Theme 6: Promoting Access and Quality

The theme highlighted the crucial role of AI in enhancing the quality of education. Under Quality, teachers emphasized that access to the right AI tools and infrastructure is crucial for enhancing teaching effectiveness. In Analysis, AI enables more profound insights into student performance through detailed data analytics, enriching teachers' understanding of learning progress. The Accessibility category demonstrates how AI enhances educational access by tailoring content to meet diverse student needs, thereby making learning more inclusive. Finally, Reliability emphasizes AI's ability to automate tasks such as grading and data analysis with precision, thereby reducing human error and ensuring consistent accuracy.

These six themes, supported by clearly defined categories and derived through rigorous thematic analysis, provided a comprehensive understanding of the complex and multifaceted experiences of public senior high school teachers using AI in their instructional practices. The thematic framework laid a solid foundation for the subsequent formulation of conclusions and recommendations.

Conclusions

Based on the findings, the study concluded that public senior high school teachers generally perceived artificial intelligence (AI) as a beneficial tool for enhancing teaching, learning, and administrative processes. AI was seen to offer opportunities for personalized instruction and improved efficiency in classroom management. However, its practical implementation was hindered by key challenges, including limited access to technology, a lack of training, data privacy concerns, and inadequate institutional support. These barriers

underscore the urgent need for targeted professional development and enhanced infrastructure to facilitate meaningful AI integration.

Teachers' experiences with AI reflected a balance of optimism and apprehension. While many recognized AI's potential to automate tasks and support individualized learning, concerns persisted regarding its impact on teacher-student relationships and the evolving role of educators. The overall sentiment was shaped by enthusiasm for innovation, tempered by uncertainty due to insufficient preparation and resources. To unlock AI's transformative potential in education, educators require structured training, access to reliable tools, and clear guidance that acknowledges the ethical and pedagogical complexities involved.

In response to these findings, the study recommends that students use AI responsibly, enhancing their learning without compromising academic integrity. Teachers should actively engage in professional development and view AI as a tool that supports—rather than replaces—their instructional role. School administrators must prioritize investments in teacher training, resource provision, and clear policy frameworks, particularly in data protection. Meanwhile, developers should involve educators in the design of AI tools to ensure usability and relevance. Future research should also explore the long-term impact of AI on teaching practices, teacher-student dynamics, and equitable access across educational settings.

References

Adiguzel, T., Kaya, M. H., & Cansu, F. K. (2023). Revolutionizing education with AI: Exploring the transformative potential of ChatGPT. Contemporary Educational Technology. https://doi.org/10.30935/cedtech/13152

Akgun, S., & Greenhow, C. (2021). Artificial intelligence in education: Addressing ethical challenges in K–12 settings. AI and Ethics, 2, 431–440. https://doi.org/10.1007/s43681-021-00096-7

Alowais, S. A., Alghamdi, S. S., Alsuhebany, N., Alqahtani, T., Alshaya, A. I., Almohareb, S. N., Aldairem, A., Alrashed, M. A., Saleh, K. B., Badreldin, H., Yami, M. S. A., Al Harbi, S. A., & Albekairy, A. M. (2023). Revolutionizing healthcare: The role of artificial intelligence in clinical practice. BMC Medical Education, 23. https://doi.org/10.1186/s12909-023-04698-z

An, X., Chai, C., Li, Y., Zhou, Y., Shen, X., Zheng, C., & Chen, M. (2022). Modeling English teachers' behavioral intention to use artificial intelligence in middle schools. Education and Information Technologies, 28, 5187–5208. https://doi.org/10.1007/s10639-022-11286-z

Baidoo-Anu, D., & Ansah, L. O. (2023). Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.4337484

Benos, L., Tagarakis, A., Dolias, G., Berruto, R., Kateris, D., & Bochtis, D. (2021). Machine learning in agriculture: A comprehensive updated review. Sensors, 21(11), Article 3758. https://doi.org/10.3390/s21113758

Cadiz, M. C. D., Manuel, L. A. F., Reyes, M. M., & Natividad, L. R. (2024). Technology integration in Philippine higher education: A content-based bibliometric analysis. Jurnal Ilmiah Ilmu Terapan Universitas Jambi, 8(1), 35–47.

Cao, G., Duan, Y., Edwards, J., & Dwivedi, Y. K. (2021). Understanding managers' attitudes and behavioral intentions towards using artificial intelligence for organizational decision-making. Technovation. https://doi.org/10.1016/j.technovation.2021.102312

Chan, C. (2023). A comprehensive AI policy education framework for university teaching and learning. International Journal of Educational Technology in Higher Education, 20. https://doi.org/10.1186/s41239-023-00408-3

Chan, C., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and challenges in higher education. International Journal of Educational Technology in Higher Education, 20. https://doi.org/10.1186/s41239-023-00411-8Chen, Lijia., Chen, Pingping., & Lin, Zhijian. (2020). Artificial Intelligence in Education: A Review. IEEE Access, 8, 75264-75278.

Chiu, T. K. F.., Meng, Helen M.., Chai, C.., King, Irwin., Wong, S.., & Yam, Y. (2021). Creation and Evaluation of a Pretertiary Artificial Intelligence (AI) Curriculum. IEEE Transactions on Education, 65, 3039. http://doi.org/10.1109/TE.2021.3085878

Crawford, J.., Cowling, Michael., & Allen, Kelly-Ann. (2023). Leadership is needed for ethical ChatGPT: Character, assessment, and learning using artificial intelligence (AI). Journal of University Teaching and Learning Practice. http://doi.org/10.53761/1.20.3.02

Creswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five traditions.

Dave, T., Athaluri, S A., & Singh, Satyam. (2023). ChatGPT in medicine: an overview of its applications, advantages, limitations, future prospects, and ethical considerations. Frontiers in Artificial Intelligence , 6. http://doi.org/10.3389/frai.2023.1169595

Farazouli, A., Pargman, T., Cerratto, T., Bolander-Laksov, K., & McGrath, C. (2023). Hello GPT! Goodbye home examination? An exploratory study of AI chatbots impact on university teachers' assessment practices. Assessment & Evaluation in Higher Education, 49, 363 - 375. http://doi.org/10.1080/02602938.2023.2241676

Firat, M. (2023). What ChatGPT means for universities: Perceptions of scholars and students. 1. http://doi.org/10.37074/jalt.2023.6.1.22

Granić, A., & Marangunić, N.. (2020). Technology acceptance model in educational context: A systematic literature review. British

Journal of Educational Technology, 50 (5) (2020), pp. 2572-2593

Grassini, S. (2023). Shaping the Future of Education: Exploring the Potential and Consequences of AI and ChatGPT in Educational Settings. Education Sciences. http://doi.org/10.3390/educsci13070692

Hammer, E. (2024). ChatGPT in the Classroom: The Teacher's Challenges and Opportunities in an AI Revolution.

Hu, W. (2019). Joseph E. Aoun: Robot-proof: higher education in the age of artificial intelligence. Higher Education, 78, 1143 - 1145. http://doi.org/10.1007/s10734-019-00387-3

Huang, A., Lu, Owen H. T., & Yang, Stephen J. H. (2023). Effects of artificial Intelligence-Enabled personalized recommendations on learners' learning engagement, motivation, and outcomes in a flipped classroom. Comput. Educ., 194, 104684.

Hussain, A., Tahir, A., Hussain, Z. U., Sheikh, Z., Gogate, M., Dashtipour, K., Ali, A., & Sheikh, A. (2021). Artificial Intelligence–Enabled Analysis of Public Attitudes on Facebook and Twitter Toward COVID-19 Vaccines in the United Kingdom and the United States: Observational Study. Journal of Medical Internet Research, 23. http://doi.org/10.2196/26627

Iqbal, S., & Bhatti, Z. (2020). A qualitative exploration of teachers' perspective on smartphones usage in higher education in developing countries. International Journal of Educational Technology in Higher Education, 17. http://doi.org/10.1186/s41239-020-00203-4

Kaya, F., Aydın, F.., Schepman, A.., Rodway, P.., Yetişensoy, Okan., & Kaya, Meva Demir. (2022). The Roles of Personality Traits, AI Anxiety, and Demographic Factors in Attitudes toward Artificial Intelligence. International Journal of Human–Computer Interaction, 40, 497-514. http://doi.org/10.1080/10447318.2022.2151730

Khalid, A., Kazim, T., Diaz, K. R. V., & Iqbal, J. (2023). Breaking barriers in higher education: Implementation of cost-effective social constructivism in engineering education. International Journal of Mechanical Engineering Education, 03064190231218123.

Kim, J. (2024). Leading teachers' perspective on teacher-AI collaboration in education. Education and Information Technologies, 29(7), 8693-8724.

Kung, T. H., Cheatham, M., Medenilla, A., Sillos, C., Leon, L., Elepaño, C., Madriaga, M., Aggabao, R., Diaz-Candido, G., Maningo, J., & Tseng, V. (2022). Performance of ChatGPT on USMLE: Potential for AI-assisted medical education using large language models. PLOS Digital Health, 2. http://doi.org/10.1371/journal.pdig.0000198

Labadze, L., Grigolia, M., & Machaidze, L. (2023). Role of AI chatbots in education: systematic literature review. International Journal of Educational Technology in Higher Education, 20. http://doi.org/10.1186/s41239- 023-00426-1

Le, H. V., & Nguyen, L. Q. (2024). Promoting L2 learners' critical thinking skills: the role of social constructivism in reading class. In Frontiers in Education (Vol. 9, p. 1241973). Frontiers Media SA.

Lee, J., Wu, A. Siyu, Li, David, & Kulasegaram, K. (2021). Artificial Intelligence in Undergraduate Medical Education: A Scoping Review. Academic Medicine, 96, S62 - S70. http://doi.org/10.1097/ACM.0000000000004291

Li, M., Vale, C., Tan, H., & Blannin, J. (2024). A systematic review of TPACK research in primary mathematics education. Mathematics Education Research Journal, 1-31.

Lim, W. M. (2024). What Is Qualitative Research? An Overview and Guidelines. Australasian Marketing Journal, 0(0). https://doi.org/10.1177/14413582241264619

Lund, B. D., Wang, T., Mannuru, N. R., Nie, B., Shimray, S., & Wang, Z. (2023). ChatGPT and a new academic reality: Artificial Intelligence-written research papers and the ethics of the large language models in scholarly publishing. Journal of the Association for Information Science and Technology, 74, 570 – 581. http://doi.org/10.1002/asi.24750

Mantello, P., Ho, M.-T., Nguyen, M.-H., & Vuong, Q. (2021). Bosses without a heart: socio-demographic and cross-cultural determinants of attitude toward Emotional AI in the workplace. Ai & Society, 38, 97 - 119. http://doi.org/10.1007/s00146-021-01290-1\

Memon, Mumtaz & T., Ramayah & Ting, Hiram & Cheah, Jun-Hwa. (2025). PURPOSIVE SAMPLING: A REVIEW AND GUIDELINES FOR QUANTITATIVE RESEARCH. Journal of Applied Structural Equation Modeling. 9. 1-23.10.47263/JASEM.9(1)01.

Miao, F., Holmes, W., Huang, R., & Zhang, H. (2021). AI and education: A guidance for policymakers. Unesco Publishing.

Michel-Villarreal, R., Vilalta-Perdomo, E.., Salinas-Navarro, D.., Thierry-Aguilera, Ricardo., & Gerardou, F. S. (2023). Challenges and Opportunities of Generative AI for Higher Education as Explained by ChatGPT. Education Sciences. http://doi.org/10.3390/educsci13090856

Morley, J., Elhalal, A., Garcia, F., Kinsey, L., Mökander, J., & Floridi, L. (2021). Ethics as a Service: A Pragmatic Operationalisation of AI Ethics. Minds and Machines, 31, 239 - 256. http://doi.org/10.1007/s11023-021-09563-w

Nah, F. F.-H., Zheng, R., Cai, J., Siau, K., & Chen, L. (2023). Generative AI and ChatGPT: Applications, challenges, and AI–human

collaboration. Journal of Information Technology Case and Application Research, 25(4), 277–304. https://doi.org/10.1080/15228053.2023.2233814

Nazaretsky, T., Ariely, M., Cukurova, M., & Alexandron, Giora. (2022). Teachers' trust in AI-powered educational technology and a professional development program to improve it. Br. J. Educ. Technol., 53, 914931. http://doi.org/10.1111/bjet.13232

Nazaretsky, T., Cukurova, M., & Alexandron, Giora. (2021). An Instrument for Measuring Teachers' Trust in AI-Based Educational Technology. LAK22: 12th International Learning Analytics and Knowledge Conference. http://doi.org/10.1145/3506860.3506866

Ng, D., Lee, M., Tan, R. Jun Yi, Hu, Xiao, Downie, J.S., & Chu, S.K. (2022). A review of AI teaching and learning from 2000 to 2020. Education and Information Technologies, 28, 8445-8501. http://doi.org/10.1007/s10639-022-11491-w

Ng, D.., Leung, J.., Su, Jiahong., Ng, R.., & Chu, S. (2023). Teachers' AI digital competencies and twenty-first century skills in the post-pandemic world. Educational Technology Research and Development, 71, 137 -161. http://doi.org/10.1007/s11423-023-10203-6

Nikolopoulou, K. (2023, June 22). What Is Snowball Sampling? | Definition & Examples. Scribbr. Retrieved April 26, 2025, from https://www.scribbr.com/methodology/snowball-sampling/

Olatunde-Aiyedun, T. G. (2024). Artificial Intelligence (AI) in Education: Integration of AI Into Science Education Curriculum in Nigerian Universities. International Journal of Artificial Intelligence for Digital, 1(1).

Prather, J., Denny, Paul., Leinonen, Juho., Becker, Brett A.., Albluwi, Ibrahim., Craig, Michelle., Keuning, H.., Kiesler, Natalie., Kohn, Tobias., Luxton-Reilly, Andrew., Macneil, Stephen., Petersen, Andrew., Pettit, Raymond., Reeves, Brent N.., & Šavelka, Jaromír. (2023). The Robots Are Here: Navigating the Generative AI Revolution in Computing Education. Proceedings of the 2023 Working Group Reports on Innovation and Technology in Computer Science Education. http://doi.org/10.1145/3623762.3633499

Pyo, J., Lee, W., Choi, E. Y., Jang, S. G., & Ock, M. (2023). Qualitative research in healthcare: necessity and characteristics. Journal of preventive medicine and public health, 56(1), 12.

Qadir, J. (2023). Engineering Education in the Era of ChatGPT: Promise and Pitfalls of Generative AI for Education. 2023 IEEE Global Engineering Education Conference (EDUCON), 19. http://doi.org/10.1109/EDUCON54358.2023.10125121

Sallam, M. (2023). ChatGPT Utility in Healthcare Education, Research, and Practice: Systematic Review on the Promising Perspectives and Valid Concerns. Healthcare, 11. http://doi.org/10.3390/healthcare11060887

Saputra, I., Astuti, M., Sayuti, M., & Kusumastuti, D. (2023). Integration of Artificial Intelligence in Education: Opportunities, Challenges, Threats and Obstacles. A Literature Review. The Indonesian Journal of Computer Science, 12(4).

Schepman, A., & Rodway, P. (2020). Initial validation of the general attitudes towards Artificial Intelligence Scale. Computers in Human Behavior Reports, 1, 100014 - 100014. http://doi.org/10.1016/j.chbr.2020.100014

Schepman, A., & Rodway, P. (2022). The General Attitudes towards Artificial Intelligence Scale (GAAIS): Confirmatory Validation and Associations with Personality, Corporate Distrust, and General Trust. International Journal of Human–Computer Interaction, 39, 2724 - 2741. http://doi.org/10.1080/10447318.2022.2085400

Silva, G.M., Dias, Á., Rodrigues, M.S. (2022). Continuity of use of food delivery apps: An integrated approach to the health belief model and the technology readiness and acceptance model. Journal of Open Innovation: Technology, Market, and Complexity, 8 (3) (2022), p. 114

Skavronskaya, L., Hadinejad, A., & Cotterell, D. (2023). Reversing the threat of artificial intelligence to opportunity: a discussion of ChatGPT in tourism education. Journal of Teaching in Travel & Tourism, 23, 253 -258. http://doi.org/10.1080/15313220.2023.2196658

Tao, E. et al. (2020). A systematic review and meta-analysis of user acceptance of consumer-oriented health information technologies. Computers in Human Behavior, 104 (2020), Article 106147

Tapalova, O., Zhiyenbayeva, N., & Gura, Dmitry. (2022). Artificial Intelligence in Education: AIEd for Personalised Learning Pathways. Electronic Journal of e-Learning. http://doi.org/10.34190/ejel.20.5.2597

Ugbolue, U.., Duclos, M.., Urzeală, C.., Berthon, M.., Kulik, Keri S.., Bota, Aura., Thivel, D.., Bagheri, R.., Gu, Yaodong., Baker, J.., Andant, Nicolas., Pereira, B.., Rouffiac, K.., Clinchamps, Maëlys., Frédéric, Network., & Covistress, on behalf of the. (2020). An Assessment of the Novel COVISTRESS Questionnaire: COVID-19 Impact on Physical Activity,Sedentary Action and Psychological Emotion. Journal of Clinical Medicine, 9. http://doi.org/10.3390/jcm9103352

Wardat, Y., Tashtoush, M., AlAli, R., & Saleh, S. (2024). Artificial intelligence in education: mathematics teachers' perspectives, practices and challenges. Iraqi Journal for Computer Science and Mathematics, 5(1), 60-77.

Yan, D. (2023). Impact of ChatGPT on learners in a L2 writing practicum: An exploratory investigation. Education and Information Technologies, 28, 13943-13967. http://doi.org/10.1007/s10639-023-11742-4

Yeh, Y. F., Chan, K. K. H., & Hsu, Y. S. (2021). Toward a framework that connects individual TPACK and collective TPACK: A

systematic review of TPACK studies investigating teacher collaborative discourse in the learning by design process. Computers & education, 171, 104238.

Zhai, X., Chu, X., Chai, C.., Jong, M.., Istenič, A.., Spector, Michael., Liu, Jia-bao., Yuan, Jing., & Li, Yan. (2021). A Review of Artificial Intelligence (AI) in Education from 2010 to 2020. Complex., 2021, 8812542:1-8812542:18. http://doi.org/10.1155/2021/8812542

Zhang, H., Lee, I. A., Ali, S., DiPaola, D., Cheng, Y., & Breazeal, C. (2022). Integrating Ethics and Career Futures with Technical Learning to Promote AI Literacy for Middle School Students: An Exploratory Study. International Journal of Artificial Intelligence in Education, 1 - 35. http://doi.org/10.1007/s40593-022-00293-3

Zhang, K., & Aslan, A. B. (2021). AI technologies for education: Recent research & future directions. Computers and Education: Artificial Intelligence, 2, 100025.

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