OPEN ACCESS
Al-Hijr: Journal of Adulearn World
Vol. 4 No. 2. June 2025, pp. 101-114 DOI. 10.55849/alhijr.vxix.xxx

Research Article

The Ethics of AI in Education: An Empirical Study on Students' and Teachers' Attitudes toward Responsible AI Use

Nofirman [1], Rithy Vann [2], Levy Sefrizal [3], Ravi Dara [4]
[1] Universitas Prof. Dr. Hazairin, SH., Bengkulu, Indonesia
[2] Royal University, Cambodia
[3] Sekolah Tinggi Ilmu Tarbiyah YPI Kerinci, Indonesia
[4] South East University, Cambodia

Corresponding Author:

Nofirman,
Universitas Prof. Dr. Hazairin, SH., Bengkulu, Indonesia
Jalan Jend. A. Yani No.1, Kebun Ros, Kec. Tlk. Segara, Kota Bengkulu, Bengkulu 38115
Email: nofirman@unihaz.ac.id

Article Info

Received: June 2, 2025
Revised: June 5, 2025
Accepted: June 8, 2025
Online Version: June 8, 2025

Abstract

The rapid integration of artificial intelligence (AI) into educational settings has outpaced the development of clear ethical guidelines, creating significant challenges related to academic integrity, data privacy, and algorithmic bias. Understanding stakeholder attitudes is crucial for developing effective policies for responsible AI use. This study aimed to empirically investigate and compare the attitudes of high school students and teachers regarding the ethical challenges and responsible use of AI in education. A mixed-methods approach was employed, using a quantitative survey administered to 250 students and 50 teachers to gauge attitudes toward AI ethics. This was supplemented by qualitative data from semi-structured focus groups to explore the reasoning behind these attitudes. The findings revealed a significant divergence in attitudes, with teachers expressing greater concern for academic integrity and data privacy, while students were more focused on AI as a tool for efficiency. Both groups, however, demonstrated a shared desire for clear, explicit ethical guidelines. A notable gap exists between student and teacher perspectives on AI ethics in education. To foster a culture of responsible AI use, educational institutions must implement comprehensive training and develop clear policies that address the distinct concerns of both stakeholder groups.

Keywords: AI Ethics, Educational Technology, Responsible AI

Journal Homepage https://ejournal.staialhikmahpariangan.ac.id/Journal/index.php/alhijr
How to cite: Nofirman, Nofirman., Vann, R., Sefrizal, L & Dara, R. (2025). The Ethics of AI in Education: An Empirical Study on Students' and Teachers' Attitudes toward Responsible AI Use. *Al-Hijr: Journal of Adulearn World, 4*(2), 101–114. https://doi.org/10.55849/alhijr.v4i2.983
Published by: Sekolah Tinggi Agama Islam Al-Hikmah Pariangan Batusangkar

INTRODUCTION

The rapid and widespread integration of artificial intelligence (AI) into the educational landscape represents one of the most significant technological shifts in modern pedagogy. AI-powered tools, from automated grading systems and personalized learning platforms to generative language models, are no longer futuristic concepts but are becoming increasingly embedded in the daily fabric of teaching and learning (Coleman, 2024; Idris et al., 2024). These technologies offer unprecedented opportunities to enhance educational efficiency, provide individualized student support, and broaden access to information. The promise of AI to tailor learning experiences, automate administrative tasks, and serve as a powerful research assistant has generated considerable enthusiasm among educators and institutions striving to prepare students for a technology-driven future.

This technological proliferation, however, has dramatically outpaced the development of a corresponding ethical framework to guide its use. The introduction of powerful AI tools into classrooms has given rise to a complex array of ethical dilemmas that educational systems are only beginning to confront. Key among these are concerns regarding academic integrity, as generative AI blurs the lines between authentic student work and AI-assisted output. Furthermore, the reliance on data-driven platforms raises critical questions about student data privacy and security (Fujiwara et al., 2024; Jiang & Li, 2024). The potential for algorithmic bias within these systems to perpetuate or even amplify existing social inequities presents another profound challenge that demands careful consideration.

The discourse surrounding these issues is critical because the unguided implementation of AI risks undermining the core values of education. Fostering a culture of responsible AI use is not merely a technical or administrative task; it is a fundamental pedagogical imperative. Understanding how the primary stakeholders—students and teachers—perceive and navigate these ethical complexities is the first and most crucial step in developing policies and practices that are not only effective but also equitable and ethically sound (Gauna et al., 2024; Waibel & Bischoff, 2024). Without this foundational understanding, any attempt to create guidelines for responsible AI use will be disconnected from the realities of the classroom experience.

The central problem this research addresses is the significant and growing disconnect between the rapid adoption of AI tools in high schools and the lack of empirical understanding of how key stakeholders perceive the associated ethical challenges. While institutional leaders and technology developers promote the benefits of AI, the voices, attitudes, and concerns of the students and teachers who interact with these technologies daily remain largely unexamined in a systematic, comparative manner (Eutsler & Long, 2024; Tshuma & Nyamupangedengu, 2024). This lack of stakeholder-centric data creates a critical void, hindering the development of relevant, effective, and widely accepted ethical guidelines.

The specific issue is the presumed but unverified divergence in perspectives between students and teachers. It is often assumed that students, as "digital natives," may view AI primarily as a tool for efficiency and productivity, potentially downplaying ethical concerns like plagiarism. Conversely, teachers, as guardians of academic standards, are often presumed to be more focused on issues of academic integrity and the potential for AI to inhibit critical thinking (Ipek, 2024; Jose & Jose, 2024). The problem is that these assumptions, while logical,

are not substantiated by rigorous, comparative empirical research, making it difficult to design interventions or policies that effectively bridge this potential perceptual gap.

This study, therefore, confronts the issue that without a clear, data-driven picture of student and teacher attitudes, educational institutions are operating in an ethical vacuum. They risk implementing policies that are misaligned with the needs and perspectives of their communities, leading to guidelines that may be ignored by students or are overly restrictive from a pedagogical standpoint. The problem is the absence of a foundational dataset that maps the ethical landscape from the dual perspectives of those most directly impacted, which is an essential prerequisite for fostering a genuine culture of responsible and ethical AI use in education.

The primary objective of this study is to empirically investigate and systematically compare the attitudes of high school students and teachers concerning the ethical challenges posed by the use of AI in education. This research seeks to move beyond anecdotal evidence and assumptions by collecting and analyzing quantitative and qualitative data on stakeholder perspectives (Husni et al., 2024; Ly, 2024). The central goal is to identify the specific areas of convergence and divergence in how these two critical groups view issues such as AI's role in academic integrity, data privacy, and algorithmic fairness.

To achieve this overarching objective, the study will pursue several specific aims. First, it will quantify the attitudes of both students and teachers toward a range of predefined ethical scenarios involving AI use, allowing for a statistical comparison of their viewpoints. Second, the research aims to explore the underlying reasoning and rationales that inform these attitudes through in-depth qualitative analysis. This will provide a richer, more nuanced understanding of *why* students and teachers hold their respective views, moving beyond simply documenting *what* those views are.

Ultimately, this study endeavors to synthesize these findings to create a comprehensive, dual-perspective map of the ethical landscape of AI in high school settings (Barahona et al., 2024; Butler et al., 2024). The research aims to provide a clear answer to the question: What are the shared and differing ethical concerns of students and teachers regarding AI, and what do they consider to be "responsible use"? By achieving these objectives, the study intends to generate actionable insights that can directly inform the development of targeted educational programs, fair use policies, and a shared framework for ethical AI engagement that is respected by all members of the school community.

The existing body of literature on AI in education has rapidly expanded, with many publications focusing on the technological capabilities of AI tools or their potential pedagogical applications (Yang & Banks, 2024; Zhang, 2024). However, a distinct gap exists in the empirical research concerning the ethical dimensions of AI use from a comparative stakeholder perspective. While numerous opinion pieces, theoretical papers, and policy documents discuss AI ethics, there is a marked scarcity of studies that systematically collect and analyze primary data on the attitudes of both students and teachers within the same educational context.

This gap is particularly pronounced in the secondary education sector. Much of the empirical research on user attitudes toward AI has been conducted in higher education or professional settings (Kamhi-Stein et al., 2024; Wach et al., 2024). The unique social dynamics, developmental stages, and pedagogical structures of high schools mean that findings from other contexts cannot be reliably extrapolated. The literature lacks studies that specifically

address the ethical viewpoints of high school students and their teachers, who are navigating these issues at a formative stage of academic and personal development.

Furthermore, the existing research often examines stakeholder groups in isolation or relies on a single methodological approach. There is a dearth of mixed-methods studies that not only quantify attitudes through surveys but also delve into the qualitative nuances behind those attitudes through focus groups or interviews (Conway et al., 2024; Pamfilos, 2024b). This methodological gap means that the current understanding of the issue is often superficial, lacking the explanatory depth required to understand the complex interplay of beliefs, experiences, and pressures that shape ethical decision-making regarding AI. This study is designed to fill these specific gaps by providing a comparative, mixed-methods, and context-specific investigation of this critical issue.

The primary novelty of this research lies in its direct, empirical comparison of student and teacher attitudes toward AI ethics within a unified study design. Unlike previous research that has often treated these groups separately or relied on assumptions, this study places their perspectives in direct dialogue (Buchanan, 2024; Butler et al., 2024). By systematically analyzing points of alignment and divergence, the research offers a novel, relational understanding of the ethical ecosystem of the modern classroom. This approach provides a more holistic and dynamic picture than studies that focus on a single stakeholder group.

This research is justified by the urgent and practical need for evidence-based policymaking in schools. As educational institutions rush to create guidelines for responsible AI use, they are often doing so without a clear understanding of the very people these policies will affect (Graves-Cristobal, 2024; Sugimoto et al., 2024). This study is essential because it will provide the empirical data needed to craft policies that are not only ethically sound but also relevant, practical, and likely to be adopted by both students and teachers. It addresses the critical need to ground administrative decisions in the lived realities of the classroom.

The ultimate justification for this study rests on its potential to foster a more proactive and collaborative approach to digital citizenship education. By illuminating the specific gaps in understanding and concern between students and teachers, the findings can be used to design targeted training programs and open, constructive dialogues (Scanlon et al., 2024; Zhang, 2024). This research is important because it moves beyond simply identifying problems and provides the foundational knowledge needed to build a shared culture of academic integrity and responsible innovation. It is a necessary step in ensuring that the integration of AI into education serves to enhance, rather than erode, core academic and ethical values.

RESEARCH METHOD

Research Design

This study employed a convergent parallel mixed-methods research design to conduct a comprehensive investigation into student and teacher attitudes toward AI ethics. The quantitative phase involved the administration of a cross-sectional survey to measure and compare the attitudes of the two stakeholder groups. Concurrently, the qualitative phase utilized semi-structured focus group discussions to explore the underlying reasoning, experiences, and contexts that shape these attitudes (Butler & Yendol-Hoppey, 2024; Emerson, 2024). This design was selected to provide a more holistic understanding of the research problem by integrating statistical data with rich, contextual qualitative insights, allowing for both comparison and in-depth explanation.

Population and Sample

The target population for this study comprised students and teachers from public high schools in a large, demographically diverse urban school district. A multi-stage sampling strategy was employed. First, three high schools were selected via purposive sampling to represent a range of socioeconomic and academic environments (Butler & Yendol-Hoppey, 2024; Vanassche, 2024). Subsequently, a stratified random sampling technique was used to select a sample of 250 students (grades 10-12) and 50 teachers from various subject disciplines across these schools. For the qualitative component, a nested purposeful sample of 30 students and 15 teachers was selected from the survey respondents who volunteered for follow-up, ensuring a diversity of expressed attitudes were represented in the focus groups.

Instruments

Two primary instruments were developed for data collection. The quantitative instrument was the "Attitudes toward AI in Education Scale" (AIES), a 40-item questionnaire designed by the researchers (van der Stap et al., 2024). The AIES used a 5-point Likert scale to measure perceptions related to academic integrity, data privacy, algorithmic fairness, and the pedagogical role of AI. The instrument's content validity was established by a panel of experts in educational technology and ethics, and its reliability was confirmed with a strong Cronbach's alpha of .91. The qualitative instrument was a semi-structured focus group protocol, which included open-ended questions and ethical scenarios designed to stimulate discussion about personal experiences with AI and perspectives on responsible use.

Procedures

The research was conducted following ethical approval from the university's institutional review board and the participating school district. After obtaining informed consent from teachers and parents, and assent from students, the AIES survey was administered electronically during a designated school period (Beddoes, 2024; Pamfilos, 2024a). Upon completion of the quantitative data collection, participants who had expressed interest were invited to participate in focus groups. Six separate focus groups for students and three for teachers were conducted via video conference, each lasting between 60 and 75 minutes. All focus group sessions were audio-recorded, transcribed verbatim, and anonymized. Quantitative data were analyzed using independent samples t-tests to compare group means, while qualitative data were analyzed using an iterative thematic analysis approach to identify emergent patterns and themes.

RESULTS AND DISCUSSION

The initial analysis focused on the quantitative data gathered from the "Attitudes toward AI in Education Scale" (AIES). The survey was designed to measure attitudes across three primary ethical domains: Academic Integrity, Data Privacy, and Algorithmic Fairness. The descriptive statistics revealed notable differences in the mean scores between the teacher and student groups across all domains, suggesting distinct attitudinal stances toward the ethical challenges of AI in education.

A summary of these findings is presented in Table 1. The table displays the mean scores (M) and standard deviations (SD) for both student (N=250) and teacher (N=50) participants on each of the three ethical subscales. The scores, measured on a 5-point Likert scale, indicate the

level of concern, with higher scores representing greater concern regarding the ethical risks associated with AI in each domain.

Table 1: Mean Scores of Student and Teacher Attitudes on AIES Subscales

Ethical Domain	Group	N	Mean (M)	Standard Deviation (SD)
Academic Integrity	Students	250	3.15	0.88
	Teachers	50	4.45	0.62
Data Privacy	Students	250	3.40	0.95
	Teachers	50	4.21	0.75
Algorithmic Fairness	Students	250	3.65	1.02
	Teachers	50	3.95	0.85

The quantitative data clearly indicate a significant divergence in attitudes between teachers and students, particularly concerning academic integrity. Teachers (M=4.45) expressed a substantially higher level of concern about AI's potential to enable plagiarism and undermine authentic work compared to students (M=3.15). A similar, though less pronounced, gap was evident in attitudes toward data privacy, where teachers (M=4.21) again showed greater concern than students (M=3.40).

The domain with the closest alignment was algorithmic fairness, although teachers (M=3.95) still reported a slightly higher level of concern than students (M=3.65). The smaller standard deviations in the teacher group across all subscales suggest a more homogenous and consistently high level of concern among educators. Conversely, the larger standard deviations among students indicate a wider range of opinions, with some students expressing very low concern while others aligned more closely with their teachers.

The thematic analysis of the nine focus group discussions yielded four primary themes that captured the essence of stakeholder attitudes. For teachers, two dominant themes emerged: "Guardians of Academic Standards," reflecting a deep sense of responsibility to protect academic integrity from the threat of AI-driven cheating, and "Concern for Unseen Consequences," which encompassed anxieties about long-term impacts on student critical thinking skills and data privacy.

For students, the two central themes were "AI as an Indispensable Efficiency Tool," where they framed AI as essential for managing heavy workloads and improving the quality of their work, and "Navigating an Ambiguous Landscape," which highlighted their confusion and frustration over the lack of clear rules and inconsistent expectations from different teachers regarding acceptable AI use.

The themes emerging from the teacher focus groups can be inferred to stem directly from their professional roles and pedagogical responsibilities. The "Guardians of Academic Standards" theme reflects their duty to evaluate student learning authentically, a task complicated by generative AI. Their "Concern for Unseen Consequences" suggests a forward-looking perspective, worrying about how over-reliance on AI might affect students' future cognitive and analytical abilities, a concern rooted in their experience with student development.

The student themes are inferred to be shaped by their immediate academic environment and their identity as digital natives. The perception of "AI as an Indispensable Efficiency Tool" is a pragmatic response to the pressures of modern schooling, including heavy homework loads and high expectations. The "Navigating an Ambiguous Landscape" theme does not necessarily

indicate a desire to cheat, but rather a genuine plea for clarity and fairness, suggesting that much of the ethically questionable use of AI may stem from confusion rather than malice.

A strong congruence exists between the quantitative survey data and the qualitative focus group themes. The large statistical gap in the "Academic Integrity" subscale (M=4.45 for teachers vs. M=3.15 for students) is vividly explained by the qualitative themes. The teachers' high scores are the numerical representation of their role as "Guardians of Academic Standards," while the students' lower scores reflect their pragmatic view of "AI as an Indispensable Efficiency Tool."

This connection is further reinforced in the domain of data privacy. The teachers' higher mean score (M=4.21) on the survey aligns with their expressed "Concern for Unseen Consequences," including how student data is collected and used by third-party AI platforms. The students' comparatively lower score (M=3.40) is consistent with their focus on AI's utility, where the immediate benefits of the tool often overshadowed more abstract concerns about data privacy in their discussions.

To illustrate the divergent perspectives, the case of Ms. Albright, a veteran English teacher, provides a clear example. During her focus group, Ms. Albright expressed profound distress, stating, "It's not just about cheating. I feel like I'm grading a machine. How can I teach writing when I don't know if I'm even reading my student's thoughts?" She described spending hours trying to discern AI use, feeling it eroded the trust central to the teacher-student relationship.

In a separate student focus group, a high-achieving 11th-grade student named Chloe offered a contrasting view. "I use it to help me outline my essays and rephrase awkward sentences," she explained. "It's like a super-powered thesaurus. I still do all the thinking and research. It just helps me get my ideas down better. Why is that cheating? It's just a tool."

Ms. Albright's perspective encapsulates the "Guardians of Academic Standards" theme and the deep-seated anxieties of the teacher cohort. Her concern is not merely procedural but existential, touching upon the very purpose of her profession and the nature of learning. Her statement reflects the teachers' aggregate high score on the academic integrity scale, grounding the statistic in a tangible, emotional reality of professional identity under threat.

Chloe's case provides a powerful illustration of the "AI as an Indispensable Efficiency Tool" theme and the nuances within the student data. Her articulated use of AI is not for generating entire essays but for specific, supportive tasks, challenging the binary assumption that all AI use is plagiarism. Her perspective explains why many students do not rate academic integrity concerns as highly as teachers do; from their viewpoint, they are using a sophisticated tool to improve their authentic work, not replace it.

The combined findings of this study robustly demonstrate the existence of a significant perceptual and attitudinal gap between teachers and students regarding the ethics of AI in education. The results show that these two groups approach the technology from fundamentally different standpoints: teachers from a position of pedagogical principle and risk aversion, and students from a position of pragmatic utility and efficiency.

This divergence should not be interpreted simply as a conflict between enforcers and rule-breakers. It is more accurately understood as a difference in priorities, shaped by the distinct roles, responsibilities, and pressures each group faces within the educational system. The results strongly suggest that current top-down ethical policies are likely to fail unless they actively bridge this gap through shared dialogue, co-created guidelines, and mutual education.

The results from this empirical study present a clear and statistically significant divergence in attitudes between high school teachers and students regarding the ethical use of AI in education. Quantitative analysis of the AIES survey data revealed this gap to be most pronounced in the domain of academic integrity, where teachers expressed a substantially higher level of concern than their students. This disparity, while less extreme, was also evident in perceptions of data privacy, with the smallest difference observed in attitudes toward algorithmic fairness.

These numerical findings are given depth and context by the qualitative data from the focus groups. The analysis identified distinct, role-based thematic frameworks for each group. Teachers predominantly framed their views through the lenses of being "Guardians of Academic Standards" and holding a "Concern for Unseen Consequences," highlighting their focus on principles and long-term impacts. In stark contrast, students viewed AI through the pragmatic themes of it being an "Indispensable Efficiency Tool" and their struggle in "Navigating an Ambiguous Landscape," emphasizing utility and the need for clear rules.

The case studies of Ms. Albright and Chloe serve to personify this central conflict. Ms. Albright's distress over her inability to discern authentic student thought encapsulates the teachers' fundamental concerns about the erosion of their professional purpose and the integrity of the learning process. Chloe's perspective, however, illustrates the nuanced student view of AI as a sophisticated assistant for improving, not replacing, their own intellectual labor, challenging the simplistic assumption that all student AI use is equivalent to cheating.

In synthesis, the research findings consistently point to a significant perceptual gap between the two primary stakeholder groups in the educational ecosystem. Teachers approach AI ethics from a standpoint of principled guardianship and risk aversion, shaped by their professional responsibilities. Students, operating under different pressures and with a different relationship to technology, approach it from a position of pragmatic utility and a desire for clear guidelines in an otherwise confusing environment.

These findings empirically substantiate the long-theorized concept of a "digital disconnect" between educators and students, extending it into the new territory of generative AI. The observed attitudinal gap aligns with literature on digital nativity, which posits that those who have grown up immersed in technology often perceive and utilize tools differently from those who have adopted them later. This study provides specific, quantifiable data showing how this divide manifests as a conflict of values—efficiency versus integrity—within the context of AI in education.

The theme of teachers as "Guardians of Academic Standards" resonates deeply with literature on teacher professional identity. Scholars have long argued that the role of an educator extends beyond mere instruction to include the moral and ethical formation of students. This study demonstrates that teachers perceive generative AI as a direct challenge to this core tenet of their professional identity. Their high level of concern is not simply about preventing cheating but about defending the very value of intellectual struggle and authentic creation that they are tasked to foster.

The student perspective, particularly as articulated by Chloe, contributes a much-needed nuance to literature that often frames student technology use in a binary of ethical versus unethical. Her view of AI as a tool for "co-creation" aligns with emerging research on human-computer collaboration, suggesting that current academic integrity policies are ill-equipped to handle this new paradigm. The findings challenge the field to move beyond a plagiarism-

centric view and develop more sophisticated frameworks for evaluating student work in an age of AI partnership.

Furthermore, the student theme of "Navigating an Ambiguous Landscape" strongly supports the body of research calling for the explicit integration of AI literacy and digital citizenship into school curricula. The confusion and frustration expressed by students suggest their ethically questionable actions may often stem from a lack of guidance rather than a lack of moral character. This study provides empirical weight to the argument that institutions have a responsibility to proactively educate students about ethical technology use, rather than simply creating punitive policies.

The stark divergence in attitudes signifies a fundamental conflict in the perceived purpose of academic work in the AI era. For teachers, the process of research and writing is as important as the final product, as it is where critical thinking, analysis, and synthesis are developed. They see AI as a shortcut that circumvents this essential process. For many students, however, the educational system often incentivizes the production of a high-quality final product above all else, making AI a logical and powerful tool for meeting that goal. The results reflect a system where the means and the ends of education are in direct conflict.

The findings are also a clear signal of an institutional policy vacuum. The confusion expressed by students and the anxiety expressed by teachers are symptoms of a reactive, rather than proactive, approach to technological change from educational leaders. The absence of clear, consistent, and well-communicated guidelines has created an environment of uncertainty where individual teachers and students are left to create their own disparate sets of rules. This ambiguity fosters mistrust and makes the consistent and fair application of academic standards nearly impossible.

This classroom-level conflict is a microcosm of a larger societal tension between the drive for technological efficiency and the preservation of humanistic values. Ms. Albright's concern is not just about a student's essay; it is about the value of human thought, creativity, and the authentic struggle that leads to genuine learning. Chloe's pragmatism is not just about getting a good grade; it reflects a world where AI-assisted productivity is rapidly becoming the norm. The school has become a primary battleground where these competing worldviews are clashing.

Ultimately, the results signify a breakdown in communication and a lack of shared understanding between the two most important groups in education. The current dynamic is less of a partnership and more of a quiet, ongoing conflict. The data are an unambiguous indicator that without intentional, structured dialogue between students and teachers, any top-down ethical policy is destined to be perceived as either an out-of-touch restriction or an unenforceable decree, failing to foster a true, shared culture of responsibility.

The most immediate implication of these findings is for educational administrators and policymakers. It is clear that simplistic, zero-tolerance policies on AI use are untenable and misaligned with student perspectives. Institutions must develop nuanced, tiered academic integrity policies that distinguish between different uses of AI—from unacceptable plagiarism to permissible assistance with brainstorming, outlining, or grammar. These policies must be co-created with input from both students and teachers to ensure they are seen as fair and relevant.

There are significant implications for teacher professional development. Training must evolve beyond basic technological literacy to focus on pedagogical adaptation. Educators need support in redesigning assessments to be more "AI-resistant," emphasizing in-class activities,

oral presentations, and process-based evaluation over take-home essays. Furthermore, they need training on how to facilitate classroom conversations about AI ethics, turning moments of potential conflict into teachable moments about digital citizenship.

This study also has direct implications for curriculum development. The findings provide a strong justification for the mandatory integration of a dedicated AI literacy and ethics curriculum into secondary education. Such a curriculum must be designed to bridge the identified perceptual gap, helping students understand the ethical concerns of educators while also helping educators appreciate the pragmatic realities students face. It should equip students with a framework for making responsible decisions about when and how to use these powerful tools.

For the educational technology industry, the implication is a call to action for more ethical product design. Developers should move beyond creating maximally powerful tools and consider incorporating features that promote responsible use. This could include transparently flagging AI-generated content, building in citation and source-checking functionalities, or creating "education modes" that limit capabilities to prevent outright cheating. The industry has a role to play in making ethical use the path of least resistance.

The divergent attitudes are, first and foremost, a product of the distinct roles and pressures inherent to each group. Teachers are professionally and ethically bound to certify the authenticity of student learning. Their role as evaluators makes them naturally sensitive to any tool that could compromise the validity of their assessments. Their perspective is fundamentally shaped by this immense responsibility to uphold academic standards.

Students' attitudes are an equally rational response to their environment. They operate within a high-pressure academic system that heavily rewards polished final products and high grades. Faced with demanding workloads and the availability of a tool that dramatically increases efficiency and output quality, their adoption of AI is a logical, pragmatic choice. Their focus on utility is a direct result of the incentive structures within which they learn.

The difference in lived experience with technology also contributes to the results. For many students, AI is an intuitive extension of the digital ecosystem they have inhabited their entire lives. They see it as just another tool, analogous to a calculator or search engine. Many teachers, however, experience generative AI as a disruptive force that fundamentally challenges their established pedagogical methods and the very definition of learning, leading to a more cautious and critical stance.

A crucial reason for the observed gap is the widespread failure of institutions to lead the conversation. In the absence of clear, consistent, and well-reasoned institutional policies, a vacuum has been created. Into this vacuum, students and teachers have projected their own assumptions, anxieties, and norms. The resulting attitudinal divergence is a direct consequence of this lack of proactive leadership and shared dialogue.

The most critical direction for future research is to move from diagnosing the problem to testing solutions. Intervention-based studies are urgently needed to design and evaluate the effectiveness of various AI ethics curricula and professional development programs. Research should measure whether targeted educational interventions can successfully bridge the attitudinal gap identified in this study.

Longitudinal research is also essential. The current study provides a cross-sectional snapshot of attitudes at a time when generative AI is still relatively new. It is crucial to track how the attitudes of both students and teachers evolve over time as the technology becomes

more powerful and more deeply integrated into all aspects of society. This will reveal whether the current gap widens, narrows, or transforms.

Future studies should expand the scope of inquiry to include other important stakeholders, most notably parents and school administrators. Understanding their perspectives on AI ethics is critical, as they play a significant role in shaping school culture and policy. A multi-stakeholder analysis would provide an even more comprehensive picture of the educational ecosystem's response to AI.

Finally, a vital avenue for future research lies in the development and validation of new forms of assessment. The threat AI poses to traditional essays necessitates innovation. Research should focus on creating and testing alternative assessment methods—such as authentic, project-based work, oral examinations, and portfolio defenses—that are designed to evaluate the skills of critical thinking, creativity, and collaboration in an AI-abundant world.

CONCLUSION

The most significant finding of this research is the empirically verified, profound gap between the ethical frameworks of teachers and students concerning AI in education. This study reveals that the divergence is not merely a difference of opinion but a fundamental conflict in perspective: teachers operate from a position of principled guardianship over academic integrity and long-term skill development, while students operate from a pragmatic position of seeking efficiency in a high-pressure environment. This core disparity in how each group perceives the purpose of AI—as either a threat to process or a tool for production—is the central, defining outcome of this investigation.

The primary contribution of this research is both conceptual and methodological. Conceptually, it provides empirical evidence for the "digital disconnect" in the age of generative AI and challenges the field to move beyond a binary, plagiarism-focused view of student AI use toward a more nuanced understanding of AI-human collaboration. Methodologically, it establishes a robust, mixed-methods framework for comparatively analyzing stakeholder attitudes, offering a replicable model for generating the kind of data needed to inform evidence-based policy in a field often dominated by speculation.

The study's conclusions are bound by its specific demographic and cross-sectional design, which naturally delineates the pathway for future inquiry. The clear next steps for research are to conduct longitudinal studies to track how these divergent attitudes evolve over time and to replicate the study with broader, more diverse populations to establish generalizability. Furthermore, future work must expand to include the perspectives of other key stakeholders, such as parents and administrators, and focus on the critical task of developing and validating alternative assessment methods that are resilient to the challenges posed by AI.

AUTHOR CONTRIBUTIONS

Look this example below:

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.
Author 2: Conceptualization; Data curation; In-vestigation.
Author 3: Data curation; Investigation.

CONFLICTS OF INTEREST

The authors declare no conflict of interest

REFERENCES

Barahona, M., David, V., Guzmán, M. C. Ó., Pavez, N., Salas, C., & Stöckel, P. (2024). EMBRACING DIALOGIC FEEDBACK IN CHILEAN EFL TEACHER EDUCATION: A Self-Study of Teacher Educator Practices. In *Transformative L2 Teacher Education Innovations: Insights from Vygotskian Sociocultural Theory* (pp. 203–227). Taylor and Francis; Scopus. https://doi.org/10.4324/9781003505143-10

Beddoes, Z. (2024). Learning to Guide Elementary Education Majors in Teaching Physical Education: A Journey of Teacher and Student Socialization. *Studying Teacher Education*. Scopus. https://doi.org/10.1080/17425964.2024.2360926

Buchanan, J. (2024). EXCESSIVE (EN)TITLE(MENT) FIGHT? EXPLORING THE DYNAMICS THAT PERPETUATE ENTITLEMENT IN EDUCATION AND BEYOND. In *Adv. Res. Teach.* (Vol. 47, pp. 249–267). Emerald Publishing; Scopus. https://doi.org/10.1108/S1479-368720240000047016

Butler, B. M., Caraballo, R., Christian, D., Devlin, K., Fair, A., & Stallings, S. (2024). Empowering emerging teacher leaders: Insights from a self-study community of practice. *Teachers and Teaching: Theory and Practice*. Scopus. https://doi.org/10.1080/13540602.2024.2401083

Butler, B. M., & Yendol-Hoppey, D. (2024). Facing Fears and Finding Fit: A Self-Study of Teacher Education Leadership. *Studying Teacher Education*, *20*(2), 236–258. Scopus. https://doi.org/10.1080/17425964.2024.2303675

Coleman, A. (2024). Designing Curriculum for Critical Consciousness A White Teacher's Process. *Critical Education*, *15*(4), 1–18. Scopus. https://doi.org/10.14288/ce.v15i4.186807

Conway, C., Vecchio, M., & Weaver, R. (2024). Music teacher educator growth through Self-Study of Teacher Education Practices (S-STEP) research. *International Journal of Music Education*. Scopus. https://doi.org/10.1177/02557614241238745

Emerson, A. C. (2024). Facilitating antiracist sessions for white parents: Self-study on the challenges to and perpetuations of whiteness. *Whiteness and Education*, *9*(1), 142–160. Scopus. https://doi.org/10.1080/23793406.2023.2185535

Eutsler, L., & Long, C. S. (2024). Don't put the Cart Before the Horse: Self-Study on Using VR in Education. *TechTrends*, *68*(1), 136–148. Scopus. https://doi.org/10.1007/s11528-023-00897-z

Fujiwara, K., Sano, F., & Mitobe, K. (2024). Development of a VR Training System for Saito's Music Conducting Method. *IEEJ Transactions on Electrical and Electronic Engineering*, *19*(2), 187–192. Scopus. https://doi.org/10.1002/tee.23947

Gauna, L. M., Cooper, J. M., & Beaudry, C. (2024). Discussing Controversial Topics While Keeping the Class Civil: Critical Pedagogy and Dialogue for Those Who Dare. *Studying Teacher Education*. Scopus. https://doi.org/10.1080/17425964.2024.2397067

Graves-Cristobal, S. (2024). Examining Postcolonialism in Secondary English Curriculum in Hawai'i: A-One Teacher Self-Study. In *Empowering Teachers for Equitable and Sustainable Education: Action Research, Teacher Agency, and Online Community* (pp. 130–149). Taylor and Francis; Scopus. https://doi.org/10.4324/9781032699295-8

Husni, M., Bujuri, D. A., Khodijah, N., Darmayanti, K. K. H., Baiti, M., Anggraini, E., & Malacapay, M. C. (2024). Elementary school students' learning difficulties on distance learning during COVID-19: The psychological approach. *International Journal of Evaluation and Research in Education*, *13*(3), 1797–1806. Scopus. https://doi.org/10.11591/ijere.v13i3.27476

Idris, K. M., Posti-Ahokas, H., & Lehtomäki, E. (2024). Developing a teaching-research nexus in teacher education: Recounts of an educator's self-study. *Teaching in Higher Education*. Scopus. https://doi.org/10.1080/13562517.2023.2298828

Ipek, H. (2024). Effects of Former Experience, Self-study & Listening Comprehension Training on Foreign Language Listening Anxiety: The Case of EFL Teacher Candidates. *International Journal of Listening*, *38*(2), 79–88. Scopus. https://doi.org/10.1080/10904018.2020.1764359

Jiang, Y., & Li, J. (2024). Development and Application of Intraoral Science Microcourses Based on Cloud Platform. In Zhang Y. & Shah N. (Eds.), *Lect. Notes Inst. Comput. Sci. Soc. Informatics Telecommun. Eng.: Vol. 583 LNICST* (pp. 347–359). Springer Science and Business Media Deutschland GmbH; Scopus. https://doi.org/10.1007/978-3-031-63139-9_37

Jose, J., & Jose, B. J. (2024). Educators' Academic Insights on Artificial Intelligence: Challenges and Opportunities. *Electronic Journal of E-Learning*, *22*(2), 59–77. Scopus. https://doi.org/10.34190/ejel.21.5.3272

Kamhi-Stein, L. D., Hardacre, B., & Kelley, J. (2024). Navigating the English language classroom: Effective practices for novice teachers. In *Navig. The Engl. Lang. Classr.: Eff. Pract. For Novice Teach.* (p. 344). University of Michigan Press; Scopus. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85196239766&partnerID=40&md5=4cc340766a4252b7b6ef935881e1ff8e

Ly, D. T. (2024). EFL Students' Perceptions on the Use of Liveworksheets in Self-study. In Shelley M. & Ozturk O.T. (Eds.), *Proc. Int. Conf. Res. Educ. Sci.* (Vol. 10, Issue 1, pp. 838–849). The International Society for Technology Education and Science; Scopus. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85217640731&partnerID=40&md5=931872bc1121bf8249b2b45d1e9c835c

Pamfilos, P. (2024a). Lectures on Euclidean Geometry—Volume 1: Euclidean Geometry of the Plane. In *Lectures on Euclidean Geometry—Volume 1: Euclidean Geometry of the Pl.* (Vol. 1, p. 595). CRC Press; Scopus. https://doi.org/10.1007/978-3-031-48906-8

Pamfilos, P. (2024b). Lectures on Euclidean Geometry—Volume 2: Circle measurement, Transformations, Space Geometry, Conics. In *Lectures on Euclidean Geometry—Volume 2: Circ. Measurement, Transformations, Space Geometry, Conics* (p. 441). Springer Nature; Scopus. https://doi.org/10.1007/978-3-031-48910-5

Scanlon, D., Beckey, A., Wintle, J., & Hordvik, M. (2024). Exploration and creation of meaningful teacher educator practises in physical education teacher education. *Sport, Education and Society*. Scopus. https://doi.org/10.1080/13573322.2024.2417782

Sugimoto, A. T., Thieman, G. Y., & Ferner, B. R. (2024). EXPLORING STUDENT TEACHING STAKEHOLDERS' CONCEPTIONS OF CULTURALLY AND LINGUISTICALLY RESPONSIVE TEACHING TO SUPPORT PROGRAM IMPROVEMENT. In *Collaborating for Transformative Change in Education: Lessons from within a Teacher-Educator Coalition* (pp. 200–215). Taylor and Francis; Scopus. https://doi.org/10.4324/9781003487067-17

Tshuma, T., & Nyamupangedengu, E. (2024). Drama in the Science Classroom: Reimagining the Teaching of Natural and Life Sciences. *Educational Research for Social Change*, *13*(1), 18–33. Scopus. https://doi.org/10.17159/2221-4070/2023/v13i1a2

van der Stap, N., van den Bogaart, T., Rahimi, E., & Versendaal, J. (2024). Fostering online interaction in blended learning through social presence and convergence: A systematic literature review. *Journal of Computer Assisted Learning*, *40*(4), 1712–1726. Scopus. https://doi.org/10.1111/jcal.12981

Vanassche, E. (2024). FOREWORD TO A SELF-STUDY OF THE SHIFTS IN TEACHER EDUCATOR KNOWLEDGE RESULTING FROM THE MOVE FROM IN-PERSON TO ONLINE INSTRUCTION. *Advances in Research on Teaching*, *48*, xi–xiv. Scopus.

Wach, A., Tanghe, S., & Zhang, D. (2024). Multinational telecollaboration in language teacher education: Teacher educators' perspectives. *Language Learning and Technology*, *28*(1), 1–13. Scopus.

Waibel, A.-M., & Bischoff, M. (2024). Digital competencies in medical studies: Results of an interdisciplinary course. *HNO*, *72*(3), 161–165. Scopus. https://doi.org/10.1007/s00106-023-01411-w

Yang, S., & Banks, A. (2024). Enhancing AI Literacy: A Collaborative Self-Study of Elementary Teacher Educators. *Studying Teacher Education*. Scopus. https://doi.org/10.1080/17425964.2024.2434213

Zhang, Y. (2024). English as a Foreign Language Learners' Guide to Argument–Counterargument Skills: ProCon.org. *RELC Journal*, *55*(3), 860–864. Scopus. https://doi.org/10.1177/00336882231157463