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AI as a Pedagogical Partner: A Value-Based Framework for Digital Ethics in Civic Education

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ABSTRACT
The digital revolution has introduced important ethical challenges for younger generations, including the spread of hoaxes, plagiarism, and cyberbullying. This research examines the integration of generative Artificial Intelligence (AI) as a pedagogical partner in civic education to strengthen digital ethics grounded in Pancasila as Indonesia's local wisdom. Employing a mixed-methods approach, data were collected through questionnaires administered to 332 senior and vocational high school students, Focus Group Discussions (FGDs) with 10 civic education teachers in Central Java Province, and in-depth interviews with experts in Civic and Character Education. The study findings reveal that, despite students' active use of AI, their critical thinking skills and digital ethics require further development. Teachers expressed an urgent need for adaptive, context-specific learning resources. Pancasila values provide a relevant and robust philosophical foundation for developing a digital ethics framework. Based on these findings, the study proposes an innovative framework that positions AI chatbots not merely as tools but as simulative and reflective learning partners. The framework seeks to transform learning from simple knowledge transmission to value-oriented education, enabling teachers to act as facilitators who guide students in actualising Pancasila values within the digital space.

KEYWORDS
Artificial intelligence; digital ethics; civic education; Pancasila Values, pedagogical partners.

INTRODUCTION

Global education stands at a pivotal turning point, driven by the rapid development of digital technologies, especially Generative Artificial Intelligence (AI) (Alier et al., 2024; Giannakos et al., 2025; Lim et al., 2023). Platforms such as ChatGPT, Gemini, and others have expanded the boundaries of the conventional classroom, providing unprecedented access to information (Cordero et al., 2024; Kurtz et al., 2024). However, alongside their considerable potential to personalise and democratise learning, these disruptive technologies introduce complex challenges that threaten the foundations of character education (Alier et al., 2024). The growing prevalence of academic plagiarism, the spread of misinformation, and increasing cases of cyberbullying signal a new epidemic among younger learners, reflecting not only a crisis in digital literacy but also, more profoundly, a crisis of values and ethics (Qian & Xie, 2025; Tantakov et al., 2025). In the Indonesian context, these challenges are particularly urgent, as the nation is grounded in the philosophical principles of Pancasila, intended to guide ethical conduct across all aspects of life, including the digital sphere (Utaminingsih et al., 2023; Yusuf et al., 2024).

Civic Education, referred to as Pancasila Education within the Independent Curriculum (Sari et al., 2023). Pancasila is the philosophical foundation of the Indonesian state, consisting of five interrelated principles: (1) Belief in One Almighty God, (2) Just and Civilized Humanity, (3) The Unity of Indonesia, (4) Democracy Guided by the Inner Wisdom in Deliberation/Representation, and (5) Social Justice for All Indonesians, holds a central historical and philosophical mandate as the primary vehicle for instilling virtuous values and shaping responsible citizens (Dewantara, 2023; Fortuna & Khadir, 2022). This subject is designed not merely to transmit procedural knowledge about citizenship but, more importantly, to cultivate the nation's core values, ensuring they are reflected in students' daily conduct (Hajunilato et al., 2024; Silalahi & Yuwono, 2018). However, amid rapid digitalisation, a substantial gap persists between the ideal aims of Civic Education and its practical implementation in schools (Japar et al., 2023; Jayanti et al., 2025; Zakiah et al., 2023).

The teacher faces a paradoxical dilemma: students who are technically proficient with AI but lack ethical guidance (Albakri et al., 2025). Meanwhile, teachers with pedagogical authority feel technologically left behind, leading them to adopt a defensive attitude. (Althubyani, 2024). Consequently, their responses often become defensive and less likely to provide students with a sense of direction towards productive and meaningful learning (Kalantzis & Cope, 2025; Tabieh et al., 2021). This dynamic creates a *generational digital divide*, where students, as *digital natives*, adapt to technological change far more quickly than their teachers (Masoumeh et al., 2013; Modeme & Adeogun, 2021). The generational digital divide refers to the ongoing imbalance between teachers (digital immigrants) and students (digital natives) in literacy, access, usage patterns, and ethical frameworks for utilising AI technology, where this AI era gap emphasises critical and ethical competence rather than just physical access. (Dyantyi & Mkabile-Masebe, 2025; Prensky, 2010; Scheerder et al., 2017; Selwyn, 2019; Stoilova et al., 2021; Teräs et al., 2020; van Deursen & van Dijk, 2019).

This reality is reinforced by preliminary findings from a survey of 332 senior and vocational high school students in Central Java, which showed that more than 80% of respondents had used generative AI, such as ChatGPT, to complete school assignments (Student Survey, 29 September 2025). However, their use remains superficial, mainly dominated by a "copy–paste" approach that lacks critical engagement or reflective analysis. Meanwhile, a Focus Group Discussion (FGD) with ten Civic Education teachers revealed an urgent need for adaptive learning resources that align with flexible study hours, present interactive content, and offer personalised learning experiences (FGD Civic Education Teachers, 24 August 2025).

Teachers also expressed serious concerns about the erosion of values such as honesty, responsibility, and empathy in students' digital interactions. In-depth interviews with experts in Civic and Character Education further affirmed that the integration of AI in learning is not optional but inevitable. They argued that AI is inherently neutral and that its impact depends mainly on how it is utilised. Both experts emphasised that Pancasila values—divinity, just and civilised humanity, unity, democracy, and social justice—remain highly relevant and should serve as the normative foundation of digital ethics (S, Civic Education Expert, personal communication, 23 September 2025; Y, Character Education Expert, personal communication, 23 September 2025). They contended that AI should not be regarded as a threat but as a 'partner' capable of advancing higher-order learning goals, provided it is supported by teacher capacity building and responsive curriculum development.

Although numerous studies have examined the integration of technology in education (Kakabayeva et al., 2025; Kamalov et al., 2023; Kilinc et al., 2023; Tan et al., 2025) and the increasing importance of digital ethics (Guenduez et al., 2025; Reyman & Sparby, 2020), research that explicitly connects these two domains within a Civic Education framework grounded in local values remains limited. Much of the existing literature treats AI as a 'tool' for enhancing efficiency rather than as a 'partner' capable of contributing to the formation of values and ethical reasoning (George & Wooden, 2023; Khairullah et al., 2025; Salih et al., 2025). This research is based on the Human-AI Collaboration (HAIC) theory and Socio-Technical Systems (STS), which configure AI as a collaborative partner in the cognitive process and emphasise the sharing of goals and responsibilities within the learning system. (Järvelä et al., 2023; Seeber et al., 2020; Shneiderman, 2020). The concept of 'pedagogical partner' is based on a triadic collaboration, thus going beyond viewing AI as merely an efficiency tool.

Addressing this gap, the present study poses a central question: How can a pedagogical framework that positions AI as a partner be developed to strengthen digital ethics in Civic Education based on the values of Pancasila? To answer the main question, this research is designed to investigate several sub-questions as follows: 1. What are the patterns of usage and students' ethical awareness of generative artificial intelligence in the context of Civic Education? 2. What do Citizenship Education teachers face in terms of needs and challenges in integrating AI for value-based learning? 3. How relevant are the values of Pancasila as a philosophical

foundation for framing digital ethics in the AI era? 4. How can the roles of AI and teachers be repositioned synergistically within a value-oriented pedagogical framework?

This research represents the initial stage (Define-Design-Develop) of the Four-D model (Thiagarajan et al., 1974), focusing on data-driven conceptual development. Product validation through dissemination will occur in the second phase of the study in 2026. The proposed Pancasila Bot framework in the research aims to bridge this intergenerational gap by positioning AI as a simulative partner that requires active value facilitation from teachers, thereby creating a complementary triadic collaboration. Through this approach, Civic Education can be reimagined from a subject often considered as merely normative into a learning space that is contextual, simulation-based, and deeply relevant to students in the digital era, while maintaining continuity with the nation's cultural heritage and noble values.

METHODS

Research Design

This study employs a mixed-methods sequential explanatory design (Creswell & Clark, 2017). This approach was selected because it enables researchers to begin with quantitative data collection and analysis, followed by qualitative data to explore further and explain the quantitative findings. The sequence is particularly appropriate for this study: the quantitative survey data from students provide a broad overview of patterns in AI use and digital ethical awareness. In contrast, qualitative data from Civic Education teacher focus groups and expert interviews help uncover the underlying reasons, contexts, and meanings behind these patterns, ultimately informing the development of a framework. The mixed-methods approach is therefore well suited to capturing the complexity of socio-educational phenomena, encompassing both behavioural dimensions (quantitative) and the meanings attached to them (qualitative) (Creswell & Creswell, 2018).

Participants and Research Locations

The study was conducted in Central Java Province, Indonesia, involving participants from five regions: Surakarta City, Sukoharjo Regency, Karanganyar Regency, Boyolali Regency, and Klaten Regency. These locations were purposively selected to represent both urban and semi-urban educational contexts. The participants comprised three groups. First, 332 senior and vocational high school students (57% from senior high schools and 43% from vocational schools) completed the questionnaire. The sampling technique employed was cluster random sampling, whereby classes were randomly selected from schools across all grade levels (Years X, XI, and XII). The students' ages ranged from 16 to 18 years, with a gender distribution of 48% male and 52% female. Second, ten Civic Education teachers participated in the Focus Group Discussion (FGD). They were selected through purposive sampling based on two criteria: a minimum of 5 years of teaching experience and prior efforts to integrate technology into their teaching. Third, two experts took part in in-depth interviews: a specialist in Character Education from the State University of Jakarta and a Professor of Civic Education from the Indonesia University of

Education, Bandung. The experts were selected based on their academic reputation and the relevance of their scholarly expertise to the study.

Data Collection Instruments and Procedures

Data collection was conducted sequentially from June to August 2025. The first phase was quantitative, employing a structured online questionnaire distributed through Google Forms. The questionnaire comprised three sections: (a) demographic information (5 items); (b) questions concerning the frequency, purposes, and patterns of generative AI use (3 items); and (c) a digital ethics awareness scale adapted Ng (2012), digital literacy framework, measuring aspects of privacy, academic integrity, and social responsibility in the digital space (12 items). The instrument utilised a five-point Likert scale, ranging from ‘always’ to ‘never’ and from ‘strongly disagree’ to ‘strongly agree’. The scale used a 5-point Likert scale, ranging from "always" (5 points) to "never" (1 point) and from "strongly disagree" (1 point) to "strongly agree" (4 points) with 4 points in between. The questionnaire's content validity was verified through expert judgement (Aiken's V > 0.80). Exploratory Factor Analysis (EFA) confirmed a three-factor structure with a KMO of 0.87, Bartlett’s test was significant ($p < .001$), and all factor loadings were > 0.50, indicating adequate construct validity. The reliability test yielded a Cronbach's Alpha coefficient of 0.86, indicating good internal consistency (Gliem & Gliem, 2003).

The second phase was qualitative and conducted following the descriptive analysis of the quantitative findings. The Focus Group Discussion (FGD) took place in a single 120-minute session involving 10 Civic Education teachers. The FGD protocol comprised open-ended questions exploring teachers’ experiences with digital ethical challenges in student interactions, their perceptions of AI use in learning, and their need for adaptive, contextually relevant learning models. The session was recorded and transcribed verbatim. In addition, semi-structured, in-depth interviews were conducted face-to-face with two experts. The interview guide addressed the philosophical and pedagogical relevance of AI to civic education objectives, strategies for integrating AI into the curriculum, and opportunities for developing value-oriented chatbots. Each interview lasted approximately 60 minutes and was transcribed for analysis.

Data Analysis

The data were analysed using an explanatory sequential design. Quantitative data were analyzed using descriptive statistics (frequencies, percentages, means, and standard deviations) in IBM SPSS Statistics 25. This analysis provided an overview of general trends in students’ AI-related behaviours and their awareness of digital ethics. Qualitative data, derived from FGD transcripts and interviews, were examined using Braun and Clarke’s (2008; 2020) thematic analysis model. The process involved: (a) familiarisation with the data, (b) generating initial codes, (c) searching for themes, (d) reviewing themes, (e) defining and naming themes, and (f) producing the report. The validity of qualitative findings is enhanced through method triangulation (questionnaires, FGDs, interviews) and member checking, where FGD participants and experts confirm the theme summaries. The analysis was conducted manually to preserve

contextual depth. These qualitative findings were subsequently used to elaborate on and explain the patterns identified in the quantitative phase, ensuring a comprehensive and integrated interpretation.

Ethical Considerations

This study adhered to established ethical research principles. Informed consent was obtained from all participants (students, teachers, and experts) following a full explanation of the research objectives and procedures. For participants under 18, consent was obtained from parents or guardians, and approval was obtained from the participating schools. Participant confidentiality was strictly maintained through the use of anonymised codes, and no identifying information was disclosed at any stage of the study. All data collected was stored securely and used solely for academic and research purposes.

RESULTS AND DISCUSSION

The Reality of AI Use and Digital Ethical Challenges Among Students

Quantitative data from 332 senior and vocational high school students in Central Java reveal a concerning pattern. A substantial 87% of students reported using generative AI tools such as ChatGPT or Gemini for academic purposes. However, among these users, 62% indicated that their primary motivation was to 'complete assignments more quickly', while only 18% used AI to 'deepen their understanding of difficult concepts'. When asked about their attitudes towards AI-generated output, only 29% reported that they 'always' or 'frequently' cross-check such information against alternative sources. Results from the digital ethics awareness scale further showed that the 'academic honesty' dimension recorded the lowest average score (Mean = 2.45 on a 1–5 scale), reflecting students' uncertainty in distinguishing between legitimate AI-supported learning and plagiarism.

Qualitative data from the FGD with teachers reinforced and contextualised these quantitative findings. Teacher-08 observed (FGD, 24 August 2025), 'They (students) are already comfortable. When I assigned an analytical task, ChatGPT provided an answer, but it was very normative. They forget that I assess the thought process. Similar concerns were expressed by a Character Education expert (Y, personal communication, 23 September 2025), who argued that uncritical reliance on AI may become the 'first disaster' in education, as students tend to treat AI-generated information as inherently accurate without verification. This pattern highlights a widening gap between technological convenience and the cultivation of critical digital ethics.

These findings reinforce long-standing concerns in the literature regarding the superficial use of AI in education (Kasneci et al., 2023; Zawacki-Richter et al., 2019). The dominance of AI use for time efficiency and rapid task completion reflects an instrumental–transactional paradigm in which AI is perceived as a 'problem-solving machine' rather than a 'learning partner' capable of fostering deeper cognitive engagement (Woo & Cho, 2025). Such a paradigm risks undermining the fundamental aims of education, namely the development of reasoning skills and character formation (Al-Huwail et al., 2025; Vieriu & Petrea, 2025). The low

tendency to verify information and the weak academic honesty scores indicate what has been termed digital ethics blindness (Costa & Freitas, 2025; Rogerson, 2023), whereby students demonstrate technological proficiency yet lack value-based frameworks to navigate emerging ethical dilemmas. This trend aligns with Selwyn's (2019) warning that technological integration devoid of a value dimension may produce a generation that is ‘digitally skilled but morally poor’.

Table 1.

Summary of Descriptive Statistics of Quantitative Findings

Variable	N	Min.	Max.	Mean	Std. Deviation	Explanation
Percentage of AI Users for Academic Tasks	332	-	-	87%	-	Proportion of students using (ChatGPT/Gemini)
Complete Tasks Faster	332	-	-	62%	-	The most dominant ma motivation
Deepening the Understanding of Difficult Concepts	332	-	-	18%	-	Motivation with the smalle proportion
Frequency of Cross-Checking Information from AI	332	1	5	2.45	-	Only 29% stated that th 'always' or 'often' cross-check.
Academic Honesty Dimension (Scale 1-5)	332	1	5	2.45	0.78	Lowest score, indicating t ambiguity of the bounda between plagiarism a legitimate AI assistance

In the context of Civic Education, these findings carry significant implications. Civic Education is intended not only to cultivate knowledgeable citizens but also to nurture individuals of integrity (Althof & Berkowitz, 2006; Choo et al., 2025). The uncritical and unreflective use of AI contradicts the ethical foundation of Pancasila, particularly the Fifth Precept on Social Justice, as such practices may constitute academic injustice (Chavez et al., 2024). Therefore, the pedagogical response must move beyond merely banning AI towards promoting its ethical and responsible use. As noted by Y (Character Education expert, personal communication, 23 September 2025), teachers need to develop a ‘strong mindset so that they do not necessarily believe’ AI outputs. Strategies such as the Value Clarification Technique (VCT) may be integrated into classroom practice to encourage students to reflect on which values are compromised when AI is used dishonestly and which are upheld when it serves as a stimulus for

inquiry, dialogue, and deeper reasoning (S, Civic Education expert, personal communication, 23 September 2025).

Teachers' Need for Adaptive and Contextual Value-Based Learning Resources

Findings from the FGD reveal a substantial gap between pedagogical expectations and the realities faced by Civic Education teachers in the classroom. All participating teachers expressed an urgent need for more dynamic, interactive, and contextually relevant learning resources to engage students in the digital era. Eight out of ten teachers indicated that conventional instruction, particularly textbook-based materials, is no longer sufficient to address students' increasingly complex questions or contemporary ethical challenges, including misinformation, hoaxes, and hate speech. As Teacher-01 stated (FGD, 24 August 2025), 'Chatbots can be supportive, used to explore answers to questions or discussion topics around Pancasila values and digital ethical practices in real life'.

Personalisation and flexibility also emerged as prominent themes. Teachers observed that students possess varying levels of digital ethical awareness and technological experience; therefore, learning tools must accommodate these differences. Teacher-02 (FGD, 24 August 2025) emphasised that chatbots can enable "personalised, needs-based, and flexible learning, anytime and anywhere," thereby addressing limitations such as uneven access to textbooks, differences in learning pace, and the absence of immediate guidance when ethical dilemmas arise.

These findings highlight the limited effectiveness of conventional teaching materials in meeting the demands of twenty-first-century education, which requires contextual, adaptive, and future-oriented approaches (Zhao, 2022). Teachers' concerns regarding the inadequacy of standard textbooks suggest that value education can no longer be delivered through rigid, one-directional methods (Hussin & Tamuri, 2019). Pancasila values, intended to be internalised and practised by students, must instead be presented through real-world contexts relevant to their digital lives (Khriswina et al., 2025; Komalasari et al., 2024). The demand for personalised and flexible resources reflects a pedagogical shift towards differentiated instruction in the digital era (Peng et al., 2019), recognising that a one-size-fits-all approach is neither feasible nor effective (Hussin & Tamuri, 2019). Within this context, the potential of AI as a pedagogical partner becomes strategically significant. A well-designed chatbot can function as an always-available personal tutor (Walter, 2024), offering explanations, examples, and scaffolded questions tailored to students' levels of understanding and interests (Annamalai et al., 2023; Baker & Smith, 2019), aligning with the principles of student-centred learning (Bremner, 2021).

However, teachers' aspirations to explore Pancasila values through chatbots present distinct challenges. As emphasised by a Civic Education expert (S, personal communication, 23 September 2025), generic AI platforms such as ChatGPT often generate responses that are overly "normative" (Schramowski et al., 2022) and insufficiently contextualised within the Indonesian socio-cultural setting. Consequently, chatbot development for Civic Education cannot depend solely on general AI platforms. It requires deliberately designed curricular

content that explicitly and pedagogically embeds Pancasila values in context. Such chatbots should stimulate higher-order thinking and value reflection rather than merely provide factual information. For example, instead of asking, 'What is the content of the Second Precept?', a pedagogically oriented chatbot might present a cyberbullying case study and guide students in analysing it through the lens of Just and Civilised Humanity, prompting them to consider concrete actions they would take. In this way, chatbots can meet teachers' needs for learning resources that are both technologically adaptive and deeply value-oriented, bridging the gap between the philosophical ideals of Pancasila and students' daily digital ethical practices (Y, personal communication, 23 September 2025).

The Relevance of Pancasila Values as a Philosophical Foundation of Digital Ethics

The findings of this study reveal a strong consensus among teachers and experts regarding the enduring relevance of Pancasila as a philosophical foundation for digital ethics. The thematic analysis of FGD and interview data shows that the digital ethical values articulated by participants align closely with the five precepts of Pancasila. As Teacher-01 observed (FGD, 24 August 2025), his teaching consistently emphasises values such as 'responsibility, honesty, justice, empathy, and tolerance', all of which are rooted in Pancasila. This analysis yields a coherent ethical framework: the First Precept, Belief in One Almighty God, underpins principles of honesty, integrity, and moral responsibility; the Second Precept, Just and Civilised Humanity, promotes empathy, opposition to cyberbullying, and respect for human dignity; the Third Precept, Indonesian Unity, encourages the cultivation of positive digital narratives and the avoidance of divisive hoaxes; the Fourth Precept, Democracy Guided by Inner Wisdom in Deliberation/Representation, informs ethical online communication, respectful dialogue, and constructive debate; and the Fifth Precept, Social Justice for All Indonesians, fosters awareness of equitable access to information and responsible information sharing.

The Civic Education expert (S, personal communication, 23 September 2025) emphasised that 'all Pancasila values can serve as a basis and reference when students and educators use chatbots, depending on the context'. This statement underscores the view of Pancasila not as a static symbol but as a set of living values capable of guiding digital behaviour. Expert Y (personal communication, 23 September 2025) added a transformative perspective, noting that 'digital ethics are inseparable from the foundations of social ethics', implying that the nation's long-standing moral principles, cultivated through real-world social interaction, must likewise underpin ethical conduct in the digital sphere.

These findings contribute meaningfully to the broader discourse on digital ethics by offering a culturally grounded and locally relevant perspective (Guenduez et al., 2025; Kamal et al., 2025). In contrast to universal and generic ethical frameworks, which students often perceive as abstract or detached, the Pancasila-based approach is contextual and firmly embedded in Indonesian civic identity (Ngesthi et al., 2022; Yorman & Sadam, 2025). The value mapping developed in this study demonstrates that Pancasila provides a comprehensive and highly relevant philosophical foundation for addressing digital challenges. Issues such as data

privacy correspond directly to principles of justice and respect for human dignity. At the same time, the spread of harmful practices stands in apparent contradiction to the precepts of unity and social justice.

Table 2.

Implementation of Pancasila Values in the Digital Space

No.	Pancasila's Precepts	Digital Space Implementations
1	Divinity	Respect for religious freedom, anti-blasphemy
2	Humanity	Anti-cyberbullying, empathy, justice
3	Unity	Maintaining harmony, anti-hoaxes, and tolerance
4	Deliberation	Active participation, digital democracy
5	Social Justice	Equal access, data protection, anti-discrimination

This relevance is particularly significant within Civic Education, where the ultimate aim is to cultivate citizens who are both digitally literate and grounded in Pancasila values (S, Civic Education expert, personal communication, 23 September 2025). Embedding these values into digital ethics instruction, including through chatbots, shifts the pedagogical orientation from mere 'prohibition' (do not bully, do not spread hoaxes) to 'identity formation' (as an Indonesian guided by Pancasila, I choose not to bully because it contradicts the values of humanity and justice). This paradigm shift aligns with constructivist approaches to values education, in which values are not imposed but developed through critical reflection on their relevance to students' lived and digital experiences (Almazroui, 2025; Konstruktivisme et al., 2023; Lewin, 2022; Shephard & Egan, 2018).

Therefore, the development of chatbots for Civic Education should extend beyond functioning merely as channels of information. They must be deliberately designed as pedagogical media that facilitate the internalisation of (Bialkova, 2024; Bykov & Kurushkin, 2023; Pérez et al., 2020; Stöhr et al., 2024). For example, when students inquire about a cyberbullying case, the chatbot should not only provide a definition but also guide them through reflective, value-oriented questions, such as: 'Which Pancasila precepts does this action violate? What impact might it have on unity within your school's digital environment?' In this way, chatbots can serve as catalysts that connect the abstract values of Pancasila with concrete digital ethical dilemmas, addressing the contextualisation challenges teachers face.

Reframing the Role of AI as a Simulative Partner and Teachers as Value Facilitators

The research findings underscore the need to redefine the roles of AI and teachers within the evolving learning ecosystem. Teachers participating in the FGD acknowledged the pedagogical

potential of AI while also recognising its limitations. Teacher-05 (FGD, 24 August 2025) described an ideal practice in which students use ChatGPT to generate role-playing scenarios related to deviant behaviour, but 'do not directly use the results of ChatGPT; instead, they process them independently'. This perspective reflects a pedagogical preference to position AI not as a source of ready-made answers but as a simulative partner—an initial generator of ideas that stimulates inquiry, creativity, and critical engagement.

Character Education experts further clarified the significance of this division of roles. Y (personal communication, 23 September 2025) emphasised that the use of AI in learning should operate at a simulative level, as the internalisation of Pancasila values constitutes a 'life skill' that can only be developed through processes that are 'trained, habituated, and learned'. According to him, 'the operator is the teacher', highlighting the teacher's central role as a facilitator who directs and scaffolds value formation. Meanwhile, S (Civic Education expert, personal communication, 23 September 2025) drew a clear boundary by asserting that affective dimensions and character development are domains that 'cannot be fully conceived by man-made instruments' and that 'the human element, the educator or teacher, is irreplaceable'. From this perspective, teachers function as key agents who guide students in conducting a 'truth analysis' of AI-generated information, ensuring that technological input is critically filtered through ethical reasoning and Pancasila-based values.

This guidance culminates in a collaborative framework that addresses concerns regarding the potential displacement of teachers by technology (Zhang & Aslan, 2021). The framework positions AI as a Simulative Partner and teachers as Value Facilitators. As a Simulative Partner, AI functions most effectively when used to create immersive, contextually relevant learning environments. For instance, AI can generate complex case studies of social media conflicts, simulate negotiation scenarios involving value-based disagreements, or role-play situations that require students to make ethical decisions grounded in Pancasila principles. Such applications reinforce Chen's (Chen, 2025) findings, which emphasise the importance of learning that moves beyond memorisation towards meaningful actualisation.

Conversely, the teacher's role as a Value Facilitator is pivotal to the effectiveness of this framework. After students engage with AI-generated simulations, teachers guide processes of critical reflection and meaning-making (Goodyear & Dudley, 2015; Moustaghfir et al., 2025). They pose probing questions such as, 'Why did you make that decision in the simulation? Which Pancasila values did you apply? What would be the consequences for digital society if everyone acted in the same way?' Through this facilitation, technical and simulative experiences are transformed into deep, contextualised, and meaningful value learning—a pedagogical dimension that cannot be replicated by machines (Zhong et al., 2025). This finding aligns with the 21st-century social curriculum policy that integrates critical thinking, creativity, and problem-solving skills (Moloi et al., 2023).

This triangular collaboration between teacher, AI, and student establishes a synergistic learning ecosystem. AI contributes scalability, personalisation, and simulated contextual

learning experiences (Ouyang et al., 2023). Teachers provide depth, meaning, and holistic assessment within the process of students' character development (Kim, 2023). Meanwhile, students become active agents who construct their understanding of digital ethics through iterative interactions with both AI and their teachers (Järvelä et al., 2023). This model not only reduces the risk of 'digital jet lag', in which students progress far ahead of their teachers, but also repositions teachers as essential guides of wisdom amid the abundance of information and simulations generated by AI (Airaj, 2024).

Table 3.

Synergy of the Role of Teachers–AI–Students

Component	Main Role	Synergistic Impact
Teacher	Facilitators, mentors, ethical decision-makers	Meaningful learning, value reinforcement
Artificial Intelligence	Data analysis, personalization, and feedback	Efficiency, adaptation, and needs detection
Student	Active subjects, collaborators, independent learners	Independence, creativity, engagement

Conceptual Framework of "Pancasila Bot" as a Pedagogical Partner

Based on a synthesis of the quantitative and qualitative findings, this study proposes an innovative framework entitled *'Pancasila Bot as a Pedagogical Partner'*. The framework is designed to address digital ethical challenges by integrating value-based AI into Civic Education learning processes. Conceptually, it consists of four interconnected core components.

First, the Pancasila values serve as the philosophical foundation of the entire system. The five precepts are not symbolic ornaments but function as an ethical lens that curates all chatbot content and interactions. As emphasised by S (personal communication, 23 September 2025), 'all Pancasila values can be used as a basis, used as a reference', meaning that they act as a normative compass in designing prompts, responses, scenarios, and decision-making pathways.

Second, contextual curricular content encompasses Citizenship and Civic Education materials adapted to contemporary digital challenges. Unlike generic AI platforms, the 'Pancasila Bot' integrates content explicitly aligned with Indonesia's national curriculum and enriched with real-world case studies, such as hoax mitigation, ethical engagement on social media, and the impact of the digital economy on social justice. The development of this content involves experts with a deep understanding of Indonesia's socio-cultural context, addressing teachers' concerns about the limitations and normative tendencies of generic AI outputs (Teacher-01 & Teacher-09, FGD, 24 August 2025).

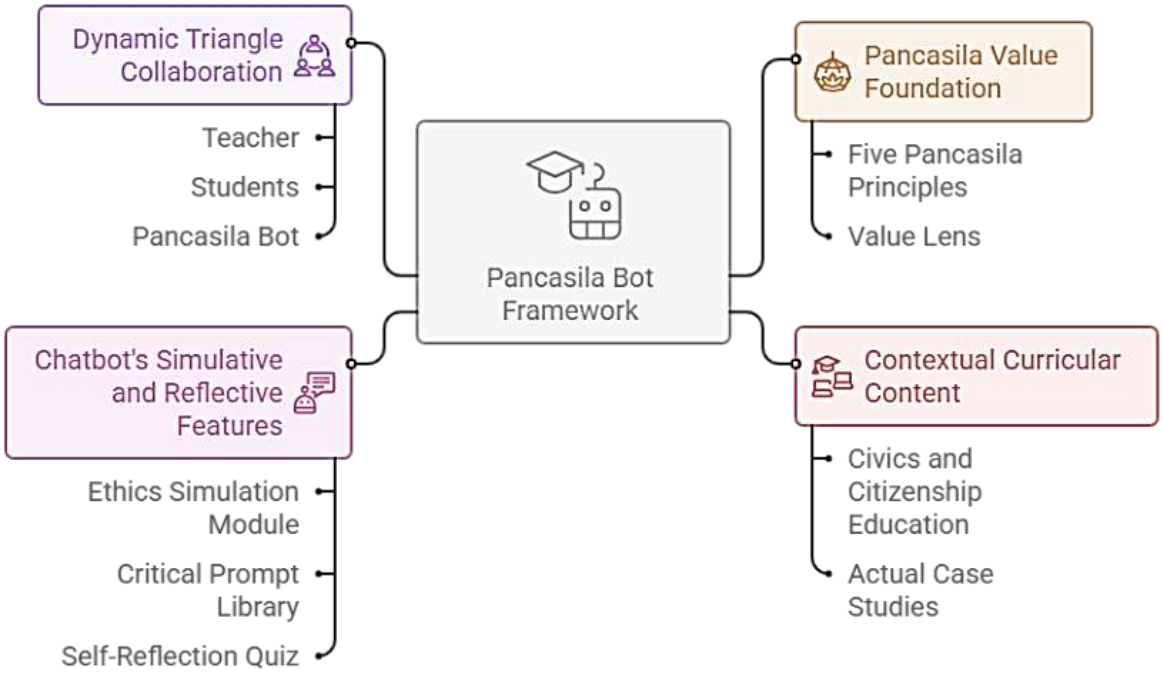
Third, the simulative and reflective chatbot feature forms the core of the framework, moving beyond a purely informative function towards a simulative level, as emphasised by Y

(personal communication, 23 September 2025). Key features include: (a) an ethics simulation module that presents immersive digital ethical dilemmas, such as encountering provocative content or witnessing cyberbullying, inviting students to make decisions and reflect on the consequences; (b) a critical prompt library containing probing questions to encourage deeper analysis of AI outputs, for example, 'What is the counter-argument to this opinion? ' or 'How does the third precept apply in this case'? (S, personal communication, 23 September 2025). Moreover, (c) self-reflection quizzes are designed to measure value internalisation through reflective questions that prompt students to evaluate their ethical understanding and behaviour.

Fourth, dynamic triangular collaboration characterises the synergistic relationship between teachers, students, and the Pancasila Bot. Within this model, the Pancasila Bot functions as a simulative partner, providing scenarios, initial information, and cognitive challenges to support learning and development. Students act as critical analysts and value constructors, actively exploring, questioning, and shaping their understanding of digital ethics. Meanwhile, teachers serve as value facilitators, guiding reflection, offering socio-emotional context, and conducting holistic assessments of students' character development. This facilitative role, particularly in fostering judgement, empathy, and ethical reasoning, remains fundamentally irreplaceable by machines (S, personal communication, 23 September 2025).

Figure 1.

Pancasila Bot Framework



The proposed *'Pancasila Bot as a Pedagogical Partner'* framework represents a conceptual advance in responding to AI-driven disruptions in value-based education. Rather than offering merely technical solutions, the framework entails a philosophical repositioning of technology's role in character formation (Ono, 2024). Within this model, AI is no longer viewed

as a threat to be resisted or restricted but as a partner that can be intentionally directed to strengthen value-oriented pedagogical aims (Luckin, 2018). Theoretically, the framework enriches the discourse on AI pedagogy by introducing a culturally grounded, value-based model (Payadnya et al., 2025). It challenges technological determinism by asserting that human judgement and cultural values—rather than algorithms—should guide the development and use of educational technologies (Selwyn, 2019). In practice, the framework provides a clear roadmap for educational technology developers, policymakers, and teachers for designing and implementing AI solutions aligned with national character education objectives (Salido et al., 2025).

Limitations and Future Research Directions

A fundamental research grant funds this multi-year study. In its first year, the project has only completed the define, design, and develop phases of the Four-D model. As a result, the "Pancasila Bot" framework remains conceptual and has not yet been empirically validated. Additionally, the questionnaire used has not been tested for construct validity, as it serves as an exploratory needs assessment tool. Given these limitations, the second year should focus on testing the conceptual framework through a prototype trial of Pancasila Bot in schools during dissemination. Moreover, the digital ethics instrument needs its construct validity confirmed via confirmatory factor analysis. Therefore, the technical development of the chatbot prototype should be based on the conceptual framework established in this research.

CONCLUSION

Integrating AI into Citizenship Education demands a transformative, values-driven approach. Currently, students use AI mainly for practical purposes. 87% of students reported using generative AI tools, with 62% doing so primarily for task completion rather than deeper understanding. Teachers require adaptable resources to manage digital ethical issues. The principles of Pancasila remain highly relevant as a philosophical basis for digital ethics. This study introduces the ‘Pancasila Bot as a Pedagogical Partner' framework, which conceptualizes AI as a partner akin to a simulacrum, positions teachers as guides for values, and views students as analytical thinkers. This model embeds technology within local cultural contexts and opposes technological determinism. Practical outcomes include enhancing teachers' roles as value facilitators, creating teaching materials that address digital dilemmas, and fostering value-based learning within the national curriculum. Future research should evaluate chatbot prototypes and support educators' ongoing professional development.

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