EPRA International Journal of Environmental Economics, Commerce and Educational Management
Journal DOI: 10.36713/epra0414 |ISI I.F Value: 0.815|SJIF Impact Factor (2026): 8.752 ISSN: 2348 – 814X
Volume: 13 | Issue:5 | May 2026 -Peer Reviewed Journal

ARTIFICIAL INTELLIGENCE (AI) IN THE CLASSROOM: NARRATIVES OF JUNIOR HIGH SCHOOL TEACHERS

Majelyn A. Icalina
Master of Arts in Educational Management, Rizal Memorial Colleges, Inc.

Article DOI: https://doi.org/10.36713/epra27882
DOI No: 10.36713/epra27882

ABSTRACT

This qualitative phenomenological study explored the lived experiences of junior high school teachers in integrating artificial intelligence in the classroom in Kapalong West District, Division of Davao del Norte. Specifically, the study examined teachers' experiences in using artificial intelligence tools, the challenges they encountered, their coping strategies, and the educational insights they gained from these experiences. Five millennial Grade 10 public secondary school teachers and three grade level head from medium-sized schools participated in in-depth interviews and FGD for triangulation. Data were analyzed using NVivo software to identify recurring patterns and meanings across narratives. Findings revealed that teachers utilized various artificial intelligence applications for lesson planning, instructional material development, grammar support, interactive assessments, and student engagement. While artificial intelligence enhanced efficiency and creativity, challenges such as limited internet connectivity, unequal access to devices, overreliance, misinformation risks, and ethical concerns emerged. Teachers coped through clear usage guidelines, critical evaluation of outputs, supervised in-class activities, and collaboration with colleagues including Learning Action Cell sessions. Educational insights emphasized AI integration depends heavily on the teacher's role as a guide and evaluator to preserve learning authenticity and as a support tool rather than a replacement for teacher expertise. The study underscores the importance of institutional support, continuous professional development, and human-centered pedagogy in ensuring responsible and effective artificial intelligence integration in junior high school classrooms.

KEYWORDS: *artificial intelligence; classroom integration; junior high school teachers; phenomenological study; teacher experiences*

INTRODUCTION

Education has long been grounded in the principles of curiosity, creativity, and intellectual growth. These ideals are continuously reshaped by technological advancements that redefine how knowledge is taught, learned, and applied. One of the most transformative forces in recent years is artificial intelligence, which has introduced new possibilities for instruction, assessment, and student engagement. Artificial intelligence systems now serve as teaching assistants, content generators, and personalized learning companions capable of tailoring lessons to individual needs. However, as artificial intelligence becomes increasingly embedded in educational practice, it also challenges teachers to adapt their methods and professional identities to a new technological reality (Yan et al., 2024).

Globally, educational institutions are navigating the complexities of artificial intelligence integration. Tools such as ChatGPT, Grammarly, and QuillBot have reshaped how students produce and refine their academic outputs, enabling them to generate ideas, correct grammar, and enhance writing structure almost instantly. While these tools offer immense pedagogical potential, they also redefine traditional teacher-student dynamics and the role of educators in fostering critical thinking and creativity (Birks & Clare, 2023). International research reveals that artificial intelligence integration in education is not merely a technical process but an ethical and pedagogical shift that requires rethinking instructional strategies, feedback mechanisms, and the nature of student learning itself (Zhai et al., 2024).

In many countries, the discourse on artificial intelligence in education centers on balancing opportunity and oversight. Artificial intelligence is viewed as a powerful tool for promoting inclusivity and personalized learning when guided appropriately by educators (UNESCO, 2021). Yet, without sufficient teacher training and institutional support, it risks deepening inequalities or fostering dependency rather than empowerment (Office of Educational Technology, 2023). Educators worldwide are thus called upon to develop new competencies, artificial intelligence literacy, digital ethics, and adaptive pedagogical design, that allow them to integrate technology effectively while maintaining human-centered learning (Fidas et al., 2023).

In the Philippine context, artificial intelligence integration remains in its formative stage. Although higher education institutions such as the University of the Philippines Open University and Philippine Normal University have begun developing ethical frameworks and guidelines for responsible artificial intelligence use, similar initiatives in basic education are still emerging (Far Eastern University, 2024). The Department of Education has started exploring digital transformation strategies, but challenges in teacher readiness, infrastructure, and policy consistency persist (DepEd, 2025). As artificial intelligence technologies become more accessible, understanding how teachers engage with these tools in real classroom settings becomes increasingly vital to shaping future education policies and practices.

Teachers in Philippine schools, particularly those in rural or under-resourced areas, often face additional obstacles when integrating artificial intelligence into their teaching. Limited access to stable internet connections, insufficient technological tools, and the lack of structured training programs hinder the effective use of digital innovations (Kanehira et al., 2024). In many cases, teachers must rely on their initiative and creativity to adapt artificial intelligence tools to classroom realities that differ significantly from those in urban or technologically advanced environments. These contextual constraints shape not only how teachers use artificial intelligence but also how they perceive its role in enhancing or complicating learning (Algones et al., 2024).

In Kapalong West District, Division of Davao del Norte, teachers operate within a landscape marked by resource limitations, geographical isolation, and high student diversity. Previous studies in Davao del Norte highlight that educators in rural areas encounter unique logistical and infrastructural barriers that influence both instructional delivery and technological integration (Alagones et al., 2024). These challenges necessitate flexible and context-sensitive approaches to implementing artificial intelligence in classroom settings. Teachers in this area must navigate between innovation and practicality, adopting artificial intelligence in ways that align with their students' needs, school capacities, and personal teaching philosophies.

As artificial intelligence continues to evolve, teachers' experiences become critical in understanding how technology reshapes classroom interaction, lesson planning, and student learning outcomes. Their narratives provide insight into how artificial intelligence can be used not only as a tool for efficiency but also as a medium for enhancing engagement and creativity. Equally, teachers' coping mechanisms, how they address challenges such as limited resources, changing workloads, or unfamiliar technologies, reveal the adaptive strategies necessary for sustainable educational innovation (Bin-Nashwan, 2023).

Exploring the lived experiences of teachers in using artificial intelligence in the classroom offers an opportunity to capture both the promises and pressures of technological change. Their reflections highlight how teaching practices evolve, how challenges are negotiated, and what forms of support are essential for meaningful integration. These experiences underscore that effective artificial intelligence adoption depends not merely on access to tools but on the human capacity to adapt, interpret, and apply them thoughtfully (Ly, 2024).

This study, therefore, aims to explore the experiences of junior high school teachers in using artificial intelligence in the classroom setting. By focusing on the narratives of teachers in Kapalong West District, Division of Davao del Norte, this research seeks to illuminate how educators experience and adapt to artificial intelligence integration within their unique educational contexts. The findings aim to inform local and national educational stakeholders on how to design support systems, training programs, and pedagogical models that empower teachers as active agents of technological transformation.

THE STUDY'S OBJECTIVES

This study aimed to explore the lived experiences of junior high school teachers in using artificial intelligence in the classroom setting within Kapalong West District, Division of Davao del Norte. Specifically, it sought to

1) identify the experiences and the challenges of junior high school teachers in integrating artificial intelligence tools in their instructional practices.
2) examine the coping strategies they employ to overcome the challenges they encounter in integrating artificial intelligence in their classroom.
3) determine the educational insights they gain from these experiences.

By focusing on their narratives, the study aimed to uncover authentic accounts of how artificial intelligence influences teaching, learning, and classroom interactions. The findings of this study provided valuable implications for educators, school leaders, and policymakers in developing practical and ethical strategies for integrating artificial intelligence in education while ensuring that its use enhances, rather than replaces, meaningful teaching and learning.

METHODOLOGY

The procedures and methods that support the study are described in this chapter. In this section the following aspects of the research method are described thoroughly: philosophical assumptions, qualitative stance of the study, research design,

research participants, ethical consideration, the role of the researcher, data collection, data analysis and trustworthiness of the study.

Method Used

This study employed a qualitative phenomenological research design to explore and interpret the lived experiences of junior high school teachers in relation to the use of artificial intelligence in the classroom. Phenomenology seeks to understand the meaning of human experiences as they are lived and perceived by individuals, focusing on the essence of their shared realities (Neubauer et al., 2019). In this study, the phenomenon of interest revolved around how teachers experience, cope with, and adapt to the integration of artificial intelligence in teaching and learning. Through this design, the research aimed to uncover how teachers' professional experiences shape their understanding of technology, authenticity, and integrity within the classroom setting, offering an in-depth view of the educational implications of artificial intelligence integration. To generate rich and meaningful data, the study utilized in-depth interviews and focus group discussion as primary data collection methods. In phenomenological research, interviews play a central role as they allow participants to express their lived experiences and the meanings they attribute to them (Sundler et al., 2019). Teacher-participants were encouraged to share their reflections on the benefits, challenges, and coping mechanisms associated with artificial intelligence in their classrooms.

The research procedure followed a structured process encompassing participant recruitment, ethical approval, data collection, and analysis. Participants were purposively selected based on their experience in classroom teaching and familiarity with artificial intelligence integration. Each interview and discussion session was audio-recorded and transcribed verbatim to ensure accuracy and credibility. The collected data were analyzed using thematic analysis, which is consistent with phenomenological methodology as it identifies patterns, recurring meanings, and themes across participants' narratives (Clarke & Braun, 2019). Through this rigorous process, the study remained grounded in the teachers' authentic voices while contributing valuable insights for educational practice and policy in the context of artificial intelligence integration.

Sources of Data

In line with the purpose of this study to explore the experiences, coping mechanisms, and educational insights of junior high school teachers in using artificial intelligence (AI) in the classroom the participants were carefully selected to provide meaningful and authentic narratives about the phenomenon under investigation. The study employed a qualitative phenomenological approach, which sought to capture the lived experiences of individuals and to understand how they made sense of their encounters with AI technology in teaching (Neubauer et al., 2019). This approach was deemed appropriate as it enabled the researcher to examine the depth and diversity of teachers' real-world experiences with AI integration in classroom instruction.

There were five (5) participants in in-depth interview (IDI) and three (3) grade level head teachers in focus group discussion (FGD) for triangulation were involved in this study. They are millennial public secondary teachers aged 29 to 44 years old, specifically junior high school Grade 10 teachers from medium-sized schools in the Kapalong West District, Division of Davao del Norte. All participants have at least three years of continuous teaching experience in their current school, ensuring that they possess adequate familiarity with their institutional context and sustained engagement with students and classroom technologies. This inclusion criterion guaranteed that the participants have relevant exposure and maturity in teaching practices, making their insights credible and grounded in actual classroom realities (Holloway & Galvin, 2016).

The sample size of five participants followed Creswell and Poth's (2018) recommendation of five to twenty-five participants for phenomenological studies, allowing for both depth of understanding and sufficient representation. In qualitative inquiry, smaller samples are appropriate since the goal is to achieve depth and richness rather than generalization (Vasileiou et al., 2018). Data collection continued until data saturation is reached, that is, when no new themes or insights emerge from participants' accounts (Saunders et al., 2018).

The five selected teacher-participants who meet the inclusion criteria were considered appropriate and sufficient for this study. Their direct classroom experience, technological engagement, and reflective insights ensured that the findings are both credible and contextually meaningful in understanding how junior high school teachers experience, cope with, and learn from the use of artificial intelligence in their teaching practices.

Data Gathering Instrument

This study employed a semi-structured interview guide during the IDI and FGD as the primary data collection tool to explore the lived experiences of junior high school teachers in using artificial intelligence in the classroom setting. The interview guide was carefully designed to elicit in-depth insights into how teachers integrate artificial intelligence into their teaching, the challenges they encounter, and the coping strategies they develop in adapting to this technological change. The combination of open-ended questions and guided prompts provided flexibility for participants to express their thoughts

freely, while maintaining focus on the central themes of the study. This structure allowed teachers in the Kapalong West District to share authentic and reflective narratives drawn from their own classroom experiences.

The instrument was anchored on the study's core areas, teachers' experiences, challenges, and adaptive strategies, ensuring alignment with the research questions. Through this approach, the study gathered rich, descriptive data suitable for thematic analysis, leading to a comprehensive understanding of how teachers experience and manage artificial intelligence integration in their classrooms.

The interview guides and FGD protocols were subjected to validation by experts through content analysis and pilot testing. This procedure guaranteed that the instruments were clear, relevant, and suitable for the study.

Sampling Technique

The study utilized purposive sampling to identify and select participants who can provide rich, relevant, and diverse information about the use of AI in education. Purposive sampling is widely recognized in qualitative research as an intentional strategy to recruit individuals with substantial experience and direct involvement in the phenomenon being studied (Palinkas et al., 2015). By using this method, the researcher ensured that participants have firsthand experience in integrating AI tools, such as ChatGPT, Grammarly, and other educational technologies, into teaching and learning processes.

It also employed interview guide to engage the participants in meaningful dialogue by encouraging them to recount specific instances of artificial intelligence integration, discuss its effects on teaching and learning, and reflect on their adaptive strategies in navigating its use. Its semi-structured nature ensured that the conversation remains fluid and responsive to participants' individual contexts, fostering deeper exploration of each topic.

Procedure of the Study

The process of data collection for this study followed a systematic series of steps to ensure ethical compliance, credibility, and rigor. Each step was undertaken with careful consideration of institutional protocols and research ethics.

Before conducting the study, a full ethics review was undertaken last November 11, 2025, to ensure that all research procedures align with ethical standards for studies involving human participants. The research proposal, including interview protocols, consent forms, and data management plans, were submitted to the Institutional Ethics Review Committee for evaluation. This review ensured that the rights, safety, and confidentiality of all participants are protected and that the study adheres to ethical principles of voluntary participation and informed consent.

Once ethical clearance was granted, the semi-structured interview guide was subjected to expert validation dated. Three qualified experts reviewed the instrument to ensure that the questions are clear, relevant, and aligned with the research objectives. Their suggestions were incorporated to refine the instrument before administration. The validation process ensured that the tool effectively elicits comprehensive and meaningful responses about teachers' experiences, coping mechanisms, and insights on AI use in the classroom.

Following instrument validation, an official endorsement letter from the Dean of the Graduate School was secured last November 22, 2025. This endorsement formally authorized the researcher to proceed with data collection and to approach relevant schools for permission. The Dean's endorsement served as institutional confirmation that the study meets academic standards and has the necessary ethical and methodological clearances to be implemented in the field.

After securing the endorsement, a permit to conduct the study was requested from the Schools Division Superintendent of Davao del Norte dated December 22, 2025. Subsequent permissions were sought from the Public Schools District Supervisor and the principals of the identified schools within the Kapalong West District. These permissions confirmed that the study was conducted with the cooperation of junior high school teachers. Upon approval, coordination with the selected teacher-participants begun to schedule the interviews.

Once all approvals were obtained, the researcher conducted semi-structured interviews with the five selected participants. The purpose of the study, procedures, and ethical considerations were clearly explained prior to the interviews. Informed consent was obtained, and participants were assured that their participation is voluntary and that their responses remained confidential. Each interview lasted approximately 30 to 55 minutes and conducted in a quiet and comfortable environment depending on participants' convenience. Audio recordings and notes were taken with participants' consent to ensure accuracy and completeness of data.

After all interviews were completed, the collected data were transcribed verbatim and organized for analysis. Thematic analysis through NVivo software was employed to identify recurring ideas, categories, and themes from the participants' narratives. Coding was done systematically to draw out patterns and relationships related to teachers' experiences, coping

EPRA International Journal of Environmental Economics, Commerce and Educational Management
Journal DOI: 10.36713/epra0414 |ISI I.F Value: 0.815|SJIF Impact Factor (2026): 8.752 ISSN: 2348 – 814X
Volume: 13 | Issue:5 | May 2026 -Peer Reviewed Journal

mechanisms, and educational insights in using AI. Validation of findings was ensured through member checking and FGD triangulation to confirm accuracy and consistency.

Data Analysis Procedure

This qualitative research employed a systematic and iterative approach to analysis, allowing for a thorough examination of the data. This method facilitated the identification of significant themes, categories, and patterns that accurately addressed the research problem.

Beyond data collection, the researcher personally handled and managed all data with strict confidentiality and professionalism. This included transcribing interview responses verbatim including how participants conveyed their ideas, paying close attention to the tone, emotions, and implicit meanings within their responses. Furthermore, verifying accuracy and securely storing files to protect participants' identities were also followed.

Figure 1 presents the data analysis process adapted from Braun and Clarke (2021). After transcribing, reducing the data by summarizing and simplifying the raw information into manageable segments was also involved in this study. This process helped remove irrelevant information and allowed to focus clearly on the data that directly responded to the research questions.

Thematic analysis was used by the data analyst to identify patterns, categories, emerging themes, and to support the organization and interpretation of the data from the participants' accounts, ensuring that interpretations are deeply rooted in their lived experiences through NVivo software.

Ethical Consideration

To ensure the rights, dignity, and well-being of all participants, this study adhered strictly to established ethical standards in qualitative research. Since the research involves human participants, specifically junior high school teachers in the Kapalong West District, the researcher uphold ethical principles throughout all phases of the study, from planning and data collection to analysis and dissemination. These ethical safeguards guaranteed

Step 1 Organizing and Familiarizing with Data.	I carefully arranged and reviewed the interview transcripts gathered from junior high school teachers regarding their experiences in integrating Artificial Intelligence (AI) in the classroom. Through repeated reading and examination of the responses, I gained a deeper understanding of the participants' narratives, perceptions, and challenges related to AI integration in teaching.
Step 2 Identifying Significant Statements.	I extracted meaningful statements and responses from the interview transcripts that directly reflected the experiences, insights, and challenges of junior high school teachers in using Artificial Intelligence (AI) in the classroom.
Step 3 Initial Coding and Formulating Meanings.	I assigned codes to significant statements based on recurring ideas, experiences, and perceptions shared by the junior high school teachers regarding the use of Artificial Intelligence (AI) in the classroom. These codes were then analyzed and interpreted to formulate meanings that reflected the participants' viewpoints, and challenges in AI integration.
Step 4 Developing Themes.	I grouped related codes and formulated broader themes that represented the common experiences, perceptions, and challenges of junior high school teachers in integrating Artificial Intelligence (AI) in the classroom.
Step 5 Refining Themes and Analytic Memos.	I carefully reviewed and refined the emerging themes to ensure these reflect on patterns, relationships, and insights within and across themes and that they accurately represented the narratives of junior high school teachers regarding the integration of Artificial Intelligence (AI) in the classroom.
Step 6 Triangulation and Trustworthiness.	I validated the findings by comparing and examining the consistency of the gathered data to ensure the credibility, reliability, and accuracy of the narratives shared by junior high school teachers regarding the integration of Artificial Intelligence (AI) in the classroom.

Figure 1. Data Analysis Framework

that participants' experiences, perspectives, and narratives are handled with sensitivity, respect, and professional responsibility (Creswell & Poth, 2018).

Social Value. This study upholds the principle of social value by ensuring that its findings contribute meaningfully to improving teaching practices and policies regarding artificial intelligence integration in classroom settings. By documenting the lived experiences of teachers, the research generated insights that may inform training programs, pedagogical innovation, and institutional planning in technologically evolving schools. Conducting the study in Kapalong West District acknowledges the unique conditions of rural educational environments, ensuring that the research outcomes reflected the realities of under-resourced contexts. Dissemination of findings through academic presentations and publications further extended their value, contributing to the broader discourse on the responsible use of artificial intelligence in education.

Informed Consent. Prior to participation, teachers were provided with a clear explanation of the study's objectives, procedures, risks, and benefits. Informed consent was obtained through signed consent forms, ensuring that participants fully understood their role in the study and their right to withdraw at any point without penalty. Participants were also informed that interviews and focus group discussions would be recorded solely for research purposes and that all responses would remain confidential. Voluntary participation was emphasized to respect their autonomy and decision-making power. *Vulnerability of Research Respondents.* As employees of public schools, teachers may experience perceived vulnerability due to hierarchical structures within the Department of Education. To address this, permissions were secured from the Schools Division Superintendent and school heads before conducting the study, ensuring transparency and institutional approval. Participants were assured that their responses would not influence their employment status or professional evaluations. This minimized the risk of undue pressure and promoted a safe environment where teachers could express their views freely.

Risk, Benefits, and Safety. The study posed minimal risks to participants, with possible discomfort limited to sharing personal reflections during interviews. These risks would be mitigated by allowing participants to skip questions or withdraw at any point. The anticipated benefits include opportunities for professional reflection, sharing best practices, and contributing to the development of responsive policies and strategies for integrating artificial intelligence in classrooms. Data collection would be conducted in secure, convenient, and accessible locations to ensure participants' comfort and safety.

Privacy, Confidentiality, and Anonymity. Participants' privacy was safeguarded by ensuring that all interview and discussion sessions were conducted in confidential settings. To protect confidentiality, only the researcher had access to raw data, and recordings were securely stored in password-protected files. Anonymity was maintained by assigning pseudonyms or codes to participants, ensuring that no identifying details appeared in transcripts, reports, or publications. These measures reinforced trust between the researcher and participants while protecting their professional and personal identities.

Conflict of Interest. The researcher declared no conflict of interest in the conduct of this study. There were no external funding sources or personal motivations that could influence data collection, analysis, or interpretation. The sole aim of the study was to contribute to educational research and practice, free from bias or hidden agendas. Maintaining neutrality ensured that the findings remained credible and trustworthy, aligning with ethical standards of research integrity.

Justice was ensured by treating all participants fairly and equitably throughout the study. Selection of teacher-participants was based on purposive sampling to ensure relevance to the research topic, not on personal preference or discriminatory criteria. All participants were given equal opportunity to share their perspectives, and the benefits of the study, such as professional insights and policy implications, were intended for the collective good of all stakeholders in the Division of Davao del Norte. No participant bore undue burden or cost in participating, as their involvement was voluntary and non-monetary.

Transparency was upheld throughout every stage of the research process. Participants were fully informed about the study's goals, scope, and intended outcomes, and they were regularly updated on how their contributions would be utilized in reports and publications. The research procedures, methodology, and findings were documented comprehensively and prepared for dissemination across academic platforms at the local, national, and international levels. Through transparent reporting, the study ensured accountability and provided a reliable foundation upon which future researchers, educators, and policymakers could confidently build.

Trustworthiness of the Study. To ensure the trustworthiness of this qualitative study, four essential components were observed: credibility, confirmability, transferability, and dependability. These principles were central to enhancing rigor in qualitative research and ensuring that the findings authentically reflected the lived experiences of participants (Korstjens & Moser, 2018). The study was guided by a clearly articulated theoretical framework and transparent procedures in data

collection and analysis, enabling readers to evaluate how conclusions were drawn. By grounding the process in these trustworthiness criteria, the findings of this research were both reliable and meaningful for understanding the role of artificial intelligence in the classroom setting.

Credibility. To establish credibility, the narratives collected during interviews and focus group discussions were reported directly and faithfully, without the insertion of assumptions or premature conclusions. Credibility was further strengthened through member checking, wherein participants reviewed transcripts and preliminary findings to confirm accuracy (Birt et al., 2016). Triangulation was also employed by comparing data across participants, school contexts, and different methods of collection to validate consistency (Fusch et al., 2018). Through these practices, the study provided a trustworthy representation of teachers' perspectives in the Kapalong West District.

Confirmability. It addressed by minimizing researcher bias and ensuring that interpretations emerge from the participants' voices rather than personal assumptions. To achieve this, I used audit trails, field notes, and audio recordings to document the decision-making process during analysis (Nowell et al., 2017). This allowed other researchers to trace how conclusions were reached and verify that findings are grounded in data. Reflexivity was also practiced by acknowledging my own position and setting aside personal perspectives while interpreting the teachers' accounts (Shenton, 2020). These strategies ensured that the findings reflect the realities of participants rather than the predispositions of the researcher.

Transferability. To ensure transferability, I provided thick, detailed descriptions of the research context, including the Kapalong West District setting, participants' profiles, and the circumstances under which data were collected. This enabled readers to determine the applicability of the findings to their own settings (Korstjens & Moser, 2018). Rather than making broad claims, the study invited readers to compare similarities and differences between this context and their own. By documenting procedures such as interview protocols and providing comprehensive contextual descriptions, this study enhanced its potential for meaningful application beyond the local setting.

Dependability. This was established by maintaining consistency throughout the data collection and analysis phases. Thematic analysis was systematically applied, with codes, categories, and themes developed through repeated review of transcripts to ensure alignment with participants' narratives (Castleberry & Nolen, 2018). An audit trail was maintained to document every phase of the research process, allowing external reviewers to assess methodological reliability (Nowell et al., 2017). This consistency in approach confirmed that the findings are dependable and could be repeated with similar participants under comparable conditions.

Results

Coping Mechanisms of Junior High School Teachers in Addressing Challenges in the Use of Artificial Intelligence in the Classroom

The experiences of Junior High School teachers reveal a multifaceted approach to coping with AI integration challenges in the classroom. Triangulated findings consistently highlight three major coping mechanisms: **Collaborative Coping for Effective AI Integration**, **Instructional Adjustment for Responsible AI Use**, and **Resource and Technology-Based Coping Strategies**. Each mechanism comprises several subthemes, reflecting specific strategies that teachers employ to address practical, pedagogical, and technological challenges.

1. Collaborative Coping for Effective AI Integration

Collaboration among teachers fosters innovation and continuous improvement in teaching practices. According to the OECD (2021), collaborative teacher networks significantly enhance instructional quality by enabling shared learning and professional exchange.

- **Strengthening Collaboration and Sharing Practices**:
  Teachers actively share ideas and best practices to enhance AI use. FGD and IDI participants reported that collaboration improves knowledge, instructional strategies, and confidence in using AI tools.
  - "Nagashare ko ug ideas sa akong co-teachers, mao nga mas nadugangan akong kahibalo ug mas napalapdan ang akong mga pamaagi sa pagtudlo." (I share ideas with my co-teachers, resulting in increased knowledge and expanded teaching strategies.) (FGD-P2)
  - "Ako gi-adapt ang best practices sa uban teachers, mao nga mas effective akong AI integration sa classroom." (I adapt the best practices of other teachers, so my AI integration in the classroom becomes more effective.) (IDI-4)
  - "Kung magtinabangay mi, mas dali ma-solve ang problems sa AI usage, mao nga dili maapektuhan ang learning process." (When we collaborate, problems in AI usage are solved faster, so the learning process is not affected.) (IDI-3)
  - "Ako nakat-on pinaagi sa collaboration, mao nga mas improved akong confidence sa paggamit sa AI tools." (I learn through collaboration, so my confidence in using AI tools improves.) (IDI-2)

Triangulated data show that collaboration functions as an ongoing learning system among teachers rather than an isolated activity. By adapting peer strategies, teachers enhance instructional effectiveness and strengthen confidence in using AI,

supporting the notion that collaborative professional environments promote instructional innovation (Darling-Hammond et al., 2020; Luckin et al., 2021; OECD, 2021; UNESCO Institute for Statistics, 2023).

- **Seeking Technical Assistance and Participating in Trainings**:
  Teachers seek guidance from ICT coordinators, attend seminars, and join Learning Action Cell (LAC) sessions to improve competence and confidence.
  - "Mangayo gyud ko og tabang sa ICT coordinator kung maglisod ko." (I really ask help from the ICT coordinator when I struggle.) (FGD-P3)
  - "Ang sharing og best practices sa LAC session dako og tabang sa akoa." (Sharing best practices during LAC sessions is very helpful for me.) (IDI-4)
  - "Nakatabang sa ako ang seminars about AI nga gihatag sa school." (Seminars about AI provided by the school are helpful to me.) (FGD-P2)

These insights indicate that professional learning communities and institutional support are essential for enhancing teachers' digital competence, problem-solving capacity, and confidence in AI utilization (Darling-Hammond et al., 2020; OECD, 2021; World Bank, 2022; UNESCO, 2023).

2. Instructional Adjustment for Responsible AI Use

Teachers actively adjust AI use to fit classroom needs, ensuring responsible integration while maintaining instructional quality.

- **Modifying AI Outputs to Fit Learner Needs**:
  Teachers edit and customize AI-generated content to align with learner abilities and comprehension levels.
  - "Ako gi-edit ang AI outputs, mao nga mas angay siya sa level sa akong students ug mas masabtan nila ang lesson." (I edit AI outputs so they fit my students' level and they can better understand the lesson.) (FGD-P1)
  - "Dili nako i-copy ang tanan gikan sa AI, ako gyud siyang gi-adjust, mao nga dili ma-confuse ang akong learners." (I do not copy everything from AI; I adjust it so my learners will not be confused.) (IDI-5)
  - "Ako gi-customize ang content, mao nga mas meaningful ang learning sa akong klase." (I customize the content so learning in my class becomes more meaningful.) (IDI-1)
  - "Kung dili nako i-modify ang AI output, maglisod ang students, mao nga gi-tweak nako para effective ang teaching." (If I do not modify AI output, students will struggle, so I adjust it to make teaching effective.) (IDI-3)

Teachers' critical evaluation and adaptation of AI outputs ensure clarity, appropriateness, and instructional relevance, reflecting responsible pedagogy and protecting learning integrity (Selwyn, 2021; Luckin et al., 2021; UNESCO, 2023).

- **Setting Rules to Prevent Overdependence on AI**
  Classroom guidelines, constant monitoring, and reminders prevent student reliance on AI.
  - "Ako gi-set ug rules sa paggamit sa AI, mao nga mas independent ang students ug makahunahuna sila sa ilang kaugalingon." (I set rules in using AI so students become more independent and can think for themselves.) (FGD-P2)
  - "Ako ginamonitor ang paggamit nila sa AI, mao nga malikayan ang cheating ug dependency." (I monitor their use of AI so cheating and dependency can be avoided.) (FGD-P1)
  - "Sa akong klase, ginapahinumdom nako sila nga mag-isip jud, mao nga dili sila mahimong reliant sa AI." (In my class, I remind them to think critically so they will not become reliant on AI.) (IDI-2)
  - "Para sa ako, kung walay rules, mag-abuse sila sa AI, mao nga importante kaayo ang proper guidance." (For me, without rules, they will abuse AI, so proper guidance is very important.) (IDI-1)

These practices emphasize ethical AI use, student autonomy, and the maintenance of cognitive engagement (Kasneci et al., 2023; Holmes et al., 2022; UNESCO, 2023).

- **Balancing AI with Traditional Teaching Methods**
  Teachers integrate AI as a support tool while retaining core instructional strategies.
  - "Ako gi-combine ang AI ug traditional methods, mao nga mas effective ang pagkat-on sa akong students." (I combine AI and traditional methods, so student learning becomes more effective.) (IDI-2)
  - "Dili nako pasagdan nga AI lang ang basehan, mao nga mas holistic ang learning experience." (I do not rely only on AI, so the learning experience becomes more holistic.) (FGD-P2)
  - "Sa akong experience, kung blended ang approach, mas active ang students ug mas engaged sila." (In my experience, when the approach is blended, students become more active and engaged.) (IDI-3)
  - "Ako gi-ensure nga dili mawala ang core learning objectives bisan naggamit ug AI." (I ensure that core learning objectives are not lost even when using AI.) (IDI-1)

Blended instruction maintains curriculum integrity, maximizes learning engagement, and promotes active participation (Selwyn, 2021; OECD, 2021; UNESCO, 2023; Kasneci et al., 2023).

3. Resource and Technology-Based Coping Strategies

Teachers respond to infrastructural and technological limitations by adapting lessons and optimizing resources.

- **Managing Internet and Connectivity Issues**
  Teachers prepare backup activities and adjust lessons to ensure continuity.
  - "Naglisod ko kung hinay ang internet, mao nga usahay ma-delay ang akong AI-based activities, busa maghatag nalang ko ug alternative nga activities nga related sa lesson aron magpadayon gihapon ang learning." (I struggle when the internet is slow, so my AI-based activities are sometimes delayed, that is why I provide alternative activities related to the lesson so learning can still continue.) (FGD-P3)
  - "Ako gi-adjust ang lesson kung walay internet, mao nga magpadayon gihapon ang klase bisan limited ang resources ug dili ma-interrupt ang pagkat-on sa students." (I adjust the lesson when there is no internet, so the class continues even with limited resources and student learning is not interrupted.) (FGD-P1)

Preparedness and contingency planning ensure sustained instruction in digitally constrained environments (Darling-Hammond et al., 2020; World Bank, 2022; OECD, 2021; UNESCO, 2023).

- **Maximizing School Facilities and Available Resources**:
  Teachers utilize computer labs and ICT rooms to facilitate inclusive AI integration.
  - "I use the computer lab, so AI activities can still continue even if students have no gadgets, and all of them are still able to participate in the lesson." (IDI-5)
  - "Ako gi-schedule ang ICT room usage, mao nga organized ang paggamit sa technology sa klase ug malikayan ang conflict sa schedule sa ubang teachers." (FGD-P2)
  - "School facilities are very helpful, so AI integration in teaching becomes smoother and my lesson delivery becomes more efficient." (IDI-3)

Strategic use of institutional resources enhances participation, instructional efficiency, and equitable access (Trucano, 2020; Redecker, 2021; Asian Development Bank, 2021; UNICEF, 2022).

- **Adapting to Students' Limited Access to Devices**
  Teachers design activities that can be done without gadgets to maintain inclusivity.
  - "Dili tanan students naa'y cellphone, mao nga naghimo ko ug activities nga pwede bisan walay gadgets, aron makaparticipate gihapon silang tanan sa lesson." (IDI-4)
  - "Ako gi-consider ang accessibility, mao nga dili ma-out ang uban students sa learning process ug masiguro nga equal ang opportunity sa tanan." (FGD-P1)
  - "Sa akong klase, gi-adjust nako ang tasks, mao nga inclusive gihapon ang learning bisan lain-lain ug resources ug makasunod gihapon ang tanan students." (IDI-3)
  - "Kung walay device ang students, maghimo ko ug manual activities, mao nga walay learner nga ma-left behind ug magpadayon gihapon ang ilang pagkat-on." (IDI-1)

Flexible instructional strategies promote equity and ensure continuity of learning in AI-integrated classrooms (Hodges et al., 2020; Trucano, 2020; UNICEF, 2022; Asian Development Bank, 2021).

Educational Insights Gained from Junior High School Teachers' Experiences in Using AI

The thematic analysis further reveals key educational insights regarding AI use in the classroom. Triangulated findings highlight three main themes:

1. **AI enhances teaching efficiency and instructional quality** – AI supports faster lesson preparation, enriches creativity and instructional delivery, and increases student engagement.
2. **Instructional Adjustment for Responsible AI Use** – Teachers develop digital competence, collaborate with colleagues, and gain confidence through institutional support.
3. **Responsible use of AI is essential to maintain academic integrity and learning quality** – Teachers guide, validate, monitor, and set rules for AI use, preventing misuse and overdependence.

Teachers' reflections indicate that AI serves as a **supportive tool rather than a substitute for pedagogy**, enhancing efficiency, creativity, engagement, and professional growth, while ethical use safeguards learning authenticity and student cognitive development (Luckin et al., 2021; Holmes et al., 2022; Selwyn, 2021; OECD, 2021; UNESCO, 2023; Kasneci et al., 2023).

Summary

To achieve the objectives, the study employed a qualitative phenomenological approach supported by thematic analysis. Phenomenology was utilized to capture the essence of teachers' lived experiences and the meanings they ascribed to artificial intelligence integration in their instructional practices (Neubauer et al., 2019). Open-ended interview questions were used to allow participants to freely express their experiences, reflections, and adaptive strategies, consistent with qualitative research principles that emphasize participant voice and contextual depth (Creswell & Guetterman, 2019). Through systematic coding and theme development, recurring patterns were identified that reflect teachers' instructional adjustments, coping mechanisms, and insights regarding the use of artificial intelligence in education.

The thematic analysis of participants' responses revealed interconnected insights across three major domains: experiences in artificial intelligence adoption, coping and adaptive strategies in addressing integration challenges, and educational insights emphasizing ethical, collaborative, and support-oriented implementation. These findings highlight the evolving

role of teachers in adapting to AI-enhanced instruction, as well as the need for institutional readiness, continuous professional development, and responsible integration practices. Building on these results, the following sections present the implications for educational practice and policy, followed by recommended directions for future research to further enhance the understanding and application of artificial intelligence in classroom settings.

Conclusions

The findings of this study imply that Artificial Intelligence plays a dual role in the teaching and learning process among Junior High School teachers. On one hand, AI significantly enhances teaching efficiency by supporting faster lesson preparation, improving instructional creativity, and increasing student engagement. This suggests that schools and educational institutions should actively promote AI integration as a pedagogical tool while providing structured support systems such as training programs, LAC sessions, and access to AI-based resources to maximize its instructional benefits. However, the results also imply that the use of AI introduces critical challenges that affect learning authenticity, student independence, and academic integrity. The presence of student dependence, overuse of AI tools, and poor actual performance indicates that AI should not be used without proper guidance and regulation. This highlights the need for schools to establish clear policies, classroom rules, and ethical guidelines that ensure responsible AI use and maintain the development of students' critical thinking and independent learning skills.

Furthermore, the study implies that limited access to technology including weak internet connection, lack of devices, and cost barriers continues to hinder equitable implementation of AI in education. This suggests that educational stakeholders, including school administrators and policymakers, should prioritize improving digital infrastructure, providing adequate technological resources, and addressing affordability issues to ensure inclusive and sustainable AI integration. In sum, the implications point to the need for a balanced approach where AI is maximized for instructional improvement while being carefully regulated to prevent misuse, inequality, and overdependence among learners.

On the other hand, the coping mechanisms identified in this study imply that successful integration of Artificial Intelligence in the classroom is highly dependent on collaboration, continuous professional development, and adaptive instructional practices. Teachers' reliance on ICT coordinators, peer assistance, trainings, and LAC sessions indicates that AI integration is not an individual effort but a collective process. This suggests that schools should strengthen professional learning communities and provide sustained technical and pedagogical support systems to ensure that teachers can effectively navigate AI-related challenges in teaching.

Further, the findings imply that instructional flexibility is essential in managing AI integration. Teachers' practices of modifying AI outputs, setting classroom rules, balancing traditional and AI-based methods, and monitoring student use demonstrate that AI must be carefully regulated within pedagogical boundaries. This highlights the need for institutional policies and teacher training programs that promote responsible AI use, academic integrity, and critical thinking among students, ensuring that AI serves as a supportive tool rather than a substitute for learning.

In addition, the coping strategies related to limited access to technology reveal persistent equity and infrastructure issues that directly affect teaching effectiveness. Teachers' adjustments through alternative activities, use of school facilities, and inclusive task design imply that access to digital tools remains unequal among learners. This underscores the responsibility of educational institutions and policymakers to improve ICT infrastructure, provide adequate digital resources, and address connectivity gaps to ensure equitable learning opportunities.

To highlight, the coping mechanisms imply that while teachers demonstrate resilience and adaptability in integrating AI, sustainable and effective implementation requires stronger institutional support, equitable resource distribution, and continuous capacity-building initiatives to fully maximize the benefits of AI in education.

The insights from the findings imply that Artificial Intelligence plays a significant role in enhancing instructional quality by supporting faster lesson preparation, improving teaching creativity, and increasing student engagement. This suggests that AI can be effectively utilized as a pedagogical support tool that helps teachers design more dynamic and interactive learning experiences. Consequently, educational institutions should encourage the integration of AI in lesson planning and instructional delivery while providing adequate training to maximize its pedagogical potential.

However, the results also imply that the effectiveness of AI in education depends greatly on the teacher's role as a guide and evaluator of AI-generated content. Teachers' need to validate AI outputs highlights the importance of maintaining academic integrity and ensuring instructional accuracy. This indicates that schools should strengthen policies and professional development programs that emphasize responsible AI use, critical evaluation skills, and ethical teaching practices to prevent misinformation and ensure learning quality.

In addition, the findings imply that student misuse of AI, such as copying without understanding and developing dependency, poses a serious challenge to meaningful learning. This suggests the need for stricter classroom regulations,

structured monitoring, and explicit guidelines on acceptable AI use to preserve learning authenticity and promote critical thinking skills among learners. Teachers' emphasis on rules and monitoring reflects the necessity of maintaining a balance between innovation and academic discipline.

Furthermore, the insights highlight that teacher development and institutional support are crucial in sustaining effective AI integration. Collaboration among teachers, participation in trainings and LAC sessions, and strong school support systems contribute to increased confidence and competence in using AI tools. This implies that continuous professional development and institutional investment are essential to ensure that teachers are well-equipped to adapt to technological changes in education.

Overall, the implications suggest that while AI offers substantial benefits in improving teaching and learning, its successful integration requires a balanced approach grounded in teacher oversight, ethical use, student guidance, and strong institutional support systems.

Recommendations

Based on the findings of this study, it is essential that educational stakeholders thoughtfully apply and extend the insights generated from the lived experiences of junior high school teachers integrating Artificial Intelligence in the classroom. The narratives of the participants highlight the need for structured guidance, sustained professional learning, and context-sensitive implementation. Moving forward, efforts should not only focus on expanding access to Artificial Intelligence tools but also on strengthening the human and institutional systems that support responsible and meaningful integration.

For school heads, future directions include the development of clear and localized guidelines on Artificial Intelligence use in classroom instruction. Administrators may consider providing continuous professional development programs, facilitating collaborative planning sessions, and ensuring that teachers have access to reliable technological infrastructure. Leadership initiatives such as Learning Action Cell (LAC) sessions focused on Artificial Intelligence literacy, ethical considerations, and instructional innovation may further empower teachers to integrate technology confidently and responsibly. School leaders are also encouraged to advocate for improved connectivity and equitable access to digital devices to reduce disparities among learners.

For junior high school teachers, future directions involve sustained reflective practice and continuous professional growth. Teachers are encouraged to gradually explore Artificial Intelligence tools while aligning them with curriculum standards and learning objectives, ensuring that instructional quality is maintained through critical evaluation of AI outputs. Engagement in peer collaboration, training programs, and professional learning communities can further strengthen competence and confidence in AI integration. Teachers may also play a key role in developing students' digital literacy by modeling responsible use, encouraging critical thinking, and designing learning tasks that promote originality and contextual understanding.

For learners, future directions emphasize responsible, ethical, and balanced use of Artificial Intelligence tools. Students should be guided to view Artificial Intelligence as a learning support rather than a replacement for independent thinking and effort. Schools may integrate Artificial Intelligence literacy and digital citizenship education into the curriculum to strengthen learners' awareness of ethical use, data privacy, and academic integrity. Encouraging active participation, creativity, and personal reflection in classroom activities will help preserve authentic learning experiences in technology-enhanced environments.

For future researchers, further studies may be conducted in other districts, divisions, or educational levels to broaden the understanding of Artificial Intelligence integration across diverse educational contexts. Comparative studies between urban and rural schools, public and private institutions, or different subject areas may provide deeper insights into contextual differences in implementation. Longitudinal research may also be conducted to examine how teachers' perceptions, practices, and challenges evolve as Artificial Intelligence technologies continue to advance. Further exploration of policy development, student perspectives, and measurable learning outcomes will enrich the growing body of knowledge on sustainable Artificial Intelligence integration in education.

In sum, the future of Artificial Intelligence in classroom settings depends on collaborative leadership, continuous professional learning, ethical responsibility, and context-responsive innovation. By building on the experiences and insights of teachers, educational institutions can move toward more intentional, inclusive, and pedagogically grounded integration of Artificial Intelligence in junior high school education.

REFERENCES

1. *Algones, C. J. L., Calizo, E. V., & Bauyot, M. M. (2024). Experiences of teachers teaching in far-flung areas of Division of Davao Del Norte: A phenomenological study. International Journal of Research and Innovation in Social Science, 8(6), 2790, 2802.*
2. *Almutairi, Y. M. N. (2022). Effects of academic integrity of faculty members on students' ethical behavior. Education Research International, 2022, 1, 10.*

3. *Al-Zahrani, A. M. (2024). Exploring the impact of artificial intelligence on higher education: Opportunities and challenges. Humanities and Social Sciences Communications.*
4. *Asian Development Bank. (2021). Digital learning and education systems in developing Asia. ADB Publications. https://www.adb.org*
5. *Bin-Nashwan, S. A. (2023). Use of ChatGPT in academia: Academic integrity hangs in the balance. Technology in Society, 74, 102594.*
6. *Birks, D., & Clare, J. (2023). Linking artificial intelligence facilitated academic misconduct to existing prevention frameworks. International Journal for Educational Integrity, 19(1), 20.*
7. *Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? Qualitative Health Research, 26(13), 1802, 1811.*
8. *Bond, M., Marín, V. I., Dolch, C., Bedenlier, S., & Zawacki-Richter, O. (2020). Digital transformation in education: A systematic review of student engagement in technology-enhanced learning. Educational Research Review, 33, 100331. https://doi.org/10.1016/j.edurev.2020.100331.*
9. *Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G., Lambert, S. R., Al-Freih, M., Pete, J., Olcott, D., Jr., Rodes, V., Aranciaga, I., Bali, M., Alvarez, A. V., Roberts, J., Pazurek, A., Raffaghelli, J. E., Panagiotou, N., de Coëtlogon, P., & Paskevicius, M. (2021). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. Asian Journal of Distance Education, 15(1), 1–126.*
10. *Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? Qualitative Research in Psychology, 18(3), 328, 352.*
11. *Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? Currents in Pharmacy Teaching and Learning, 10(6), 807, 815.*
12. *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*
13. *Chiong, R., Hu, Z., & McDonald, C. (2021). Integrating academic integrity training into professional development: Challenges and opportunities. Journal of University Teaching & Learning Practice, 18(5), 118, 134.*
14. *Clarke, V., & Braun, V. (2019). Guidelines for qualitative research underpinned by phenomenology. International Journal of Qualitative Methods, 18, 1, 11.*
15. *Cotton, D. R. E. (2024). ChatGPT and higher education: Opportunities and challenges. Journal of Learning Development in Higher Education, 30.*
16. *Creswell, J. W., & Guetterman, T. C. (2019). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (6th ed.). Pearson.*
17. *Creswell, J. W., & Poth, C. N. (2018). Qualitative inquiry and research design: Choosing among five approaches (4th ed.). Sage.*
18. *Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2020). Effective teacher professional development. Learning Policy Institute.*
19. *DepEd. (2025). DepEd launches AI center for education. Department of Education. https://www.deped.gov.ph/2025/02/20/deped-launches-ai-center-for-education/*
20. *Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koohang, A., & others. (2023). Multidisciplinary perspectives on opportunities, challenges, and implications of generative AI for research and practice. International Journal of Information Management, 71, 102642. https://doi.org/10.1016/j.ijinfomgt.2023.102642*
21. *Elkhatat, A. M., Elsaid, K., & Almeer, S. (2023). Evaluating the efficacy of AI content detection tools in differentiating between human and AI-generated text. International Journal for Educational Integrity, 19(1).*
22. *Ertmer, P. A., & Ottenbreit-Leftwich, A. (2021). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. Journal of Research on Technology in Education, 54(2), 1–16.*
23. *European Commission. (2022). Digital education action plan (2021–2027): Resetting education and training for the digital age. Publications Office of the European Union.*
24. *Far Eastern University. (2024). AI integration in teaching-learning practices.*
25. *Falloon, G. (2020). From digital literacy to digital competence: The teacher's role in bridging the gap. Education and Information Technologies, 25, 401–421. https://doi.org/10.1007/s10639-019-09980-z*
26. *Fauziyah, N., & Hartono, R. (2022). Oral defense as an alternative assessment to promote academic integrity in thesis writing. ELT Forum: Journal of English Language Teaching, 11(1), 48, 57.*
27. *Fidas, C. A., Belk, M., Constantinides, A., Portugal, D., Martins, P., Pietron, A. M., Pitsillides, A., & Avouris, N. (2023). Ensuring Academic Integrity and Trust in Online Learning Environments: A Longitudinal Study of an AI-Centered Proctoring System in Tertiary Educational Institutions. Education Sciences, 13(6), 566.*
28. *Fullan, M. (2020). The new meaning of educational change (5th ed.). Teachers College Press.*
29. *Fusch, P. I., Fusch, G. E., & Ness, L. R. (2018). Denzin's paradigm shift: Revisiting triangulation in qualitative research. Journal of Social Change, 10(1), 19, 32.*
30. *Gecker, J., & O'Brien, M. (2023). Cheaters beware: ChatGPT maker releases AI detection tool | AP News. AP News.*
31. *Goertzel, B., & Pennachin, C. (Eds.). (2007). Artificial general intelligence.*
32. *Goertzel, B., Panov, A. I., Potapov, A., & Yampolskiy, R. (Eds.). (2020). Artificial general intelligence: 13th International Conference, AGI 2020, St. Petersburg, Russia, September 16–19, 2020.*
33. *Han L. J. van der Maas, Snoek, L., & Stevenson, C. E. (2021). How much intelligence is there in artificial intelligence? A 2020 update. Intelligence, 87, 101548.*
34. *Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. Educause Review.*
35. *Holloway, I., & Galvin, K. (2016). Qualitative research in nursing and healthcare (4th ed.). Wiley-Blackwell.*
36. *Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial intelligence in education: Promises and implications for teaching and learning. Center for Curriculum Redesign.*

37. *Holmes, W., Bialik, M., & Fadel, C. (2022). Artificial intelligence in education: Promises and implications for teaching and learning. Center for Curriculum Redesign.*
38. *Holmes, W., Persson, J., Chounta, I.-A., Wasson, B., & Dimitrova, V. (2022). Artificial intelligence and education: A critical review. Learning, Media and Technology, 47(2), 213–229. https://doi.org/10.1080/17439884.2021.2017762*
39. *Holmes, W., Porayska-Pomsta, K., & Holstein, K. (2022). Ethics of AI in education: Towards responsible implementation. Learning, Media and Technology, 47(2), 145–161. https://doi.org/10.1080/17439884.2021.2018633*
40. *Hoover, A. (2024). Students are likely writing millions of papers with AI. WIRED. https://www.wired.com/story/student-papers-generative-ai-turnitin.*
41. *Hwang, G. J., & Tu, Y. F. (2021). Roles and research trends of artificial intelligence in education: A review. Computers and Education: Artificial Intelligence, 2, 100010.*
42. *Kanehira, N., Abdon, M., & Mirandilla-Santos, M. G. (2024). Upgrading Philippine internet for faster and inclusive growth. World Bank Blogs.*
43. *Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., ... Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. Learning and Individual Differences, 103, 102274. https://doi.org/10.1016/j.lindif.2023.102274*
44. *Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. European Journal of General Practice, 24(1), 120, 124.*
45. *Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). Intelligence unleashed: An argument for AI in education. Pearson.*
46. *Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2021). Artificial intelligence in education: Supporting teachers and learners. Educational Technology & Society, 24(3), 1–15.*
47. *Ly, D. T. (2024). University students' perceptions of the use of QuillBot in an EFL writing class. In Proceedings of the 2024 International Conference on Language, Education, and Innovation (pp. 88, 96). ACM.*
48. *Mahmud, I., Bretag, T., & Foltýnek, T. (2021). Student and staff perspectives on academic integrity: A comparative study. Assessment & Evaluation in Higher Education, 46(6), 873, 888.*
49. *Májovský, M., Černý, M., Netuka, D., & Mikolov, T. (2024). Perfect detection of computer-generated text faces fundamental challenges. Cell Reports Physical Science, 5(1), 101769.*
50. *Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. Perspectives on Medical Education, 8(2), 90, 97. https://doi.org/10.1007/s40037-019-0509-2*
51. *Nguyen, T., Gardner, J., & Sheridan, K. (2020). Academic integrity in the digital age: Policies, practices, and professional development. International Journal for Educational Integrity, 16(1), 1, 17.*
52. *Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. International Journal of Qualitative Methods, 16(1), 1, 13.*
53. *OECD. (2021). 21st century readers: Developing literacy skills in a digital world. OECD Publishing. https://doi.org/10.1787/a83d84cb-en*
54. *Office of Educational Technology, U.S. Department of Education. (2023). Artificial intelligence and the future of teaching and learning. U.S. Department of Education.*
55. *Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. Administration and Policy in Mental Health and Mental Health Services Research, 42(5), 533, 544.*
56. *Redecker, C. (2021). European framework for the digital competence of educators (DigCompEdu). Publications Office of the European Union.*
57. *Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. Quality & Quantity, 52(4), 1893, 1907.*
58. *Selwyn, N. (2021). Should robots replace teachers? AI and the future of education. Polity Press.*
59. *Shenton, A. K. (2020). Strategies for ensuring trustworthiness in qualitative research projects revisited. Journal of Emerging Trends in Educational Research and Policy Studies, 11(1), 1, 8.*
60. *Stoesz, B. M., Quesnel, M., & De Jaeger, A. E. (2023). Strengthening academic integrity through institutional support: A multi-institutional analysis. International Journal for Educational Integrity, 19(1), Article 14.*
61. *Spearman, C. (1904). "General intelligence," objectively determined and measured. American Journal of Psychology, 15(2), 201–292.*
62. *Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2021). Professional learning communities: A review of the literature. Journal of Educational Change, 22, 1–28.*
63. *Sundler, A. J., Lindberg, E., Nilsson, C., & Palmér, L. (2019). Qualitative thematic analysis based on descriptive phenomenology. Nursing Open, 6(3), 733, 739.*
64. *Tondeur, J., Scherer, R., Siddiq, F., & Baran, E. (2021). A comprehensive review of teacher digital competence frameworks. Educational Technology Research and Development, 69, 1–27.*
65. *Trucano, M. (2020). ICT in education: Issues and best practices. World Bank Blogs / EdTech resources.*
66. *Trust, T., & Whalen, J. (2020). K–12 teachers' experiences and challenges with using technology in the classroom. TechTrends, 64, 27–35.*
67. *Umali, J. N. D. (2024). Artificial intelligence technology management of teachers in private schools: Assessment management and motivation. International Journal of Multidisciplinary Contemporary Education Research, 2(3), 45, 58.*
68. *UNESCO Institute for Statistics. (2023). Global education monitoring report: Technology in education. UNESCO.*
69. *UNESCO. (2021). Artificial intelligence in education: Challenges and opportunities for sustainable development. UNESCO Publishing.*
70. *UNESCO. (2023). Guidance for generative AI in education and research. United Nations Educational, Scientific and Cultural Organization. https://unesdoc.unesco.org/*
71. *UNICEF. (2022). Education technology and equity in learning. United Nations Children's Fund.*

72. *Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterizing and justifying sample size sufficiency in interview-based studies: Systematic analysis of qualitative health research over a 15-year period. BMC Medical Research Methodology, 18(1), 148.*
73. *World Bank. (2022). Digital transformation in education: Lessons from global practice. World Bank Group.*
74. *Yan, L., Sha, L., Zhao, L., Li, Y., Martinez-Maldonado, R., Chen, G., Li, X., Jin, Y., & Gašević, D. (2024). Practical and ethical challenges of large language models in education: A systematic scoping review. British Journal of Educational Technology, 55(1), 90–112.*
75. *Zainuddin, Z., Habiburrahim, H., & others. (2020). Flipped classroom research and trends. Education and Information Technologies, 25, 1–24.*
76. *Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. International Journal of Educational Technology in Higher Education, 16(39), 1–27. https://doi.org/10.1186/s41239-019-0171-0*
77. *Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2023). Systematic review of research on artificial intelligence applications in higher education. International Journal of Educational Technology in Higher Education, 20, 1–27.*
78. *Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2022). Systematic review of research on artificial intelligence applications in higher education. International Journal of Educational Technology in Higher Education, 19(1), 1–27.*
79. *Zhai, C., Yuan, J., & Liu, H. (2024). The effects of over-reliance on AI dialogue systems on cognitive skills in education: A systematic review. Smart Learning Environments, 11(31).*
80. *Zhang, Y., & Yu, S. (2021). Process-based assessment in higher education: Enhancing student learning and originality. Assessment & Evaluation in Higher Education, 46(8), 1224, 1238.*