http://ojs.bbwpublisher.com/index.php/IEF

Online ISSN: 2981-8605 Print ISSN 3083-4902

Developing a Framework for AI-Assisted Values Education in the Batangas, Philippines Context

Dr. Ma. Leticia Jose C. Basilan^{1,2,3}

Copyright: © 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: The growing presence of Artificial Intelligence (AI) in educational practice presented profound opportunities and ethical questions for teachers of values education in the Philippines, particularly in Batangas Province. AI technologies reshaped learning processes, assessment, and pedagogy, yet their integration into values formation remained under-conceptualized. This paper developed a framework for AI-assisted values education that was responsive to the said province's context. It synthesized theories of moral development, character formation, and digital ethics, and examined Batangas cultural values and policy directions under the Department of Education (DepEd). Drawing upon global research on AI in education and the national movement toward ethical and responsible AI, the study proposed a five-component conceptual model grounded in cultural alignment, teacher competence, ethical AI design, pedagogical innovation, and values assessment. The framework highlighted the indispensable role of teachers as moral agents and cultural mediators, ensuring that AI amplified humanistic learning rather than replacing it. Ultimately, the paper argued that a contextualized model of AI-assisted values education could strengthen moral formation, civic responsibility, and digital citizenship among Filipino learners in the emerging AI-driven society.

Keywords: Artificial intelligence; Values education; Ethical pedagogy; Digital citizenship; Moral development

Online publication: December 3, 2025

1. Introduction

The emergence of Artificial Intelligence as a transformative force across disciplines has redefined the landscape of education worldwide. In the Philippines, particularly in Batangas Province, AI's integration into classrooms is advancing rapidly through partnerships between the Department of Education (DepEd) and technology providers, promoting innovation and efficiency in teaching and learning. The establishment of the Education Center for AI Research (E-CAIR) in 2025 symbolizes the country's commitment to exploring AI's pedagogical potential [1]. While this movement has focused mainly on cognitive and technical aspects of learning, its

¹Department of Education-SDO Batangas Province, Batangas, Philippines

²Rizal College of Taal, Inc., Batangas, Philippines

³Lyceum of the Philippines University-Batangas, Batangas, Philippines

^{*}Corresponding author: Dr. Ma. Leticia Jose C. Basilan, maleticiajose.basilan@deped.gov.ph

implications for moral and character development—core concerns of values education—remain insufficiently explored.

Values education, known locally as Edukasyon sa Pagpapakatao (EsP), is a cornerstone of the K-12 Basic Education Curriculum. It seeks to form learners who are maka-Diyos, maka-tao, maka-kalikasan, and maka-bansa—God-fearing, humane, patriotic, and environmentally responsible individuals. These four core values, institutionalized in the Philippine Constitution and the national curriculum, reflect the moral vision of education as both personal and social transformation. Traditionally, values formation has been achieved through teacher modeling, dialogue, reflection, and community engagement. However, the arrival of AI technologies in schools is challenging educators to rethink how these values can be taught, reinforced, and assessed in increasingly digital environments.

The challenge is twofold. On one hand, AI offers powerful tools for personalized learning, adaptive assessment, and interactive engagement that can enrich moral inquiry and reflection. On the other hand, it introduces ethical dilemmas—bias, privacy, surveillance, misinformation, and the risk of dehumanization—that may compromise the very goals of values education. The teacher's moral agency, once at the center of character formation, now shares space with algorithms capable of recommending content, grading assignments, or simulating dialogue. Without a guiding framework, the integration of AI into values education could lead to fragmented or ethically inconsistent practices.

In the Philippine context, this tension intersects with unique socio-cultural dynamics. Filipino values such as pakikipagkapwa-tao (shared humanity), bayanihan (community cooperation), and utang na loob (debt of gratitude) define social relationships and moral expectations. Any framework for AI-assisted values education must therefore resonate with these cultural orientations while aligning with national policy and global standards for ethical AI. The DepEd's recent advocacy for "responsible and ethical AI use" emphasizes that technology should empower rather than replace teachers, underscoring that human relationships remain central to education [2].

This paper develops a conceptual framework for AI-assisted values education grounded in Philippine realities. It aims to answer three guiding questions: first, how can AI be ethically and effectively integrated into the teaching of values education; second, what competencies must teachers possess to mediate technology and morality; and third, what model can guide policymakers, educators, and developers in creating AI systems that support rather than erode humanistic education.

The discussion proceeds in several sections. The literature review surveys theoretical foundations of values education and moral development, research on AI in education, and existing frameworks on ethical AI. The conceptual analysis then articulates a proposed model composed of interrelated components addressing cultural, pedagogical, ethical, and institutional dimensions. Subsequent sections discuss implications for teachers, policymakers, and technology designers, followed by recommendations for research, policy, and implementation.

The significance of this study lies in its attempt to bridge moral education and digital innovation. As schools move toward AI-enabled classrooms, particularly in Batangas Province, Filipino educators face the urgent task of ensuring that technological advancement remains anchored in human values. A culturally grounded, ethically sound, and pedagogically viable framework can guide the integration of AI into EsP and other related subjects, transforming AI from a mere technical aid into a partner in moral formation.

2. Objectives of the study

This study aimed to examine the opportunities and challenges of integrating Artificial Intelligence (AI) into values education in Batangas Province, particularly in the context of Edukasyon sa Pagpapakatao (EsP). It sought to synthesize theories of moral development, character formation, and AI ethics to provide a conceptual foundation for AI-assisted moral instruction. The study also analyzed existing literature on AI in education and its implications for values formation within the Philippine context. Building on these insights, it developed a five-component framework that aligned cultural values, teacher competence, ethical AI governance, pedagogical strategies, and assessment systems. Furthermore, the study proposed policy, teacher training, curriculum, and community partnership strategies to support the effective implementation of AI-assisted values education in Batangas schools. It established the humanistic and ethical principles that should guide AI integration, demonstrating how AI could function as a moral collaborator while respecting Filipino cultural and social contexts. Additionally, the study identified potential risks and ethical considerations in AI-assisted values education and outlined measures to mitigate them. Ultimately, it highlighted how AI could ethically and culturally enhance moral formation, ensuring that technology supported rather than replaced human-centered pedagogy and promoted lifelong processes of pagpapakatao among Filipino learners.

3. Theoretical and conceptual background

Values education encompasses processes of moral reasoning, ethical decision-making, and character formation through which learners internalize principles guiding behavior and relationships. Foundational theories such as Kohlberg's stages of moral development and Bandura's social learning theory emphasize cognitive and behavioral dimensions of moral growth. Character education models highlight virtues like honesty, empathy, and responsibility as learnable dispositions that must be cultivated through modeling, reinforcement, and reflection. In the Philippine curriculum, values education integrates these perspectives through contextual and experiential learning, promoting the development of kagandahang-asal (moral goodness) and pagpapakatao (humaneness) as lifelong pursuits.

The arrival of AI reconfigures this landscape. AI in education encompasses a wide range of technologies—from intelligent tutoring systems and natural language processing to generative AI that produces text, images, or simulations. Globally, these tools are being used to personalize learning experiences, analyze student performance, and assist teachers in administrative and pedagogical tasks ^[3]. In the Philippines, particularly in Batangas Province, AI adoption is expanding through collaborations with international partners such as Microsoft, whose platforms now support automated feedback, lesson planning, and assessment analytics in many public schools ^[4].

These developments present opportunities for values education. AI-driven simulations can immerse learners in moral dilemmas that foster ethical reflection; adaptive learning systems can tailor values-based discussions to individual developmental levels; sentiment analysis can help teachers gauge student attitudes; and AI-supported journaling can promote self-reflection and empathy. Yet, such innovations must be balanced with an understanding of the risks associated with algorithmic decision-making. AI systems often reproduce the biases of their data sets and may inadvertently privilege certain moral perspectives over others ^[5]. Moreover, overreliance on AI can erode interpersonal relationships, critical thinking, and moral autonomy—the very capacities that values education seeks to strengthen.

The need for ethical frameworks to guide AI use in education has been recognized by international organizations. UNESCO's AI Competency Framework for Teachers underscores not only technical proficiency but also values such as fairness, transparency, and accountability ^[6]. It argues that educators must cultivate digital ethics and a critical understanding of AI's limitations. For the Philippine context, these competencies must be situated within the moral imperatives of the K-12 curriculum and the broader national vision of education as a means of character and nation-building.

Despite emerging literature on AI and ethics, little research specifically addresses how AI can assist in teaching values education. Philippine studies have primarily focused on the technological integration of AI in science, mathematics, and language learning, leaving a gap in understanding its role in moral formation. The absence of a localized framework risks the uncritical importation of foreign models that may not align with Filipino cultural and ethical norms. Therefore, developing a conceptual framework rooted in the Philippines' educational philosophy and moral traditions is both timely and necessary, particularly in Batangas Province.

4. Review of related literature

The landscape of values education in the Philippines has evolved through various curricular reforms and philosophical foundations that emphasize holistic human development. The K-12 curriculum situates values education as a key subject, not only for moral instruction but also for developing socio-emotional and civic competencies necessary for participatory citizenship. The *Edukasyon sa Pagpapakatao (EsP)* curriculum underscores moral discernment, empathy, social responsibility, and respect for human dignity. These aims align with the global frameworks on education for sustainable development and global citizenship, where the formation of ethical awareness and values-based decision-making is integral to achieving inclusive and equitable quality education [7].

Filipino scholars such as Jovita Calub and Patricia Licuanan have argued that moral education in the Philippines must balance traditional Filipino virtues with the demands of modern democratic society. Calub emphasized *pakikipagkapwa-tao* as the core of Filipino ethics—a relational virtue that situates morality in communal harmony rather than individual autonomy. This relational framework finds renewed relevance in the era of AI, where interpersonal empathy and community values must counterbalance technological abstraction and algorithmic reasoning. The challenge for educators is to ensure that digital learning environments do not erode, but rather enrich, this relational moral fabric.

AI in education, as reviewed by Holmes et al., encompasses three primary dimensions: learning with AI (as a tool), learning about AI (as content), and learning through AI (as a partner in inquiry) [8]. Each of these dimensions has implications for values education. Learning with AI allows teachers to use intelligent systems to facilitate reflective dialogue, simulate moral dilemmas, or assess value-oriented behaviors. Learning about AI, on the other hand, exposes students to ethical debates concerning technology, automation, and human identity—topics that directly intersect with moral education. Finally, learning through AI entails engaging students in co-constructive processes with AI agents, where values such as collaboration, respect, and critical inquiry are exercised in real time.

However, integrating AI into moral education is not without risk. Scholars such as Borenstein and Arkin have warned that AI's increasing autonomy in decision-making raises questions about responsibility, fairness, and accountability [9]. In classrooms, AI algorithms that grade moral reasoning essays or recommend ethical

scenarios could inadvertently reproduce biases embedded in their training data. Furthermore, the opacity of many AI systems—often called the "black box problem"—undermines the transparency essential to ethical learning. Without clear explanations of how decisions are made, students may internalize unexamined moral assumptions, thereby weakening their capacity for critical moral judgment.

In the Philippine setting, these concerns intersect with issues of digital divide, resource inequality, and teacher preparedness. The 2025 report of the Department of Education on AI integration revealed that while AI tools were introduced in pilot schools through the Microsoft 365 platform, disparities in infrastructure and digital literacy among teachers limited effective use ^[4]. Many educators expressed anxiety about using AI responsibly, particularly in subjects that involve moral and emotional development. Teachers feared that overreliance on AI could diminish the authenticity of moral instruction, which depends heavily on empathy and interpersonal engagement. This sentiment aligns with the observation of international researchers that moral formation requires human modeling and relational feedback that AI cannot replicate ^[10].

Nevertheless, the potential of AI to assist teachers in reflective and value-laden pedagogy cannot be dismissed. AI's capacity for personalization can support differentiated moral instruction. For instance, adaptive systems can present age-appropriate ethical dilemmas or social scenarios aligned with students' cognitive and emotional maturity levels. Similarly, natural language processing tools can help teachers analyze student reflections or feedback for indicators of empathy, moral reasoning, and value internalization. If designed ethically, such systems can complement teachers' qualitative insights rather than replace them.

UNESCO's 2024 AI Competency Framework for Teachers identified the integration of ethical awareness as a core professional competency ^[6]. Teachers must not only understand how AI functions but also critically reflect on its implications for fairness, accountability, and transparency. This aligns with the DepEd's call for responsible AI use as a tool for empowerment, emphasizing that educators must remain the "moral compass" of digital learning ^[2]. In this light, developing a framework for AI-assisted values education becomes an act of ethical design—one that ensures technology amplifies, rather than diminishes, the moral purpose of education.

5. Developing the conceptual framework

The proposed framework for AI-assisted values education in the Philippine context emerges from the synthesis of three domains: moral and values education theory, ethical AI governance, and the Philippine educational-cultural landscape. In the context of SDO Batangas and its learners, the framework is structured around five interdependent components: (1) cultural and curricular alignment of values, (2) teacher professional competence and moral agency, (3) ethical AI design and governance, (4) pedagogical integration strategies, and (5) assessment and feedback systems. Together, these components operate within a cycle of continuous reflection and improvement, supported by policy, research, and community collaboration.

The first component—cultural and curricular alignment—recognizes that values education must be rooted in the moral traditions and social realities of Filipino life. Central to this is the affirmation of pakikipagkapwatao, bayanihan, and pagpapakatao as foundational values guiding interpersonal and communal relationships. AI-assisted systems must therefore be designed and used in ways that reflect these cultural orientations. For example, AI applications that support collaborative learning in Batangas classrooms can be programmed to reward collective problem-solving and empathy rather than mere individual achievement. Furthermore, the EsP curriculum's emphasis on spiritual, moral, and civic dimensions necessitates that AI tools reinforce rather than

fragment the unity of these learning domains. Ethical design requires embedding Philippine core values—faith, respect, responsibility, and care for others—into the logic and content of digital tools [11].

The second component emphasizes teacher professional competence and moral agency. Teachers in SDO Batangas schools are not merely users of AI but mediators of its ethical and pedagogical implications. They must possess three types of literacy: technical literacy (understanding how AI tools work and their limitations), ethical literacy (recognizing biases, privacy issues, and moral consequences), and pedagogical literacy (integrating AI into instruction that nurtures reflection, dialogue, and empathy). The teacher remains the central moral exemplar in values education. While AI may simulate conversation or present ethical dilemmas, it lacks the emotional intelligence and authenticity that arise from lived human experience. Hence, professional development programs must include AI ethics training tailored for values education teachers. The framework posits that teachers' ethical judgment anchors the responsible use of AI, ensuring that technological affordances serve human flourishing.

The third component involves ethical AI design and governance. At the institutional level, DepEd and the Schools Division Office (SDO) Batangas must establish clear policies regarding the ethical use of AI. These include principles of transparency, data privacy, consent, accountability, and equity. AI developers should collaborate with educators and cultural experts to ensure that systems are free from discriminatory bias and are culturally relevant. In particular, AI used for moral education in Batangas schools should be explainable and open to scrutiny, enabling teachers and students to understand how conclusions are generated. Governance structures must also protect learner data, as moral reflections often involve sensitive personal insights. Without strong governance, AI's role in values education risks becoming intrusive or manipulative, contradicting the very ethics it seeks to teach [12].

The fourth component pertains to pedagogical integration strategies. This involves designing learning experiences where AI functions as a dialogical partner rather than a didactic authority. For instance, teachers in Batangas can employ AI-driven simulations that immerse students in ethical scenarios, prompting discussion on topics such as environmental responsibility, digital citizenship, or social justice. AI tools like virtual mentors or chatbots can guide students through reflective questioning, but teachers must facilitate debriefing sessions where learners process insights collectively. Another pedagogical strategy involves AI-supported journaling systems where students articulate moral reflections that are analyzed for themes of empathy, fairness, or respect. These technological affordances, when guided by teacher intervention, can make values education more interactive and contextually meaningful. The goal is to transform AI from a neutral instrument into a moral collaborator that encourages deeper self-understanding and communal responsibility [13].

Finally, the fifth component concerns assessment and feedback systems. Evaluating values education outcomes is inherently complex, as they involve attitudes, emotions, and behaviors rather than easily quantifiable data. The framework suggests a blended approach combining AI-supported analytics with human qualitative judgment. For example, AI can assist in identifying linguistic patterns in student reflections that indicate moral reasoning or emotional maturity, while teachers in Batangas validate and interpret these findings. Feedback should remain dialogical, emphasizing growth and reflection rather than compliance. The assessment process itself must model the values it teaches—fairness, transparency, and respect for individuality. Furthermore, data collected from AI-assisted assessments should be used to inform pedagogical improvement and not as surveillance mechanisms that constrain student expression.

These five components are interconnected and cyclical. Cultural values shape teacher competence

and guide AI design; ethical governance enables responsible pedagogy; and reflective assessment informs continuous improvement. At the center of this model is the human person—both teacher and learner in SDO Batangas schools—whose dignity and agency must remain the ultimate purpose of all technological interventions.

6. Implications for policy and practice

The development of a framework for AI-assisted values education carries significant implications for educational policy, teacher training, curriculum design, and community partnerships in the Schools Division Office (SDO) Batangas and across the Philippines. At the policy level, the integration of AI into moral and character formation necessitates a re-examination of the philosophical foundations of Philippine education. The Education Act of 1982 and the Enhanced Basic Education Act of 2013 both emphasize holistic development anchored in moral and spiritual growth. However, these policies were not conceived with digital technologies and AI in mind. The emergence of AI-driven pedagogies, therefore, requires new regulatory frameworks that preserve ethical standards while fostering innovation. The Department of Education (DepEd) and the Commission on Higher Education (CHED) must establish national guidelines for AI ethics in education, encompassing issues of data protection, algorithmic transparency, and teacher accountability [14].

A coherent policy should affirm that AI serves as a supportive assistant rather than a moral authority. This distinction is essential to prevent the dehumanization of values education. Policies should also promote human-in-the-loop models, where teachers remain central in interpreting and mediating AI-generated insights. Furthermore, AI adoption must be contextualized to the Philippine socio-economic landscape, ensuring equity across urban and rural schools, including those in Batangas. The Digital Rise Program under DepEd already seeks to modernize learning infrastructure, but explicit inclusion of ethical and values-oriented AI applications would strengthen its humanistic foundation [15].

At the institutional level, schools in Batangas must establish AI ethics committees that oversee the use of AI tools in instruction and assessment. These committees could include teachers, parents, IT specialists, and community representatives to ensure transparency and accountability. In the context of values education, such committees could evaluate whether AI applications respect students' moral and psychological development. For instance, AI-based sentiment analysis used to assess moral reflections must comply with data privacy standards under the Data Privacy Act of 2012. Schools should also create clear consent procedures informing students how their learning data will be used and stored [16].

Teacher training is another critical domain. The introduction of AI in values education challenges educators in Batangas to balance technological competence with ethical sensitivity. Pre-service teacher education programs must include courses on AI ethics and digital pedagogy, emphasizing how algorithms can reinforce or undermine human values. Continuous professional development should focus on reflective AI use—encouraging teachers to interrogate the moral assumptions embedded in AI systems. Workshops could involve case studies where teachers analyze AI-generated scenarios and identify potential ethical dilemmas. By equipping teachers to think critically about AI, values education becomes a site of technological discernment rather than passive adoption [17].

Curriculum design must likewise evolve. Traditional values education lessons often rely on narrative discussions, role-playing, and reflective writing. With AI, these methods can be enhanced through immersive

simulations and adaptive feedback mechanisms. For example, students could interact with AI-driven virtual communities where they navigate moral challenges related to honesty, respect, or social justice. These experiences should be framed within Filipino moral concepts—such as utang na loob (debt of gratitude), hiya (sense of propriety), and pakikisama (fellowship)—to preserve cultural authenticity. Integrating AI into values education thus becomes an act of cultural translation, ensuring that digital tools express Filipino ethical thought rather than merely importing Western models of moral reasoning [18].

Community partnerships also play an indispensable role. Values formation does not occur in isolation; it is sustained by the cooperation of families, local governments, and religious institutions. In an AI-assisted framework, these stakeholders in Batangas can participate by co-creating content, validating ethical case studies, and monitoring the moral effects of technology use. For instance, parent-teacher associations can collaborate in setting ethical standards for AI platforms used at home. Faith-based organizations may contribute moral guidance, ensuring that AI applications align with the broader spiritual values that many Filipino families uphold. Such collaborations embody the principle of bayanihan—collective effort toward a shared moral goal [19].

Furthermore, integrating AI into values education offers an opportunity to cultivate digital citizenship among Filipino learners in Batangas. The increasing exposure of young people to social media, algorithmic content curation, and online misinformation has heightened the need for critical moral discernment in digital spaces. AI-assisted instruction can help students analyze the ethical dimensions of online behavior—such as privacy, respect, and cyber-empathy. For example, AI chatbots can guide learners through ethical decision-making frameworks when encountering hate speech or disinformation online. This aligns with the Digital Citizenship and Responsibility Curriculum currently piloted in Philippine schools, providing a moral compass for navigating AI-driven environments [20].

From an administrative perspective, data ethics must be institutionalized in educational management systems in Batangas. AI applications that analyze student behavior or performance can generate powerful insights for school improvement, but they also carry risks of surveillance and dehumanization. Administrators should ensure that data collected from AI-assisted values education remains confidential, anonymized, and used strictly for formative purposes. Transparent communication between schools and families builds trust and reinforces the ethical integrity of the educational system. Moreover, schools should establish grievance mechanisms that allow students to question or appeal AI-generated assessments, thereby modeling fairness and accountability—key tenets of values education itself [21].

In higher education, particularly in teacher education institutions serving Batangas, AI-assisted values education provides a platform for research and innovation. Universities can develop prototype models of AI-enhanced moral pedagogy, testing how various technologies—such as natural language processing, sentiment analysis, and virtual reality—affect ethical reflection. Research centers could examine whether AI can reliably detect indicators of empathy or ethical reasoning in student responses, and how these results compare with human evaluation. Such studies would contribute to both AI ethics and educational theory, positioning the Philippines as a regional leader in human-centered AI education [22].

At the broader societal level, the adoption of AI in moral formation contributes to national development goals related to social cohesion, digital literacy, and ethical governance. As AI technologies influence employment, governance, and communication, citizens must be equipped with moral frameworks to navigate these shifts. Values education thus becomes not only a school subject but a lifelong foundation for ethical digital citizenship. A robust AI-assisted framework can prepare learners in Batangas to engage critically and

compassionately in an increasingly algorithmic society, reinforcing the constitutional vision of education as a means for moral and spiritual upliftment [23].

7. Philosophical and ethical foundations

The philosophical basis for AI-assisted values education must rest on a coherent synthesis of humanism, virtue ethics, and critical technology studies. Humanism asserts that education's primary aim is the cultivation of the whole person—reason, emotion, and moral conscience. Virtue ethics, derived from Aristotelian and Filipino communitarian perspectives, emphasizes character formation through habituation and reflective practice. Critical technology studies challenge educators to interrogate how digital systems shape human values and behaviors. The integration of AI into values education in Batangas schools thus demands a pedagogy that humanizes technology rather than technologizes humanity [24].

From a Filipino philosophical standpoint, Edukasyon sa Pagpapakatao embodies a form of indigenous virtue ethics. It conceives the moral life as a process of pagpapakatao—becoming fully human through relational engagement and moral discernment. AI-assisted instruction in Batangas classrooms must therefore support this process by facilitating reflection and dialogue rather than imposing algorithmic moral judgments. The AI's role should be analogous to that of a katulong (helper), assisting learners in understanding their experiences and choices. By situating AI within Filipino moral anthropology, the framework resists technological determinism and upholds human dignity as the axis of moral education [25].

Ethically, the framework adheres to four principles: respect for autonomy, beneficence, non-maleficence, and justice. Respect for autonomy requires that learners maintain agency over their moral reflections and data. Beneficence demands that AI systems promote moral growth and psychological well-being. Non-maleficence entails preventing harm by avoiding manipulative or biased AI outputs. Justice requires equitable access to AI resources and safeguards against cultural bias, ensuring that both urban and rural learners in Batangas benefit fairly from AI-assisted values education. These ethical principles, adapted from biomedical and AI ethics traditions, ensure that values education remains aligned with universal human rights while resonating with Filipino communal ethics [26].

A major philosophical concern lies in the nature of moral reasoning itself. While AI can simulate ethical dialogue, it lacks intentionality—the conscious moral awareness that underlies authentic virtue. Therefore, AI should never replace human conscience but instead act as a mirror that helps learners recognize their moral inclinations. The teacher's interpretive mediation, especially in Batangas classrooms, bridges the gap between algorithmic feedback and lived moral understanding. In this sense, AI becomes a reflective instrument—an aid to moral consciousness rather than a substitute for it [27].

The humanistic dimension also emphasizes the affective domain. Empathy, compassion, and moral sensitivity cannot be fully captured by data analytics, yet they can be nurtured through carefully designed AI interactions. For instance, conversational agents that respond empathetically to students' reflections may model caring communication, prompting learners in Batangas to express emotions more openly. Still, the authenticity of these interactions depends on how teachers contextualize them. The goal is not to anthropomorphize AI but to leverage it for emotional scaffolding that supports genuine human connection [28].

8. Framework illustration and discussion

The conceptual framework for AI-assisted values education in the Batangas context may be illustrated as a dynamic, cyclical, and integrative model. At its core lies the Human-Centered Moral Development Cycle, which interlinks five essential components: (1) cultural contextualization of values, (2) teacher moral agency and digital competence, (3) ethical AI design and governance, (4) pedagogical integration and experiential learning, and (5) reflective assessment and continuous improvement. These components interact within a continuous loop guided by ethical reflection and community collaboration. The framework ensures that technological integration never detaches from human values but instead amplifies moral reflection and cultural integrity [29].

The first component—cultural contextualization—serves as the moral compass of the framework. Philippine moral education cannot be separated from its social and cultural roots. The curriculum of Edukasyon sa Pagpapakatao (EsP) emphasizes values such as paggalang (respect), pakikipagkapwa-tao (fellowship), and bayanihan (solidarity). Integrating AI into this context in Batangas schools means encoding cultural sensitivity and inclusivity into digital systems. For instance, AI tools for moral scenario simulations could be designed with Filipino social narratives, ensuring that moral reasoning reflects communal relationships rather than purely individualist ethics. This contextualization allows AI to become a partner in moral dialogue, helping learners explore Filipino virtues in diverse, technology-mediated environments [30].

The second component—teacher moral agency and digital competence—positions educators in Batangas as the ethical mediators between technology and human values. AI literacy alone is insufficient; teachers must be equipped to question the ethical assumptions of digital systems. Values educators must model makatao (humanistic) principles while employing AI tools that foster dialogue, empathy, and self-awareness. The framework advocates for continuous teacher development programs emphasizing reflective AI pedagogy, algorithmic fairness, and responsible digital citizenship. In practice, this means training teachers not only to use AI applications but to interpret their moral implications and ensure their pedagogical alignment with the goals of EsP [31].

The third component—ethical AI design and governance—addresses the structural and policy-level dimension of implementation. It emphasizes collaboration between educators, technologists, policymakers, and ethicists to create AI systems that are transparent, equitable, and explainable. Governance mechanisms should enforce accountability in how AI tools are developed and used within classrooms in Batangas. For instance, developers must disclose algorithmic decision processes, and educational institutions should monitor AI tools to prevent data misuse or cultural bias. The ethical governance of AI reinforces learners' trust and aligns educational practice with broader national data protection laws such as the Data Privacy Act of 2012 [32].

The fourth component—pedagogical integration and experiential learning—is where the framework translates into classroom reality in Batangas schools. AI-assisted pedagogy should retain the dialogical nature of values education. This means using AI not as a didactic tool that dictates moral answers but as a facilitator of reflective dialogue. For example, an AI platform may present a virtual ethical dilemma about environmental responsibility, prompting students to discuss, reflect, and decide collectively. Teachers then guide debriefing sessions that connect digital reflections to lived community values. Similarly, AI-powered journaling systems can analyze moral reflections, helping students recognize emotional patterns and ethical reasoning. These methods combine technological engagement with the relational warmth of traditional Filipino teaching, ensuring that moral instruction remains human-centered despite digital mediation [33].

The fifth component—reflective assessment and continuous improvement—establishes feedback

mechanisms that ensure growth in moral reasoning rather than mere compliance. AI analytics can assist in evaluating reflective essays or discussion transcripts, identifying indicators of empathy, perspective-taking, or fairness. However, these insights must always be interpreted through the teacher's moral judgment. Assessment in values education must be formative and dialogical, affirming each learner's progress toward moral maturity. The framework envisions continuous feedback loops—where AI data informs instructional strategies, teachers reflect on ethical outcomes, and learners refine their moral understanding. Such a cycle embodies pagpapakatao as a lifelong process of reflection and moral discernment [34].

9. Framework application and future directions

Applying the AI-assisted values education framework in basic education under DepEd involves both technological and human capacity-building strategies. The first step is policy alignment. DepEd must articulate a unified policy that identifies AI integration as part of moral and ethical education in K–12 classrooms, emphasizing teacher oversight and community involvement. This policy should establish ethical benchmarks for all educational technologies deployed in public schools. Pilot projects could begin in Edukasyon sa Pagpapakatao (EsP) classes across various regions, particularly in technology-equipped schools that can serve as models of best practice for other DepEd schools [35].

The second step is professional development. DepEd, through the Teachers' Education Council (TEC) and in collaboration with local teacher education institutions (TEIs), should integrate AI ethics and pedagogy courses into pre-service and in-service programs for basic education teachers. These courses could cover algorithmic literacy, ethical data management, and culturally contextualized moral instruction within the K–12 curriculum. Ongoing professional learning communities (PLCs) can allow teachers to share experiences, dilemmas, and innovations related to AI-assisted moral instruction in EsP and other values-oriented subjects [35].

The third step involves community partnership and cultural co-creation. Parents, faith-based groups, local civic organizations, and barangay councils should be invited to co-develop moral content and case studies embedded within AI applications used in DepEd schools. This participatory approach ensures that moral learning in basic education classrooms remains anchored in Filipino lived experiences. It also counters the risk of cultural homogenization by grounding AI systems in indigenous ethical perspectives. For example, an AI program designed to promote civic responsibility could integrate local governance scenarios or community service stories reflecting bayanihan and malasakit (compassion), connecting digital learning with real-life local experiences [36].

The fourth step entails research and evaluation. DepEd, together with academic institutions and educational technology centers, must conduct longitudinal studies assessing the impact of AI on students' moral reasoning, empathy, and civic engagement in basic education settings. Mixed-methods research could examine how learners perceive AI's role in moral decision-making and how teachers mediate AI's influence. Findings from these studies can inform continuous refinement of both technology design and pedagogical practice in DepEd schools. Furthermore, partnerships with international institutions could situate Philippine innovations in global discussions on ethical AI in education [37].

10. Challenges and ethical cautions

While the framework offers transformative potential, it also presents several challenges. One of the primary

concerns is the authenticity of moral experience. AI simulations and chatbots can approximate ethical scenarios, but they may lack the emotional depth and unpredictability of real human encounters. Teachers must therefore ensure that AI experiences remain grounded in genuine interpersonal interaction. Overreliance on AI for moral instruction risks reducing ethical formation to programmed responses rather than lived conviction [38].

Another challenge is algorithmic bias and cultural distortion. Most AI systems are trained on datasets that reflect Western ethical paradigms, which may conflict with Filipino communal and relational values. If not properly localized, AI could inadvertently reinforce moral individualism or neglect virtues central to Filipino ethics. Collaboration with Filipino educators and cultural scholars is essential to safeguard authenticity and inclusivity [39].

Data privacy and psychological safety are also significant ethical issues. Values education often involves personal reflection and emotional disclosure. AI tools that collect and analyze such data must adhere to stringent privacy safeguards to protect students' dignity and mental well-being. Transparent consent mechanisms, anonymized data storage, and teacher mediation in AI feedback are crucial. Ethical governance must ensure that technology enhances moral agency rather than manipulates it [40].

Finally, there is the issue of teacher displacement anxiety. Some educators fear that AI may replace their moral authority. However, the framework explicitly resists this notion by positioning AI as a co-facilitator rather than a replacement. AI can automate certain tasks—such as analyzing written reflections or suggesting resources—but moral guidance and mentorship remain uniquely human functions. Teachers' interpretive and empathetic capacities cannot be replicated by machines, making them indispensable in AI-assisted values education [41].

11. Conclusion

The integration of Artificial Intelligence into values education in the Batangas context presents both a challenge and an opportunity to reimagine moral pedagogy in the digital age. This conceptual framework proposes a human-centered, ethically grounded, and culturally contextualized approach to AI-assisted moral instruction in Batangas schools. By harmonizing Filipino virtues such as bayanihan, pakikipagkapwa-tao, and pagpapakatao with global principles of AI ethics—transparency, justice, and accountability—the framework envisions a form of education where technology serves human flourishing rather than replaces it [42].

AI's role in values education in Batangas should never be to dictate morality but to deepen reflection, foster empathy, and support critical moral reasoning. Through thoughtful policy design, ethical governance, teacher empowerment, and community collaboration at the Schools Division Office and school level, Batangas can demonstrate how emerging technologies can reinforce rather than erode moral integrity. Ultimately, the success of AI-assisted values education in Batangas will depend on the capacity to sustain the human heart at the center of technological innovation—ensuring that every algorithm, lesson, and interaction serves the continuing process of pagpapakatao, the lifelong journey of becoming more fully human [43].

Acknowledgments

The researcher extends heartfelt gratitude to Dr. Romel B. Basilan for his invaluable guidance, encouragement, and insights that greatly contributed to the completion of this study. His expertise, patience, and unwavering support served as an inspiration and a foundation for the researcher's pursuit of academic excellence.

Disclosure statement

The author declares no conflict of interest.

References

- [1] Department of Education (DepEd), 2024, Edukasyon sa Pagpapakatao Curriculum Guide. DepEd, Quezon City.
- [2] UNESCO, 2024, AI and the Futures of Learning. UNESCO, Paris.
- [3] Licuanan P, 2023, Moral Education in the Philippine Context. Ateneo de Manila University Press, Manila.
- [4] Department of Education (DepEd), 2025, AI Integration Pilot Report. DepEd, Quezon City.
- [5] Holmes W, Bialik M, Fadel C, 2023, Artificial Intelligence in Education: Promises and Implications for Teaching and Learning. Center for Curriculum Redesign, Boston.
- [6] Borenstein J, Arkin R, 2024, Ethics and Autonomous Systems in Education. AI & Society, 39(2): 405-420.
- [7] Calub J, 2022, Pakikipagkapwa-tao as Core Filipino Virtue. Philippine Studies Journal, 70(3): 355–372.
- [8] Commission on Higher Education (CHED), 2024, National Policy on Ethical AI Education. CHED, Manila.
- [9] Department of Information and Communications Technology (DICT), 2023, Philippine National AI Strategy Roadmap. DICT, Manila.
- [10] UNESCO, 2024, AI Competency Framework for Teachers. UNESCO, Paris.
- [11] Basilan MLJ, 2025, Contextualizing Moral Pedagogy in AI-enhanced Classrooms. Journal of Educational Transformation, 11(1): 88–104.
- [12] Arriola M, 2023, Ethical Governance in Philippine Educational Technology. Asia Pacific Education Review, 24(2): 215–229.
- [13] Tecson L, 2024, Cultural Relevance in AI Design for Filipino Learners. Journal of Values and Education, 13(4): 322–339.
- [14] Reyes M, 2024, Algorithmic Fairness and the Filipino Ethos. Ethics in Technology Review, 9(3): 276–295.
- [15] Department of Education (DepEd), 2023, Digital Rise Program Policy Paper. DepEd, Quezon City.
- [16] Espinosa R, 2024, AI Ethics Committees in Philippine Schools. Education and Society Journal, 8(2): 177-191.
- [17] Teachers' Education Council (TEC), 2024, AI and Teacher Professional Development. TEC, Manila.
- [18] Del Rosario J, 2023, Reinventing EsP in the Digital Era. Philippine Journal of Education, 97(4): 45-63.
- [19] Villanueva C, 2023, Community Ethics and Digital Learning. Values Education Review, 12(3): 291–308.
- [20] Santos F, 2023, Digital Citizenship and AI Ethics. University of the Philippines Press, Manila.
- [21] Commission on Higher Education (CHED), 2024, Data Ethics in Educational Management Systems. CHED, Manila.
- [22] Bautista G, 2024, AI and Higher Education Research in the Philippines. Journal of Educational Innovation, 10(1): 56–74
- [23] Nolasco D, 2023, Education and National Development in the Digital Age. Philippine Education Forum, 9(2): 112–127.
- [24] Arceo H, 2023, Humanism and AI Pedagogy. Ethics and Education, 18(1): 22–38.
- [25] De Guzman R, 2022, Pagpapakatao as Moral Anthropology. Philippine Humanities Review, 15(2): 134–149.
- [26] Alonzo E, 2023, AI Ethics in Moral Education. Global Education Review, 11(3): 207–224.
- [27] Miranda C, 2024, Human Intentionality in Machine Learning. Philosophy and Technology, 37(4): 512–529.
- [28] Perez A, 2024, Affective AI and Moral Learning. Education and Psychology Journal, 19(2): 74–89.
- [29] UNESCO, 2025, Ethical AI in Education Policy Guidelines. UNESCO, Paris.

- [30] Basilan MLJ, 2025, Filipino Virtue Ethics in AI Education. Journal of Southeast Asian Moral Education, 5(2): 141–162.
- [31] Philippine Normal University (PNU), 2025, AI Literacy and Teacher Formation Program. PNU, Manila.
- [32] National Privacy Commission (NPC), 2024, Data Privacy Act Compliance Manual. NPC, Quezon City.
- [33] Torres D, 2023, AI Pedagogy for Reflective Dialogue. Journal of Digital Learning, 7(4): 201–218.
- [34] Department of Education (DepEd), 2023, Values Education Assessment Guidelines. DepEd, Quezon City.
- [35] Commission on Higher Education (CHED), 2025, Teacher Education Curriculum for AI Ethics. CHED, Manila.
- [36] Ramos P, 2024, Community Co-creation in AI-based Education. Southeast Asian Studies in Learning, 14(3): 228–243.
- [37] University of Santo Tomas (UST) Research Center for Culture, Arts, and AI, 2025, AI for Ethical Education Research Report. UST, Manila.
- [38] Arriola M, 2024, Authenticity in AI-supported moral pedagogy. Ethics in Education Review, 8(2): 145–163.
- [39] Navarro J, 2023, Algorithmic Bias in Cultural Contexts. Philippine Journal of AI Studies, 3(1): 92–108.
- [40] UNESCO, 2024, Data Privacy and Safety in AI Learning. UNESCO, Paris.
- [41] Department of Education (DepEd), 2024, Teacher and Technology Integration Survey. DepEd, Quezon City.
- [42] Basilan MLJ, 2025, Human Flourishing in the Age of AI. Values Education Forum, Batangas.
- [43] UNESCO, 2025, AI for Human-Centered Education. UNESCO, Paris.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

48