



The Ethics of Automation: Exploring Educator Perceptions on Generative AI in Assessment Design

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Aim: As generative artificial intelligence (GenAI) tools such as ChatGPT, Claude, and Gemini gain traction in higher education, their integration into assessment design raises pressing ethical questions. This research aimed to explore how pre-service teacher educators perceive the ethical implications of using GenAI in designing, administering, and evaluating student assessments. Specifically, it investigated issues around academic integrity, human judgment, bias, transparency, and institutional readiness.

Methodology: The study adopted a qualitative design using semi-structured interviews with 18 pre-service teacher educators across diverse institutions. Data were analyzed thematically and triangulated with a review of recent global literature (2018–2024) on AI and ethics in education. Respondents were profiled in terms of their familiarity with GenAI, teaching roles, and institutional context.

Results: Findings revealed a spectrum of views: while participants acknowledged the convenience and efficiency that GenAI brings to assessment design, many expressed concerns about overreliance, diminished authenticity, and potential threats to academic integrity. Ethical apprehensions included risks of plagiarism, algorithmic bias, lack of transparency, and erosion of human-centered judgment. Notably, participants stressed the importance of maintaining human oversight and advocated for institutional guidelines, professional training, and ethical awareness to guide AI use in teacher education.

Conclusion: The study concludes that while GenAI presents transformative possibilities for assessment innovation, its ethical integration remains underdeveloped in many institutions. There is a critical need for teacher education programs to adopt human-centered approaches and develop explicit, values-based frameworks for AI use.

Recommendations: The study recommends the institutionalization of ethical policies, provision of ongoing professional development, curricular integration of AI ethics, promotion of student integrity, and expanded research on local AI practices in education. These recommendations aim to ensure responsible, inclusive, and pedagogically sound adoption of GenAI in assessment systems.

Keywords: Generative AI, Assessment Ethics, Teacher Education, Academic Integrity, Human Oversight

INTRODUCTION

Generative artificial intelligence (GenAI) tools such as ChatGPT have rapidly permeated educational ecosystems, offering unprecedented efficiency and innovation in assessment design, feedback, and administration (Giannakos et al., 2025; Bulut et al., 2024). These tools enable rapid generation of prompts, personalized feedback, and automated scoring—transforming tasks traditionally performed manually—but also raise critical concerns regarding validity, transparency, and fairness (Bulut et al., 2024; Matisola et al., 2024). As these technologies become more widely adopted, questions around the ethical use of GenAI in educational assessment gain urgency, particularly as they intersect with issues of academic integrity, bias, and human oversight (Kizilcec, et al., 2024; Bittle & El-Gayar, 2025).



In the Philippine educational context, reform initiatives—such as those driven by the Second Congressional Commission on Education (EDCOM II)—highlight digital transformation and AI literacy as core priorities (Republic Act 11899, 2022; Villarino, 2025). While AI tools promise to support teacher education and enhance assessment frameworks, the Philippines has yet to develop clear policy guidelines or institutional safeguards specifically for GenAI use in assessments. Studies of rural Philippine higher education students reveal ethical and access-related concerns in AI integration, echoing global concerns about equity and teacher training (Villarino, 2025). Yet empirical research on how Philippine educators perceive these ethical implications remains limited.

Prior international studies offer valuable insight. A global survey by Kizilcec et al. (2024) captured educator and student perceptions of GenAI's impact on assessment, academic integrity, and policy readiness. They reported that while efficiency and convenience are appreciated, respondents voiced anxiety about students' overreliance on AI, erosion of critical thinking skills, and difficulty distinguishing AI-generated content (Kizilcec, et al., 2024). Likewise, Bittle and El-Gayar's (2025) systematic review highlights academic integrity risks such as plagiarism, inappropriate attribution, or misuse without proper supervision.

Focusing on institutional practices, Henderson et al. (2025) examined faculty and student attitudes toward AI-based feedback versus traditional teacher feedback. Their findings emphasize the need for balance: educators question the reliability of automated evaluation, especially for higher-order judgments, and express concern over black-box assessment models (Henderson, 2025). Complementing this, Perkins et al.'s AI Assessment Scale (AIAS) offers a practical framework that foregrounds human agency in deciding the appropriate level of GenAI use—a model that underscores the principle of human-centered decision-making (Perkins et al., 2023; Furze et al., 2024).

Taken together, these strands underscore four core ethical domains relevant to assessment design: authenticity (ensuring student work reflects genuine effort), academic integrity (preventing misuse of AI-generated text), bias and equity (addressing algorithmic and access disparities), and human oversight (maintaining educator judgment and pedagogical authority). Pre-service teacher educators in the Philippines, charged with shaping future teachers, stand at the intersection of theory and practice. Understanding their perceptions may reveal how ethical considerations are interpreted and negotiated, particularly in contexts where digital literacy, resource access, and institutional leadership vary widely.

This present study thus explores Filipino pre-service teacher educators' perceptions of the ethical dimensions of GenAI in assessment design using qualitative focus group discussions. We aim to surface nuanced views on both the affordances and limits of automation, educators' concerns about transparency and learner agency, and their proposed institutional safeguards. Ultimately, our findings seek to inform policy guidelines, professional development strategies, and human-centered AI frameworks in education in the Philippines and beyond.

Background of the Study

The advent of generative artificial intelligence (GenAI) has brought transformative shifts in how educational institutions conceptualize, design, and implement assessments. Tools like ChatGPT, Claude, and Gemini are increasingly used to generate test items, simulate feedback, and even evaluate student responses (Bulut et al., 2024; Roe, Perkins, & Ruelle, 2024). These technologies promise enhanced efficiency, scalability, and creativity in education—particularly in assessment design, where educators often face time constraints and a demand for personalization. However, this surge in automation raises concerns regarding authenticity, validity, academic integrity, and ethical accountability (Kizilcec et al., 2024; Carvajal, et al, 2025; García-López & Trujillo-Liñán, 2025).

Across global contexts, studies highlight the ambivalence among educators regarding the use of GenAI in assessments. Kizilcec et al. (2024), in a multinational survey, revealed that while educators acknowledge the benefits of GenAI in reducing workload and enhancing instructional productivity, many express skepticism about its influence on critical thinking, learner agency, and academic honesty. Instructors are particularly wary of how easily students can generate AI-crafted outputs that may bypass traditional plagiarism detection tools. Similarly, Lyu et al. (2025) found that U.S. university instructors recognized GenAI's potential for supporting teaching and assessment, yet voiced strong reservations about overreliance on opaque AI mechanisms that may produce biased or unexplainable outputs.

Efforts to regulate and provide ethical frameworks for AI in assessment are emerging. Perkins et al. (2023) introduced the AI Assessment Scale (AIAS), which advocates for human-centered, context-aware integration of GenAI in assessment systems. Their framework emphasizes human agency, fairness, and clarity of purpose in choosing which tasks should—or should not—be delegated to AI. García-López and Trujillo-Liñán (2025), meanwhile, recommend greater transparency, algorithmic accountability, and educator training to mitigate ethical risks related to



bias, data misuse, and inequitable learning environments. These concerns are not merely theoretical—students have already begun questioning the fairness of assessments partly generated or graded by AI, especially when the decision-making process lacks transparency (Chan & Hu 2023).

In the Philippine context, these concerns are compounded by uneven digital access, limited AI literacy, and institutional inertia. A recent study by Espartinez (2024) found that both teachers and students in higher education institutions (HEIs) in the Philippines acknowledge GenAI's usefulness in improving academic writing and instructional design but express anxiety about ethical misuse and inadequate policy direction. Similarly, Villarino (2025), in a study of rural HEIs, observed a digital divide that limits equitable access to GenAI tools, thus challenging the inclusivity and fairness of AI-driven assessment practices. These studies indicate a need to ground AI ethics in local realities—especially in a developing country like the Philippines where infrastructure, training, and cultural factors influence the adoption of educational technologies.

Identification of the Research Gap

Despite growing global and regional research on GenAI, one key area remains underexplored: the ethical perceptions of pre-service teacher educators regarding the use of GenAI in assessment design. Much of the existing literature, such as that by Kizilcec et al. (2024), Lyu et al. (2025), and Perkins et al. (2023), focuses on institutional leaders, practicing faculty, or student perceptions, with little attention paid to those who are being trained to shape the future of education. In the Philippines, this gap is particularly glaring. While Espartinez (2024) and Villarino (2025) provide preliminary insights into general attitudes toward GenAI, they do not address the perceptions of pre-service teacher educators who are expected to adopt and model ethical assessment practices.

Furthermore, existing international frameworks for ethical GenAI use, such as the AIAS (Perkins et al., 2023), are based largely on Western educational systems and may not fully reflect the socio-cultural and infrastructural challenges faced in Southeast Asia. The study by Akanzire, et al (2025) explores perceptions among teacher educators in various countries, yet omits in-depth analysis of the Philippine context. As a result, the nuanced ethical, pedagogical, and institutional dynamics influencing Filipino pre-service educators remain undocumented.

This research thus seeks to fill the gap by investigating how Filipino pre-service teacher educators perceive the ethical dimensions of using GenAI in assessment design. Specifically, it aims to explore their perspectives on academic integrity, transparency, learner autonomy, bias, and institutional safeguards. By doing so, the study hopes to inform ethical frameworks, teacher training programs, and policy development in both local and regional contexts. Addressing this gap is vital, as pre-service educators' beliefs and practices are likely to shape future classrooms and assessment landscapes in a rapidly digitizing world.

Definition of Key Terms

To ensure clarity and consistency in the interpretation of key concepts used in this research, the following terms are defined both conceptually—drawing from scholarly literature—and operationally—based on how they are applied within the context of the study.

1. Generative Artificial Intelligence (GenAI)

Generative AI refers to advanced machine learning systems, such as large language models (LLMs), capable of creating new content—text, code, images, or media—based on patterns learned from massive datasets (Kizilcec et al., 2024; Furze et al., 2024). In education, GenAI tools are increasingly used for automated writing, problem-solving, and feedback generation. In this study, GenAI specifically refers to tools like ChatGPT, Gemini, and Claude, which pre-service teacher educators identify as influencing how assessments are designed, administered, or evaluated. Participants discussed their awareness, attitudes, and ethical concerns toward these tools in focus group discussions.

2. Assessment Design

Assessment design is the structured process of creating tools and strategies to evaluate student learning outcomes. It encompasses test item creation, scoring rubrics, feedback systems, and formative or summative frameworks (Perkins et al., 2023). This refers to the specific context in which participants used or observed the use of GenAI in creating or modifying educational assessments—such as generating exam questions, crafting rubrics, or simulating student responses during teaching demonstrations.



3. Academic Integrity

Academic integrity involves adherence to ethical principles in academic work, including honesty, trust, fairness, and responsibility. It is threatened by plagiarism, cheating, or misrepresentation of one's own efforts (García-López & Trujillo-Liñán, 2025).

In this study, academic integrity is viewed through participants' concerns about the misuse of GenAI—such as students submitting AI-generated content without attribution, or educators relying excessively on AI to produce assessment materials without proper vetting.

4. Educator Perceptions

Educator perceptions refer to the beliefs, attitudes, and judgments that teachers or teacher educators hold toward specific pedagogical tools, policies, or technologies (Akanzire, et al, 2025). This pertains to how the pre-service teacher educators in the study articulate their views, ethical standpoints, and levels of acceptance or resistance toward the integration of GenAI in assessment practices, as revealed during focus group discussions.

5. Ethics of Automation

The ethics of automation in education centers on the moral considerations surrounding the use of automated technologies in teaching and learning. It includes issues such as fairness, transparency, equity, bias, and the balance between human agency and machine decision-making (García-López & Trujillo-Liñán, 2025; Roe et al., 2024). This concept was explored by asking participants about potential ethical risks and benefits they associate with automating assessment processes via GenAI tools, including concerns about overreliance, learner agency, and algorithmic bias.

6. Pre-service Teacher Educators

Pre-service teacher educators are professionals—usually faculty members in teacher education institutions—responsible for instructing, mentoring, and evaluating future teachers prior to their entry into the teaching profession. In this study, pre-service teacher educators are the primary participants, all of whom are involved in teaching professional education or methods courses within teacher education programs. Their perspectives on GenAI use in assessment were captured through structured focus group discussions.

Literature Review

The reviewed literature paints a nuanced and evolving landscape of how educators, institutions, and policy scholars are responding to the rise of generative AI (GenAI) in educational assessment. A central convergence in global and Philippine studies is the recognition that GenAI tools—particularly large language models like ChatGPT—are rapidly transforming assessment practices, offering enhanced efficiency, personalization, and scalability (Kizilcec et al., 2024; Espartinez, 2024; Ghimire et al., 2024). However, authors across geographic contexts agree that this transformation raises significant ethical questions that remain underexplored, especially among educators in training.

While international studies such as those by Kizilcec et al. (2024) and Gouseti, et al (2025) reflect a generally optimistic yet cautious stance from educators—acknowledging GenAI's convenience while expressing concerns about academic dishonesty, transparency, and overreliance—Philippine-based research by Espartinez (2024) and Villarino (2025) adds another layer by situating these ethical concerns within the broader socio-economic and digital access inequalities specific to the Philippine context. This intersection of technological advancement and systemic constraints underscores the need for ethical frameworks that are not only globally informed but also locally grounded.

In terms of academic integrity and transparency, both García-López and Trujillo-Liñán (2025) and Perkins et al. (2023) emphasize the limitations of current GenAI systems to produce transparent, verifiable, and unbiased outputs. Their concerns are echoed by Roe et al. (2024), who observed that both students and academic staff prefer AI-generated feedback to be supplemental rather than standalone, reinforcing the need for continued human judgment. These findings suggest that while GenAI can assist in formative assessment, it must not displace professional pedagogical oversight—a concern further reinforced by Philippine educators in Dolba's (2025) work, who expressed skepticism about using AI for high-stakes evaluations.

Moreover, there is a consensus that AI literacy is a key determinant in ethical AI integration. Laupichler et al. (2022) and Lumanlan (2025) both emphasize the need for developing digital and ethical fluency among educators. However, while Western literature tends to assume a certain baseline of technological infrastructure and



digital access, Philippine studies (e.g., Villarino, 2025; Robinos, 2024) highlight major disparities in access, preparedness, and institutional support—indicating that any discussion of ethics must also be equity-driven.

Despite these valuable insights, a significant research gap remains: there is a notable absence of empirical, qualitative studies exploring how Filipino pre-service teacher educators perceive the ethical implications of GenAI in assessment. Most existing studies either focus on students, practicing faculty, or macro-level policy frameworks. The voices of those who are training the next generation of teachers—and who are at the critical juncture of both learning and teaching—remain unheard in current scholarship.

Furthermore, international frameworks such as the AI Assessment Scale (Perkins et al., 2023) provide useful ethical models, but their adaptability to Southeast Asian contexts, particularly the Philippines, has not been thoroughly examined. As Akanzire, et al (2025) suggest ethical implementation of GenAI in education is deeply shaped by cultural, institutional, and infrastructural variables, which vary widely across nations. The Philippine context—with its decentralized education system, varied digital access, and limited AI policy infrastructure—demands a localized understanding of how educators interpret and negotiate these ethical tensions.

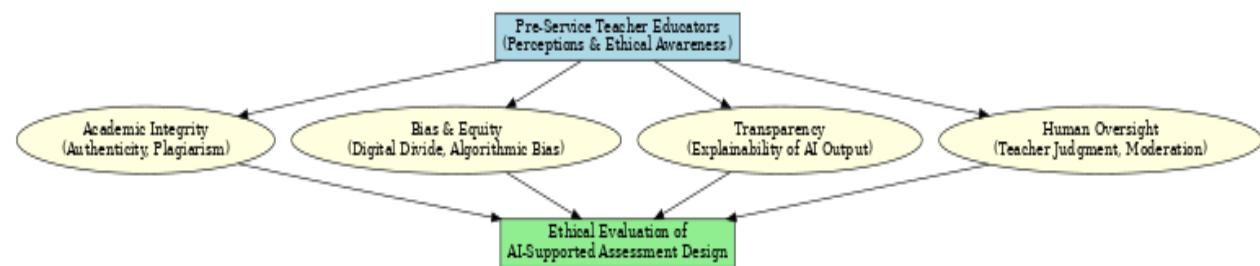
Justification for the Study

Given this clear gap in both local and international literature, the present study is justified on several grounds:

1. Contextual Relevance: It responds to a critical need to document the lived ethical perspectives of Filipino pre-service teacher educators—an essential but understudied group in GenAI adoption discourse.
2. Policy Implications: The study can contribute directly to the formation of ethical guidelines and training programs by the Department of Education, CHED, and TEIs as they navigate digital transformation in the era of EDCOM II and Education Futures.
3. Curricular Advancement: Insights from this study can inform the integration of AI ethics into teacher education curricula, particularly in assessment-related courses.
4. Global Contribution: By surfacing data from a Southeast Asian developing country context, this research offers an important counterpoint to Western-dominated narratives in AI and education.

In sum, this study fills a critical empirical and contextual void by exploring how future educators understand and respond to the ethical dimensions of generative AI in assessment design. It stands to contribute not only to academic literature but also to the evolving ethical and pedagogical frameworks that will define the future of teaching in the digital age.

Conceptual Framework



This conceptual framework illustrates the dynamic interaction between pre-service teacher educators' perceptions and the core ethical dimensions of using generative AI (GenAI) in educational assessment. It is grounded in the understanding that the ethical evaluation of technology in education must consider contextual, human-centered insights, especially from those tasked with preparing future educators.

At the center of the framework are pre-service teacher educators, whose views are shaped by their academic backgrounds, teaching experiences, digital readiness, and exposure to GenAI tools such as ChatGPT, Claude, or Gemini. These educators serve as both users and mentors in the integration of technology in pedagogy, especially in the design and administration of assessments.

Their perceptions and ethical judgments are analyzed through four interrelated domains:



1. Academic Integrity – Concerns related to plagiarism, authorship, and the authenticity of student work when AI tools are involved.
2. Bias and Equity – Challenges arising from unequal access to AI technologies, and the potential for algorithms to reproduce cultural or linguistic bias.
3. Transparency – The degree to which AI-generated outputs can be traced, explained, and trusted by both teachers and learners.
4. Human Oversight – The indispensable role of teachers in ensuring that AI complements rather than replaces pedagogical judgment and assessment integrity.

These four domains collectively influence the ethical evaluation of AI-supported assessment design, which is the core outcome of this inquiry. The framework emphasizes that responsible AI integration must go beyond technical functionality and be evaluated through the lens of ethical appropriateness, cultural relevance, and pedagogical soundness.

Research Objectives

This study aims to explore the ethical perceptions of pre-service teacher educators regarding the use of generative artificial intelligence (GenAI) in assessment design. Given the growing integration of GenAI tools in educational contexts and the limited local scholarship on this issue, this research is designed to provide rich, context-specific insights using a qualitative approach. The primary goal is to inform policy, teacher training, and ethical frameworks surrounding AI adoption in the Philippine teacher education landscape.

Specifically, this study sought to:

1. To determine the profile of the respondents in terms of the following variables:
 - a. Age
 - b. Gender
 - c. Educational background
 - d. Years of teaching experience in teacher education
 - e. Type of institution
 - f. Level of familiarity with generative AI tools
2. To explore how pre-service teacher educators perceive the ethical implications of using generative AI in the design, administration, and evaluation of student assessments.
3. To identify key ethical themes and concerns raised by participants in relation to the use of GenAI, particularly in terms of academic integrity, authenticity of student work, bias, equity, and transparency.
4. To examine how participants conceptualize the balance between automation and human judgment in the context of educational assessment.
5. To identify any institutional or professional development needs that participants identify as necessary to ensure responsible use of GenAI in assessment practices.
6. To contribute to the development of culturally responsive, human-centered AI policies in teacher education institutions by contextualizing global ethical frameworks within Philippine realities.

METHOD

This study adopted a qualitative research design to examine the ethical perceptions of pre-service teacher educators toward the use of generative artificial intelligence (GenAI) tools—such as ChatGPT, Claude, and Gemini—in assessment design. Recognizing that ethical decision-making is rooted in human values and contextual interpretation, the qualitative approach enabled the exploration of nuanced insights beyond numerical data. Addressing the gap in Philippine-based research on educators' ethical understanding of GenAI, the study was grounded in a constructivist framework, emphasizing that meaning is co-created through reflection and dialogue. Focus Group Discussions (FGDs) served as the primary data collection method, engaging 18 pre-service teacher educators from diverse regions and institutions who teach courses in assessment, curriculum, or educational technology.

Three FGDs, each lasting 60–90 minutes, were conducted either in person or via secure online platforms using semi-structured questions on themes such as authenticity, academic integrity, transparency, and human judgment in AI-assisted assessment. Data were analyzed through Braun and Clarke's (2006) six-phase thematic analysis, combining inductive and deductive coding to identify both emergent patterns and theoretical alignments. Ethical standards—including informed consent, confidentiality, and voluntary participation—were strictly observed. Overall, this qualitative design provided a rigorous, human-centered approach to uncovering how teacher educators



critically reflect on the ethical integration of GenAI in assessment, offering localized insights that can guide future policy, pedagogy, and professional development in Philippine teacher education.

DISCUSSION

Profile of Respondents (Context-Setting)

The study engaged 18 pre-service teacher educators to explore their ethical perceptions toward generative AI (GenAI) in assessment design, considering their professional backgrounds and digital orientations. Most participants taught foundational education courses such as Assessment of Student Learning, Curriculum Development, and Educational Technology, positioning them as key influencers in shaping how AI tools are understood and integrated into pedagogy. As Laupichler et al. (2022) noted, teacher educators often serve as the "first line of contact" in cultivating ethical pedagogical cultures, making their perspectives on GenAI particularly consequential. Their teaching experience ranged from one year to over a decade, combining both emerging and seasoned educators—a distribution that, according to Gouseti et al. (2025), may influence openness or caution toward technological adoption. The respondents' subject specializations, especially in assessment and educational technology, situate them directly within domains most affected by GenAI use, where ethical issues such as authenticity, authorship, and fairness frequently arise (Perkins et al., 2023). While most participants described themselves as "moderately" or "very familiar" with GenAI tools like ChatGPT, Claude, and Gemini, familiarity remained uneven, reflecting disparities in institutional exposure and digital access (Ghimire et al., 2024). A few reported regularly or occasionally using these tools for test creation or feedback, echoing Chan and Hu's (2023) observation that educators often begin with low-stakes experimentation before integrating AI into formal assessment processes. However, such usage does not necessarily imply preparedness to handle ethical challenges surrounding transparency, plagiarism, and learner autonomy (García-López & Trujillo-Liñán, 2025). Overall, the respondents' roles and experiences underscore their pivotal capacity to shape responsible GenAI use in education, while also revealing an urgent need for structured guidance and ethical literacy training to navigate AI-driven assessment practices effectively.

Perceptions of Generative AI in Assessment Design

The study explored how 18 pre-service teacher educators perceive the integration of generative artificial intelligence (GenAI) in assessment by examining their understanding, observed uses, perceived benefits, and personal experiences with AI tools. Participants generally defined GenAI as an intelligent system capable of producing educational content—such as quiz items, rubrics, and feedback—based on learned data patterns, aligning with Ghimire et al. (2024), who described GenAI as a content-generation partner that mirrors human cognition. Many had observed or used AI tools like ChatGPT in drafting test items, refining questions, and generating formative feedback, consistent with Roe et al. (2024), who noted educators' preference for using GenAI in supportive rather than high-stakes assessment contexts. The respondents highlighted time efficiency, creativity, and personalized learning as key benefits, echoing Furze et al. (2024) and Prompiengchai et al. (2025), who found that GenAI enhances instructional design and learner engagement when used judiciously. However, adoption varied—from active users to cautious observers—reflecting Laupichler et al. (2022) and the Technology Acceptance Model (Venkatesh & Davis, 2000), which suggest that digital confidence and institutional support shape educators' willingness to experiment. Overall, the findings reveal a climate of cautious optimism: while GenAI is valued for its efficiency and adaptability, concerns about academic integrity, overreliance, and ethical preparedness underscore the need for structured professional development and clear institutional guidance (García-López & Trujillo-Liñán, 2025).

Ethical Concerns and Reflections

To deepen understanding of how future educators interpret the ethical implications of generative artificial intelligence (GenAI) in assessment design, the study examined five key concerns: academic integrity, plagiarism and overreliance, authenticity, algorithmic bias, and transparency. Participants consistently expressed apprehension that unchecked AI use could undermine integrity by enabling students to bypass learning or submit unoriginal work, echoing warnings by Bittle and El-Gayar (2025) and García-López and Trujillo-Liñán (2025) about the erosion of academic values without proper oversight. Many noted that GenAI facilitates undetectable plagiarism and weakens critical thinking—issues supported by Lyu et al. (2025) and Smutny and Schreiberova (2020)—while others stressed that AI-generated assessments often lack contextual and cultural authenticity, aligning with Prompiengchai et al. (2025). Concerns about algorithmic bias also surfaced, particularly the risk of Western-centric or linguistically biased



content, consistent with findings by Gouseti et al. (2025) and Binns et al. (2018). Nearly all participants emphasized the importance of transparency, affirming UNESCO's (2021) principle that students have a right to know when AI contributes to assessment design or grading. Overall, while pre-service teacher educators acknowledged GenAI's utility, they underscored the urgent need for ethical literacy, contextualized policies, and transparency mechanisms to ensure responsible AI integration in education.

Human Oversight and Professional Judgment

The study examined educators' roles in an era of AI-mediated assessment, focusing on the importance of human judgment, teachers' continuing responsibilities, and confidence in balancing automation with professional standards. Participants overwhelmingly agreed that while GenAI can enhance efficiency, human oversight remains vital for ensuring fairness, empathy, and contextual sensitivity—particularly in evaluating reflective, creative, and performance-based tasks. They emphasized that AI lacks the emotional intelligence and cultural awareness necessary for nuanced interpretation, echoing Chanda (2024) and Asrifan et al. (2025), who stress the indispensability of professional judgment in maintaining inclusive and dignified assessment. Respondents viewed teachers as ethical mediators and verifiers of AI outputs, responsible for aligning assessments with learning objectives and guiding students in understanding AI limitations, consistent with Holmes and Porayska-Pomsta's (2023) call for pedagogical intentionality in digital education. Confidence in balancing automation varied: some felt capable with adequate training, while others cited low preparedness and institutional gaps, paralleling findings by Laupichler et al. (2022) and Villarino (2025). Overall, the results affirm that AI should complement, not replace, the informed, ethical, and compassionate judgment of educators—underscoring the value of a hybrid model where technology supports but does not supplant human decision-making in assessment.

Institutional Support, Guidelines, and Readiness

The study examined institutional and individual preparedness for engaging with generative artificial intelligence (GenAI) in assessment, revealing that while awareness is rising, formal structures remain limited. Most participants reported that their institutions lack clear policies or guidelines on AI use, relying instead on informal discussions—reflecting Espartinez's (2024) observation that Philippine higher education institutions lag in institutionalizing AI governance, a trend also seen in developing regions (García-López & Trujillo-Liñán, 2025; UNESCO, 2021). Although some educators felt technically capable of using GenAI for drafting quizzes or feedback, many expressed ethical uncertainty, particularly regarding data privacy, integrity, and judgment boundaries, consistent with Laupichler et al. (2022) and Binns et al. (2018), who note that AI literacy often emphasizes technical over ethical competence. Respondents strongly advocated for structured professional development—such as workshops, ethical frameworks, and peer mentoring—to guide responsible implementation, echoing Holmes and Porayska-Pomsta (2023). In alignment with Villarino (2025) and Carvajal (2023), they emphasized the need for culturally grounded, capacity-building programs that address local infrastructure and teacher realities. Overall, the findings highlight a readiness gap between enthusiasm for AI use and the absence of institutional frameworks, underscoring the urgency of establishing clear, context-sensitive policies that uphold fairness, integrity, and human-centered assessment.

Recommendations on the ethical and responsible use of generative AI (GenAI)

The final segment of the study gathered reflective insights and forward-looking recommendations from 18 pre-service teacher educators on the ethical and responsible use of generative AI (GenAI) in assessment. Participants emphasized that teacher education institutions must establish formal ethical guidelines, inclusive policies, and sustained capacity-building programs to cultivate an ethical culture of AI use—echoing Holmes and Porayska-Pomsta's (2023) assertion that ethical integration depends on reflective institutional practices rooted in humanistic values. They also called for embedding AI ethics in teacher education curricula, consistent with Chou et al. (2025), and for collaborative policymaking involving educators, technologists, and policymakers (Espirtez, 2024). Three key policy principles emerged: maintaining human oversight, ensuring transparency and disclosure, and promoting fairness and accessibility—reflecting calls for human-in-the-loop systems (Holmes et al., 2022; Wang et al., 2024) and the transparency imperative noted by Binns et al. (2018). While participants expressed optimism about GenAI's pedagogical potential, they also voiced concerns about student overreliance and threats to integrity, resonating with Syska et al. (2025). Collectively, their responses underscore the need for ethical guardrails, empowered teacher agency, and continuous institutional reflection to balance innovation with the enduring human values that underpin authentic education.



Conclusions

- Educator Profiles Reveal a Readiness Gap.** Respondents had diverse expertise in assessment, curriculum, and educational technology, but few had used GenAI in assessment design. This signals a readiness gap in ethical confidence and institutional guidance, underscoring the need for AI literacy and ethics training.
- Contextual and Critical Awareness of GenAI.** Educators understood GenAI as tools that generate human-like content and aid assessment creation. While recognizing its value in efficiency and creativity, they maintained a critical stance on its responsible and contextual use.
- Balancing Benefits with Integrity.** Participants saw GenAI's utility in generating quizzes, rubrics, and feedback but cautioned against risks to authenticity, plagiarism, and overreliance. They stressed that technology should complement—not replace—the intellectual and ethical role of teachers.
- Human Judgment is Indispensable.** Educators strongly asserted that human discernment must anchor AI-augmented assessment, especially in evaluating reflective or creative tasks. AI should assist, not automate, professional decision-making.
- Policy and Institutional Support are Lacking.** Most institutions lack formal GenAI policies, leading to uncertainty and inconsistency. Respondents urged the creation of clear, enforceable ethical frameworks and professional development initiatives to guide responsible AI use.
- Educators are Ready to Lead with Support.** With proper training, transparency standards, and peer collaboration, educators expressed readiness to model ethical GenAI integration—demonstrating leadership potential rather than mere compliance.

Recommendations

- Develop Ethical AI Policies:** Establish and institutionalize formal guidelines defining responsible GenAI use, emphasizing transparency and human oversight.
- Provide Continuous Training:** Offer capacity-building programs on AI tools, ethics, and assessment integrity to ensure educators are both AI-literate and ethically competent.
- Integrate AI Ethics in Curriculum:** Embed GenAI and digital ethics modules in teacher education to prepare future educators for critical and reflective AI use.
- Foster Academic Integrity:** Issue clear student guidelines on ethical AI use and promote digital literacy to prevent misuse.
- Advance Research on AI in Education:** Support studies on GenAI's impact on assessment, equity, and pedagogy to develop Philippine-specific ethical frameworks.

REFERENCES

Akanzire, B. N., Nyaaba, M., & Nabang, M. (2025). Generative AI in teacher education: Teacher educators' perception and preparedness. *Journal of Digital Educational Technology*, 5(1), ep2508. <https://doi.org/10.30935/jdet/15887>

Asrifan, A., Sadaruddin, S., Ashar, A., Nonci, J., Setiawan, T., & Erniati, E. (2025). Redefining Learning Pathways: The Impact of AI-Enhanced Micro-Credentials on Education Efficiency. In Integrating Micro-Credentials With AI in Open Education (pp. 281-312). IGI Global Scientific Publishing.

Binns, R., Veale, M., Van Kleek, M., & Shadbolt, N. (2018). 'It's reducing a human being to a percentage': Perceptions of justice in algorithmic decisions. Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, 1–14. <https://doi.org/10.1145/3173574.3173951>

Bittle, K., & El-Gayar, O. (2025). Generative AI and Academic Integrity in Higher Education: A Systematic Review and Research Agenda. *Information*, 16(4), 296. <https://doi.org/10.3390/info16040296>

Bulut, O., Beiting-Parrish, M., Casabianca, J. M., Slater, S. C., Jiao, H., Song, D., Liu, J. X., & Natesan Batley, P. (2024). The rise of artificial intelligence in educational measurement: Opportunities and ethical challenges. arXiv. <https://arxiv.org/abs/2406.18900>



Carvajal, A. L., Sario, J., Bondoc, B., Soguilon, D., & Zialcita, E. (2025). Artificial Intelligence in Academic Research: Assessing Ethical Use and Benchmarking Practices Across Local and Global Institutions. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 4(2), 1205–1224. <https://doi.org/10.63498/etcor359>

Carvajal, A. L. P. (2023). The Power Triangle of Education: Unlocking the Relationship of Educational Research, Policy, and Practice. *Asia Pacific Journal of Advanced Education and Technology*, 2(3). <https://doi.org/10.54476/apjaet/73190>

Chanda, A. K. (2024). Human judgment in artificial intelligence for business decision-making: An empirical study. *International Journal of Innovation Management*, 28(01n02), 2450004.

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/s41239-023-00411-8>

Chou, C. Y., Chan, T. W., Chen, Z. H., Liao, C. Y., Shih, J. L., Wu, Y. T., & Hung, H. C. (2025). Defining AI companions: a research agenda—from artificial companions for learning to general artificial companions for Global Harwell. *Research & Practice in Technology Enhanced Learning*, 20.

Espartinez, A. S. (2024). Exploring student and teacher perceptions of ChatGPT use in Philippine higher education institutions. *Computers in Human Behavior Reports*, 9, 100675. <https://doi.org/10.1016/j.chbr.2024.100675>

Furze, L., Perkins, M., Roe, J., & MacVaugh, J. (2024). The AI Assessment Scale (AIAS) in action: A pilot implementation of GenAI supported assessment. arXiv. <https://doi.org/10.48550/arXiv.2403.14692>

García-López, I. M., & Trujillo-Liñán, L. (2025, June). Ethical and regulatory challenges of Generative AI in education: a systematic review. In *Frontiers in Education* (Vol. 10, p. 1681252). Frontiers.

Ghimire, A., Prather, J., & Edwards, J. (2024). Generative AI in education: A study of educators' awareness, sentiments, and influencing factors. arXiv. <https://doi.org/10.48550/arXiv.2403.15586>

Giannakos, M., Azevedo, R., Brusilovsky, P., Cukurova, M., Dimitriadis, Y., Hernandez-Leo, D., ... & Rienties, B. (2025). The promise and challenges of generative AI in education. *Behaviour & Information Technology*, 44(11), 2518–2544.

Gousseti, A., James, F., Fallin, L., & Burden, K. (2025). The ethics of using AI in K-12 education: A systematic literature review. *Technology, Pedagogy and Education*, 34(2), 161–182.

Henderson, M., Bearman, M., Chung, J., Fawns, T., Buckingham Shum, S., Matthews, K. E., & de Mello Heredia, J. (2025). Comparing Generative AI and teacher feedback: student perceptions of usefulness and trustworthiness. *Assessment & Evaluation in Higher Education*, 1–16.

Holmes, W., Bialik, M., & Fadel, C. (2022). Artificial Intelligence in Education: Promises and Implications for Teaching and Learning. OECD Publishing. <https://doi.org/10.1787/5e6215ff-en>

Holmes, W., & Porayska-Pomsta, K. (2023). The ethics of artificial intelligence in education. Lontoo: Routledge, 621–653.

Kizilcec, R. F., Huber, E., Papanastasiou, E. C., Cram, A., Makridis, C. A., Smolansky, A., & Raduescu, C. (2024). Perceived impact of generative AI on assessments: Comparing educator and student perspectives in Australia, Cyprus, and the United States. *Computers and Education: Artificial Intelligence*, 7, 100269.



Laupichler, M. C., Aster, A., Schirch, J., & Raupach, T. (2022). Artificial intelligence literacy in higher and adult education: A scoping literature review. *Computers and Education: Artificial Intelligence*, 3, 100055. <https://doi.org/10.1016/j.caai.2022.100055>

Lyu, W., Zhang, S., Chung, T., Sun, Y., & Zhang, Y. (2025). Understanding the practices, perceptions, and (dis) trust of generative AI among instructors: A mixed-methods study in US higher education. *Computers and Education: Artificial Intelligence*, 8, 100383.

Matsiola, M., Lappas, G., & Yannacopoulou, A. (2024). Generative AI in Education: Assessing Usability, Ethical Implications, and Communication Effectiveness. *Societies*, 14(12), 267.

Perkins, M., Furze, L., Roe, J., & MacVaugh, J. (2023). The AI Assessment Scale (AIAS): A framework for ethical integration of generative AI in educational assessment. arXiv. <https://doi.org/10.48550/arXiv.2312.07086>

Prompiengchai, S., Narreddy, C., & Joordens, S. (2025). A practical guide for supporting formative assessment and feedback using generative AI. arXiv. <https://doi.org/10.48550/arXiv.2505.23405>

Republic of the Philippines. (2022). Republic Act No. 11899: An act creating the Second Congressional Commission on Education (EDCOM II). <https://www.officialgazette.gov.ph/2022/06/29/republic-act-no-11899/>

Roe, J., Perkins, M., & Ruelle, D. (2024). Understanding student and academic staff perceptions of AI use in assessment and feedback. arXiv. <https://doi.org/10.48550/arXiv.2406.15808>

Smutny, P., & Schreiberova, P. (2020). Chatbots for learning: A review of educational chatbots for the Facebook Messenger. *Computers & Education*, 151, 103862. <https://doi.org/10.1016/j.compedu.2020.103862>

Syska, A., Buckley, C., Sedghi, G., & Grayson, N. (2025). Transformative Practice in Higher Education. *Routledge*. <https://doi.org/10.4324/9781003503149>

UNESCO. (2021). Recommendation on the Ethics of Artificial Intelligence. <https://unesdoc.unesco.org/ark:/48223/pf0000381137>

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>

Villarino, R. T. (2025). Artificial intelligence integration in rural Philippine higher education: Perspectives, challenges, and ethical considerations. *International Journal of Educational Research and Innovation*, 24, Article 10909. <https://doi.org/10.1234/ijeri.10909>

Wang, S., Cooper, N., & Eby, M. (2024). From human-centered to social-centered artificial intelligence: Assessing ChatGPT's impact through disruptive events. *Big Data & Society*, 11(4), 20539517241290220.