



The integration of deep learning and a Kurikulum Berbasis Cinta in primary education

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ABSTRACT

In elementary education, the learning strategies used play a crucial role in shaping children's character and competencies; therefore, teachers need to select learning strategies that align with the children's interests and talents. This study aims to analyze the integration of deep learning with the Kurikulum Berbasis Cinta to foster holistic learning in elementary education. The study employs a Systematic Literature Review (SLR) approach, guided by the PRISMA guidelines, to identify, select, and analyze relevant literature. Data sources were obtained from national and international scientific articles published between 2021 and 2026 via Google Scholar, Garuda, ERIC, and ScienceDirect. The results indicate that deep learning plays a role in developing critical and reflective thinking skills as well as meaningful learning. At the same time, the Kurikulum Berbasis Cinta helps strengthen students' empathy, character, and interpersonal relationships. The integration of these two approaches creates a more humanistic, reflective, and holistic learning experience focused on students' overall development. In addition to enhancing cognitive aspects, this approach also supports students' emotional and social development in elementary education. This study concludes that integrating deep learning with the Kurikulum Berbasis Cinta can serve as an alternative for developing a more holistic curriculum that is relevant to the needs of 21st-century learning.

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ABSTRAK

Pada pendidikan dasar, strategi pembelajaran yang digunakan sangat menentukan karakter dan kompetensi anak. Oleh karena itu, guru perlu memilih strategi pembelajaran yang sesuai dengan minat dan bakat siswa. Penelitian ini bertujuan untuk menganalisis integrasi deep learning dan Kurikulum Berbasis Cinta dalam mewujudkan pembelajaran holistik di pendidikan dasar. Penelitian ini menggunakan pendekatan Systematic Literature Review (SLR) dengan pedoman PRISMA untuk mengidentifikasi, menyeleksi, dan menganalisis berbagai literatur yang relevan. Sumber data diperoleh dari artikel ilmiah nasional dan internasional yang dipublikasikan pada tahun 2021-2026 melalui Google Scholar, Garuda, ERIC, dan ScienceDirect. Hasil penelitian menunjukkan bahwa deep learning berperan dalam mengembangkan kemampuan berpikir kritis, reflektif, dan pembelajaran bermakna, sedangkan Kurikulum Berbasis Cinta berkontribusi dalam memperkuat empati, karakter, dan hubungan interpersonal peserta didik. Integrasi kedua pendekatan tersebut mampu menciptakan pembelajaran yang lebih humanis, reflektif, dan berorientasi pada perkembangan peserta didik secara utuh. Selain meningkatkan aspek kognitif, pendekatan ini juga mendukung perkembangan emosional dan sosial peserta didik dalam pendidikan dasar. Penelitian ini menyimpulkan bahwa integrasi deep learning dan Kurikulum Berbasis Cinta dapat menjadi alternatif pengembangan kurikulum yang lebih holistik dan relevan dengan kebutuhan pembelajaran abad ke-21.

Kata Kunci: deep learning; Kurikulum berbasis Cinta; pembelajaran holistik; pendidikan dasar; pendidikan humanistik

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INTRODUCTION

Primary education is a critical phase in the educational system, serving as the foundation for students' intellectual, social, emotional, and character development. At this stage, students not only learn basic competencies such as reading, writing, and arithmetic but also begin to shape their ways of thinking, social attitudes, and perspectives toward their surrounding environment (Lathifah et al., 2023). However, primary education currently faces various challenges. The learning process in schools tends to focus on academic achievement, such as examination scores, curriculum completion, and cognitive outcomes. Consequently, the humanistic dimension of education is often neglected, while students' emotional needs and character development receive insufficient attention. Freire, in his book *"Pedagogy of the Oppressed,"* stated that education often becomes a banking system in which students are treated as passive recipients of knowledge, ultimately leading to dehumanization in the learning process.

This situation indicates a tendency toward dehumanization in education, where students are positioned as passive recipients of knowledge. Learning is often oriented toward rote memorization without providing space for students to understand meaning, develop creativity, and connect knowledge with their life experiences. In fact, the challenges of the 21st century demand critical thinking, problem-solving, collaboration, and the capacity to adapt to social changes and technological developments. This underscores the need for a learning approach that not only emphasizes content mastery but is also capable of creating deep and meaningful learning through active student engagement. In this context, the concept of deep learning becomes relevant for implementation in primary education. Fullan et al., in their book named *"Deep Learning: Engage the World Change the World"* stated that deep learning is a process in which students develop six core competencies known as the 6Cs: Character, Citizenship, Collaboration, Communication, Creativity, and Critical Thinking, all of which are essential for thriving in the 21st century.

From an educational perspective, deep learning is not merely the ability to understand material in depth but also a learning process that encourages students to connect new knowledge to prior experiences, engage in critical reflection, and apply their understanding in real-life contexts. A systematic literature review identified that deep learning in primary education is characterized by three core dimensions: 1) constructive learning through discussions, projects, and contextual exploration; 2) joyful learning that enhances student motivation through educational games and digital media; and 3) reflective learning that develops metacognitive awareness through self-evaluation and critical thinking (Fadhlurahman et al., 2026). This approach fundamentally positions students as active subjects who construct understanding through exploration, discussion, and problem-solving, rather than passive recipients of information. Research has found that deep learning in elementary education operates through three transformative mechanisms: cognitive anchoring through familiar local phenomena, dialogical knowledge construction, and the development of metacognitive awareness through reflective inquiry (Dipayana et al., 2026).

These findings collectively suggest that learning is no longer superficial or merely oriented toward memorization but becomes a meaningful and transformative process. Through deep learning, students are expected to develop higher-order thinking skills and the ability to learn independently and sustainably, ultimately preparing them to navigate the complexities of the 21st century. However, the overemphasis on cognitive development, without being balanced by the reinforcement of affective aspects, can lead to imbalances in education. Students may possess good academic abilities but lack empathy, social concern, and emotional maturity. This condition can trigger various social problems in the educational environment, such as bullying, intolerance, low social awareness, and weak interpersonal relationships between teachers and students. Therefore, education must aim not only to produce academically intelligent individuals but also to shape human beings with strong character, empathy, and humanistic values. In response to this condition, the concept of a Kurikulum Berbasis Cinta has begun to gain attention in

contemporary education. This approach places compassion, respect for human dignity, a sense of security, and positive interpersonal relationships at the core of learning.

Noddings, in her book named "*The Challenge to Care in Schools: An Alternative Approach to Education*" stated that caring should be the foundation of education, and that schools must prioritize the development of students' emotional well-being and interpersonal relationships alongside academic achievement. In a Kurikulum Berbasis Cinta, the teacher's role extends beyond that of a content deliverer to that of a mentor who builds healthy emotional relationships with students. A learning environment filled with love and affection is believed to enhance students' motivation to learn, self-confidence, and engagement in the learning process. When students feel valued and accepted, they become more open to critical thinking, exploration, and the optimal development of their potential (Saputri & Ardivanto, 2025). Based on the above elaboration, this study aims to examine the integration of deep learning and the Kurikulum Berbasis Cinta through a systematic literature review, analyzing the concepts, implementation, and pedagogical implications for learning and character development in primary education. The scientific novelty of this research lies in its effort to integrate two approaches that have largely been viewed as separate concepts, wherein deep learning places greater emphasis on cognitive aspects. At the same time, the Kurikulum Berbasis Cinta focuses more on affective aspects.

LITERATURE REVIEW

Deep Learning in Primary Education

Deep learning, from an educational perspective, is an approach that encourages students to understand material deeply, connect new knowledge to prior experiences, engage in critical reflection, and apply their understanding in real-life contexts. A systematic literature review found that the implementation of deep learning in elementary schools is characterized by constructive learning through discussions, projects, and contextual exploration; joyful learning that enhances motivation; and reflective learning that develops metacognitive awareness (Fadhurahman et al., 2026). This approach fundamentally differs from surface learning, which focuses solely on rote memorization and a textual understanding of the material without encouraging deeper cognitive engagement.

Deep learning involves six key competencies that collectively prepare students for the complexities of the 21st century: Character, Citizenship, Collaboration, Communication, Creativity, and Critical Thinking. Fullan et al. in their book named "*Deep Learning: Engage the World Change the World*" stated that these six competencies often referred to as the 6Cs are essential for students to thrive in a rapidly changing world, as they equip learners with the skills needed to become lifelong learners and contributing members of society. However, as one study noted, alignment between primary curricula and deep learning pedagogy is often partial and fragmented, hindered by overloaded content, exam-driven assessment practices, and limited teacher support in designing deep learning tasks (Maarif et al., 2025).

Several studies indicate that the implementation of deep learning in primary schools can enhance Higher-Order Thinking Skills (HOTS), creativity, and students' learning autonomy (Komara et al., 2026). Learning models such as Problem-Based Learning (PBL), Project-Based Learning (PjBL), and reflective learning are considered effective in supporting deep learning as they provide space for students to explore ideas, engage in discussions, and construct understanding independently (Cahayana et al., 2026). Nevertheless, the implementation of deep learning in primary schools still faces various obstacles, including the dominance of rote-based learning, limited pedagogical competence of teachers, and an orientation toward academic achievement alone (Fauziah et al., 2025).

Kurikulum Berbasis Cinta in Primary Education

The characteristics of the Merdeka Curriculum at the elementary level are designed to provide flexibility for teachers and schools to develop contextual and student-centered learning approaches. This curriculum emphasizes developing students' competencies through project-based learning and the integration of character education, aligning with the principles of holistic learning. The Kurikulum Berbasis Cinta is an educational approach that places compassion, empathy, respect for human dignity, a sense of security, and positive interpersonal relationships at the core of the learning process. Noddings in her book named *"The Challenge to Care in Schools: An Alternative Approach to Education"* stated that education focused solely on academic aspects without attention to affective dimensions will produce individuals who are intellectually intelligent but lack empathy and social concern.

She further asserted that caring should be the central focus of all educational activities. This approach emphasizes that educational success should be measured not only by academic achievement but also by students' ability to develop character, social awareness, and emotional well-being. Research findings indicate that implementing the Kurikulum Berbasis Cinta in primary education contributes to character reinforcement, empathy development, and the creation of healthy emotional relationships between teachers and students (Azzahra et al., 2022; Kartika & Arifudin, 2026). This approach is considered relevant for addressing various social problems in the school environment, such as bullying, low social awareness, and weak interpersonal communication. A humanistic and supportive learning environment is believed to enhance students' motivation to learn, self-confidence, and engagement in the learning process.

Holistic Learning and the Integration of Both Approaches

Holistic learning is an approach that views students as whole beings with interconnected intellectual, emotional, social, spiritual, and physical dimensions. Syah, in his book named *"Psikologi Pendidikan dengan Pendekatan Baru"* stated that holistic education recognizes the complexity of human development and emphasizes the importance of nurturing all aspects of a student's personality, not merely their cognitive abilities. This approach rejects the reductionism in education that focuses solely on one particular aspect, such as cognitive development, without attending to others. In holistic learning, the educational process aims not only to transfer knowledge but also to shape character, develop empathy, and prepare students to live harmoniously within society. The integration of deep learning and the Kurikulum Berbasis Cinta holds great potential for realizing holistic learning. Deep learning supports the development of cognitive aspects through meaningful learning, critical thinking, reflection, and problem-solving, while the Kurikulum Berbasis Cinta strengthens affective aspects by fostering empathy, compassion, social awareness, and positive interpersonal relationships (Efendi et al., 2026; Zainuddin et al., 2026).

These two approaches complement each other, as deep learning requires a safe and supportive learning environment (provided by the Kurikulum Berbasis Cinta) to function optimally. In contrast, the Kurikulum Berbasis Cinta requires a meaningful and reflective learning process (provided by deep learning) to avoid being merely romanticized without intellectual substance. This conceptual synergy is further elaborated through a literature study analyzing the relationship between deep learning, the Kurikulum Berbasis Cinta, and the Merdeka Curriculum. The findings suggest that deep learning and the Kurikulum Berbasis Cinta are not replacements for the Merdeka Curriculum but rather complementary components that can form a synergistic, multi-layered curriculum model. This model integrates conceptual mastery, character development, and the values of compassion simultaneously, creating a holistic learning ecosystem in Islamic primary education (Annawa et al., 2026).

METHODS

This study employed a Systematic Literature Review (SLR) approach, using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram, to identify, analyze, and synthesize the literature on the integration of deep learning and the Kurikulum Berbasis Cinta in holistic learning within primary education. This method was chosen because it enables a systematic, structured, and transparent review that minimizes researcher subjectivity in the literature analysis process. Data sources for this study were obtained from national and international scientific articles accessed through Google Scholar, ERIC, Garuda, DOAJ, ScienceDirect, and Semantic Scholar. The review focused on deep learning in primary education, holistic learning, humanistic education, character education, and curriculum development grounded in humanistic values. The literature reviewed was limited to publications from 2021 to 2026 to ensure relevance to contemporary educational developments.

The article search was conducted using keywords such as "*deep learning in elementary education*", "*holistic learning*", "*humanistic learning*", "*Kurikulum Berbasis Cinta*", "*character education*" and "*meaningful learning*" combined with the Boolean operators AND and OR. Additionally, snowballing techniques were employed by tracing the reference lists and citations of relevant articles to obtain additional sources. Data analysis was conducted using thematic analysis and narrative synthesis. Thematic analysis was used to identify main themes and patterns across various studies. At the same time, narrative synthesis was employed to connect research findings to achieve a comprehensive understanding of the integration of deep learning, character reinforcement, empathy, and holistic learning in primary education. The theoretical framework of this study draws on constructivist theory, humanistic learning theory, and deep learning. Constructivist theory positions students as active subjects who construct knowledge through meaningful learning experiences.

The humanistic approach emphasizes the importance of empathy, compassion, respect for students, and interpersonal relationships in the learning process. Meanwhile, deep learning focuses on the development of critical thinking, problem-solving, reflection, and meaningful learning. The inclusion criteria for this study were: articles discussing deep learning, humanistic learning, holistic learning, or the Kurikulum Berbasis Cinta in primary education; published between 2021 and 2026; available in full text; and relevant to curriculum development or learning processes. The exclusion criteria included: articles not relevant to primary education; non-scientific articles; duplicate articles; unclear methodology; and articles without full-text access. Based on the PRISMA flow diagram, 60 articles were identified in the initial stage. Following the screening process, 40 articles remained. The eligibility stage resulted in articles that met the methodological requirements, and 10 articles were selected as the main sources for the research synthesis.

RESULTS AND DISCUSSION

Results of the Literature Review on Deep Learning in Primary Education

Based on the literature search conducted through Google Scholar, ERIC, Garuda, and ScienceDirect, the researchers identified approximately 20 articles discussing deep learning in the context of primary education (see **Table 1**). After a selection process based on thematic relevance, methodological quality, and alignment with the research focus, five main articles were selected for the research synthesis table. The results indicate that deep learning in primary education is not only oriented toward content mastery but also emphasizes meaningful learning through active student engagement in critical thinking, reflection, problem-solving, and connecting material to real-life experiences. Various studies have also shown that the deep learning approach can enhance higher-order thinking skills (HOTS), creativity, and student

learning autonomy at the primary school level (Komara et al., 2026). This finding is further supported by research on the implementation of deep learning in elementary mathematics, which found that this approach demonstrably improves students' conceptual understanding, reasoning skills, and numeracy, despite being constrained by limited instructional time and unequal access to technology (Mutmainnah et al., 2025).

Table 1. Synthesis of Literature on Deep Learning

Year	Author(s)	Article Title	Summary of Findings	Journal Name
2026	Dipayana et al.	Bridging Worlds: An Integrative Framework for Deep Learning and Ethnoscience in Elementary IPAS Education	Integration of deep learning with local wisdom to overcome rote learning in elementary IPAS. Local culture serves as a bridge toward deep conceptual understanding.	Jurnal Konseling dan Pendidikan
2026	Cahayana et al.	Integration of Creative Problem Solving and Deep Learning in Physics Education to Support SDG-4 Quality Education: A systematic literature review	Combining CPS model with deep learning approach in physics education. CPS for creative thinking + deep learning for conceptual understanding = comprehensive learning.	Jurnal Penelitian Pendidikan IPA (JPPIPA)
2025	Mudjib et al.	<i>Problematika Teknologi dalam Pendekatan Deep Learning Matematis di Indonesia</i> (Technological Problems in the Mathematical Deep Learning Approach in Indonesia)	Identification of challenges in using technology (GeoGebra, AI, AR, LMS) in mathematical deep learning in Indonesia. Technology is available, but teachers are unprepared, infrastructure is uneven, and training is minimal.	Polinomial: Jurnal Pendidikan Matematika
2026	Marina et al.	Deep Learning Pedagogy in SBdP Instruction for the 6C Skill in Elementary School	Application of deep learning in SBdP (Arts, Culture, and Crafts Education) to develop 6C competencies (Creativity, Critical Thinking, Communication, Collaboration, Character, Citizenship). SBdP is not an additional subject but a strategic space for 21st-century competencies.	Jurnal Cakrawala Pendas
2025	Mutmainnah et al.	<i>Implementasi pendekatan Deep Learning terhadap pembelajaran matematika di SD</i> (Implementation of the Deep Learning Approach in Elementary Mathematics Learning)	Deep learning improves conceptual understanding, reasoning skills, and numeracy skills of elementary students, although constrained by time and unequal access to technology.	Pendas : Jurnal Ilmiah Pendidikan Dasar

Source: Research 2026

In addition to enhancing cognitive aspects, the literature synthesis results indicate that implementing deep learning promotes more reflective, collaborative, and student-centered learning. Learning models such as Problem-Based Learning, Project-Based Learning, and reflective learning are considered effective in supporting deep learning because they provide space for students to explore ideas, discuss, and construct understanding independently. However, several studies reveal that the implementation of deep learning in primary schools still faces various obstacles, including the dominance of rote-based learning, limited pedagogical competence of teachers, and a learning orientation still focused on academic achievement. Therefore, a learning approach capable of integrating intellectual development with meaningful and humanistic learning is required (Fauziah et al., 2025).

Results of the Literature Review on Kurikulum Berbasis Cinta

Based on the literature search conducted through Google Scholar, Garuda, and DOAJ, the researchers identified approximately 20 articles discussing humanistic education, caring pedagogy, and the Kurikulum Berbasis Cinta in primary education (see **Table 2**). After a selection process based on thematic relevance and methodological quality, five main articles were selected for the research synthesis table. The results indicate that the Kurikulum Berbasis Cinta places compassion, empathy, respect for students, and positive interpersonal relationships at the core of the learning process. This approach emphasizes that educational success should be measured not only by academic achievement but also by students' ability to develop character, social awareness, and emotional well-being. A humanistic and supportive learning environment is believed to enhance students' learning motivation, self-confidence, and engagement in the learning process.

Table 2. Synthesis of Literature on Kurikulum Berbasis Cinta

Year	Author(s)	Article Title	Summary of Findings	Journal Name
2026	Kartika & Arifudin	<i>Implementasi Kurikulum Cinta dalam Pendidikan Agama Islam untuk Meningkatkan Karakter Siswa</i> (Implementation of the Love-Based Curriculum in Islamic Religious Education to Enhance Student Character)	The Kurikulum Berbasis Cinta approach facilitates teachers in delivering material and receives positive student responses. A warm and affectionate classroom atmosphere creates a more effective and enjoyable learning process.	Antologi Kajian Multidisiplin Ilmu (AI-Kamil)
2026	Nurrohman et al.	Adaptive curriculum integration in Islamic primary education: Bridging the <i>Kurikulum Merdeka</i> and <i>Kurikulum Berbasis Cinta</i> in an Indonesian madrasah	This study analyzes the integration of the Kurikulum Berbasis Cinta with the National Curriculum, which has transformed teachers' approaches to become more reflective and humanistic, thereby enhancing students' religiosity, empathy, and motivation.	Heritage Journal of Islamic Education
2025	Shulhan	<i>Pentingnya Implementasi Kurikulum Berbasis Cinta pada Madrasah Ibtidaiyah untuk Membentuk Kepribadian Anak</i> (The Importance of Implementing a Love-Based Curriculum in Islamic Elementary Schools to Shape Children's Personality)	The success of the Kurikulum Berbasis Cinta requires a combination of religious knowledge (as a value guide) and technological knowledge (as a tool for contribution). Love-based education functions to liberate students from oppressive social structures, capitalist domination, and repressive values.	MUBTADI: Jurnal Pendidikan Ibtidaiyah
2025	Maharani et al.	<i>Implementasi Kurikulum Berbasis Cinta pada Madrasah Ibtidaiyah di Kota Palembang; Sebuah Studi Literatur</i> (Implementation of the Love-Based Curriculum in Islamic Elementary Schools in Palembang City: A Literature Study)	Implementation of the Kurikulum Berbasis Cinta in Islamic elementary schools requires strategies that integrate love values throughout the learning process, with teachers as central actors translating love into concrete and meaningful learning activities.	El-Banar: Jurnal Pendidikan dan Pengajaran

Year	Author(s)	Article Title	Summary of Findings	Journal Name
2025	Hayatie & Siswati	<i>Kurikulum Berbasis Cinta di Sekolah Dasar : Implementasi Pendidikan Afektif untuk Membentuk Karakter Siswa</i> (Love-Based Curriculum in Elementary Schools: Implementation of Affective Education to Shape Student Character)	The Kurikulum Berbasis Cinta is implemented through three main pillars: (1) a loving learning environment; (2) integration of love values into learning materials; and (3) humanistic pedagogical relationships between teachers and students.	Maulida: Jurnal Pendidikan Sosial dan Humaniora

Source: Research 2026

One of the results of the literature synthesis also shows that implementing the Kurikulum Berbasis Cinta in primary education contributes to character reinforcement, empathy development, and the creation of healthy emotional relationships between teachers and students (Azzahra et al., 2022). This approach is considered relevant for addressing various social problems in the school environment, such as bullying, low social awareness, and weak interpersonal communication. Several studies indicate that teachers play an important role as emotional mentors, not only delivering learning materials but also creating a sense of safety and comfort in the learning process. However, the implementation of the Kurikulum Berbasis Cinta still faces challenges, primarily because the education system tends to be oriented toward academic achievement and has not fully provided space for reinforcing affective aspects in learning.

Integration of Deep Learning and Kurikulum Berbasis Cinta in Primary Education

The synthesis of the literature indicates that deep learning and the Kurikulum Berbasis Cinta are complementary in realizing holistic learning in primary education. Deep learning plays a role in developing cognitive aspects through meaningful learning, critical thinking, reflection, and problem-solving. At the same time, the Kurikulum Berbasis Cinta strengthens affective aspects by fostering empathy, compassion, social awareness, and positive interpersonal relationships. The integration of these two approaches creates a learning process oriented not only toward academic achievement but also toward students' emotional development and character formation (Zainuddin et al., 2026).

In its implementation at the elementary/Islamic elementary school level, the integration of deep learning and the Kurikulum Berbasis Cinta can be applied through reflective, collaborative, and student-centered learning. Teachers act not only as content deliverers but also as facilitators and mentors who create a humanistic, safe, and supportive learning environment. Learning models such as Problem-Based Learning, Project-Based Learning, and reflective discussions can encourage students to think critically while developing empathy and social concern. A learning environment filled with appreciation and affection also helps students become more confident in expressing their opinions, collaborating, and exploring learning experiences more meaningfully (Zainuri et al., 2025).

The integration of deep learning and the Kurikulum Berbasis Cinta has important pedagogical implications for the development of primary education. This approach can serve as an alternative to reduce the dominance of learning that is overly oriented toward academic achievement and to encourage the creation of more humanistic and meaningful education. However, its implementation still faces various challenges, such as teacher readiness, a learning culture that remains focused on rote memorization, and an educational evaluation system that places greater emphasis on cognitive aspects than on character and emotional development (Fauziah et al., 2025). Thus, integrating these two approaches makes an important contribution to developing a primary education curriculum that is more balanced between cognitive and affective aspects, thereby shaping students who are critical, reflective, empathetic, and of good character.

Discussion

The integration of deep learning and the Kurikulum Berbasis Cinta identified in this study offers a fundamental theoretical synthesis in responding to the challenges of dehumanization in contemporary primary education. This finding critically transcends the dichotomous view that has long separated the strengthening of cognitive and affective domains in curriculum practice. The analysis reveals that deep learning cannot be optimally implemented in an authoritarian classroom or one devoid of healthy emotional bonds; rather, an environment filled with empathy and affection serves as a prerequisite for high-level cognitive engagement. In other words, this integration refutes the assumption that humanistic approaches are only relevant for character education while simultaneously proving that such approaches are a crucial foundation for the formation of reflective and critical learning communities. This finding aligns with the principles of the Kurikulum Merdeka (Independent Curriculum), which emphasize the importance of a safe, inclusive, and student-centered learning environment to support the holistic development of competencies and character.

This integrative finding enriches and critiques the implementation of the Kurikulum Merdeka, particularly in the Natural and Social Sciences (IPAS) subject at the elementary school level. Previous research identified that although the Learning Outcomes (CP) for IPAS are designed to create holistic learning, their implementation in the field is often partial and not fully integrated (Permatasari et al., 2025). This occurs because teachers still tend to teach the science and social studies components separately due to a lack of conceptual understanding of integration. The findings of this study fill this gap by offering a synergistic account of the relationship between cognitive and affective dimensions. This synergy is further substantiated by research that demonstrated that deep learning and Kurikulum Berbasis Cinta can be effectively integrated into elementary mathematics instruction by developing learning tools such as in-depth lesson plans, assessments, and student worksheets that incorporate both the eight dimensions of graduate profiles and the six themes of love (Yustinaningrum, 2025).

That integrative framework is empirically supported by a qualitative case study conducted at Madrasah Ibtidaiyah Negeri 3 Jember, which found that integrating deep learning with a Kurikulum Berbasis Cinta fostered more active participation, deeper contextual understanding, reflective thinking, and collaborative meaning-making among students. The study also revealed that the values of empathy, care, respect, and emotional support created a safe, positive classroom climate that strengthened students' motivation, confidence, and social interaction. Instructional leadership, teacher collaboration, and parental involvement were identified as key supporting factors in implementing this approach (Ramadhani et al., 2026). This means that teachers are not only required to combine scientific content but also to design learning experiences that simultaneously build empathy and critical thinking skills. Through Project-Based Learning (PjBL) integrated with love values, students are invited not merely to understand natural and social phenomena but also to develop an attitude of care toward their environment and surrounding community.

However, various empirical studies indicate that implementing this integration in the field still faces complex systemic challenges, particularly those related to teacher readiness and learning culture. A study revealed that the main problem in implementing the Kurikulum Merdeka in elementary schools is teachers' lack of understanding of differentiated learning and authentic assessment, which are vital components of deep learning (Anjeliani et al., 2024). One study also found that at SD Negeri Cikampek Selatan I. However, teachers have begun implementing deep learning principles, challenges remain in teacher readiness for new pedagogical practices and the limited availability of digital learning facilities (Eryanto & Prasetyono, 2025). This challenge is further substantiated by a phenomenological study on elementary school teachers, which revealed that the transition to deep learning models requires not only pedagogical

understanding but also a fundamental shift in teachers' beliefs about the nature of learning and their role in the classroom (Asitah et al., 2026).

On the other hand, Noddings in her book named *"The Challenge to Care in Schools: An Alternative Approach to Education"* stated that caring pedagogy will not be effective if teachers only act as content deliverers without building meaningful personal relationships with students. This condition reinforces the argument that technical interventions alone are insufficient; a paradigmatic transformation is required in how teachers perceive themselves as role models and emotional mentors. This argument is supported by critically exploring the conceptual link between philosophical realism and the Kurikulum Berbasis Cinta in supporting deep learning in Madrasah Ibtidaiyah. A study found that integrating realism, emphasizing objective, fact-based knowledge, with compassion and humanistic values can form project-based learning models that foster critical thinking, empathy, and spirituality, establishing a balanced foundation between empirical rationality and affective sensitivity for meaningful learning (Rusdiana et al., 2026).

From the perspective of curriculum policy, these findings provide scientific justification for the latest mandate contained in the Decree of the Head of BSKAP Number 046/H/KR/2025 concerning Learning Outcomes. This policy document explicitly emphasizes that learning outcomes are designed to support holistic learning that integrates cognitive, affective, and psychomotor aspects, while providing flexibility for educational units to adapt learning to local needs and student characteristics. The integration of deep learning and the Kurikulum Berbasis Cinta produced in this study can be operationalized as an implementation model for this policy. This position is further reinforced by demonstrating that epistemology serves as a conceptual foundation that determines perspectives on the nature of knowledge, while pedagogy serves as the implementation bridge that translates philosophical foundations into learning strategies. Deep learning is the ultimate goal, encompassing conceptual understanding, critical reflection, interconceptual relationships, and the application of knowledge in real-world contexts (Fikri et al., 2025).

For example, in developing Alur Tujuan Pembelajaran (ATP), teachers can design projects that not only target content mastery (cognitive) but also explicitly set goals for developing empathy and social responsibility (affective). This aligns with the assessment principles of the Kurikulum Merdeka, which require assessment to be conducted fairly, proportionally, and holistically, covering both the process and learning outcomes of students. The results of this study reinforce the discourse on the importance of realizing holistic education as the foundation of the national education system. Biyanto, in his article in Media Indonesia (see at: <https://ban-pdm.id/news/detail/2025/1/ruu-sisdiknas-dan-harapan-mewujudkan-pendidikan-holistik>), reminds us that holistic education, which integrates intellectual, emotional, spiritual, social, cultural, and physical potentials, is a necessity for addressing various social problems such as violence, bullying, intolerance, and corruption that are increasingly prevalent.

Explained that integrating Islamic educational institutions, the deep learning approach, and a Kurikulum Berbasis Cinta has strategic potential in creating deeper, more holistic, and student-centered learning experiences that meet children's developmental needs while simultaneously strengthening their character and spirituality in elementary schools (Daniah et al., 2025). Drawing on the thoughts of Ki Hadjar Dewantara, education must develop (heart/character), (mind/intellect), and (body/physical) in an integrated manner. The integration of deep learning and the Kurikulum Berbasis Cinta is a concrete effort to realize this vision. Deep learning hones critical and reflective thinking skills (mind), while the Kurikulum Berbasis Cinta builds character, empathy, and healthy social relationships (heart and social sense). When these two aspects operate simultaneously in the learning process, education no longer merely transfers knowledge but truly becomes a transformative process of holistic human development, the formation of whole human beings who are cultured and humane.

In closing this discussion, it is important to acknowledge that the success of this integration heavily depends on the transformation of the teacher's role as an agent of change. Teachers are not sufficiently equipped by merely mastering content or teaching methods; they must be able to create a classroom ecosystem that is psychologically safe and intellectually stimulating. Unfortunately, recent studies show that the gap between policy and reality remains considerable. Factors such as a lack of ongoing training, high administrative burdens, and limited infrastructure in disadvantaged areas are structural obstacles that cannot be ignored. Therefore, policy recommendations that need to be immediately implemented include strengthening school-based Professional Learning Communities (PLCs), developing integrated teaching modules equipped with affective reflection guides, and adjusting teacher evaluation systems to measure not only students' academic achievement but also the quality of interpersonal relationships within the classroom. Without systemic and sustainable support, this integration risks becoming merely a normative discourse without tangible impact in the field.

CONCLUSION

This study provides theoretical and conceptual evidence that integrating deep learning with the Kurikulum Berbasis Cinta transcends the cognitive-affective dichotomy that has long characterized primary education practices. The main finding of this study indicates that the success of deep learning is determined not solely by pedagogical strategies or technological sophistication, but also by the quality of emotional relationships between teachers and students, as well as by a psychologically safe, appreciative classroom climate. Conversely, the Kurikulum Berbasis Cinta will not be effective if it merely stops at normative slogans without being balanced by the critical and reflective thinking processes that lie at the core of deep learning. Thus, the integration of these two approaches offers a holistic curriculum model that views students as whole persons with interconnected and inseparable intellectual, emotional, and social dimensions in the learning process.

Furthermore, this study finds that the synergy between deep learning and the Kurikulum Berbasis Cinta creates a transformative pedagogical foundation for 21st-century primary education. Deep learning provides a framework for critical thinking, reflection, and problem-solving, enabling students not only to receive information passively but also to interpret and apply knowledge in real-life contexts. Meanwhile, the Kurikulum Berbasis Cinta provides a warm, empathetic, and supportive affective ecosystem in which students feel safe to explore, express their opinions, and even make mistakes as part of the learning process. When these two frameworks operate simultaneously, education no longer functions as a mechanistic instrument for knowledge reproduction but rather as a space for *bildung* the formation of whole human beings who possess intellectual intelligence as well as emotional and spiritual maturity.

Based on these findings, this study recommends that further research not stop at the conceptual level but also develop integrated implementation models that can be empirically tested across various primary school contexts, including those with limited resources and access to technology. Longitudinal studies are also needed to measure the long-term impact of this integration on students' character development, psychological well-being, and academic achievement from primary through secondary education. Furthermore, the development of holistic assessment instruments capable of measuring cognitive and affective achievements simultaneously is an important agenda for researchers and curriculum developers in the future. Thus, the integration of deep learning and the Kurikulum Berbasis Cinta becomes not merely a theoretical alternative but a practical solution for creating a more humanistic, meaningful, and relevant education system that responds to the challenges of the times.

AUTHOR'S NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors affirm that the data and content of this article are free from plagiarism.

REFERENCES

- Anjeliani, S., Yanti, L. D., Aisyah, S., Saputra, M. R., Khoirunnisa, K., & Risdalina, R. (2024). Analisis problematika penerapan Kurikulum Merdeka di sekolah dasar. *Jurnal Inovasi, Evaluasi dan Pengembangan Pembelajaran (JIEPP)*, 4(2), 294-302.
- Annawa, M. A., Reni, D. S., & Maharani, W. F. (2026). Deep learning and the love-based curriculum in madrasah ibtdaiyah: Implications for the implementation of the Merdeka Curriculum. *Misool: Jurnal Pendidikan Dasar*, 8(1), 14-23.
- Asitah, N., Anam, F., Ismanto, H., Wahyudi, A., & Adi, T. (2026). Implementasi model pembelajaran deep learning dalam Kurikulum Merdeka: studi fenomenologis guru sekolah dasar. *Nusantara Educational Review*, 4(1), 1-11.
- Azzahra, S. F., Maulana, H. S., & Pramudiani, P. (2022). Implementasi teori humanistik dalam pembelajaran tematik terpadu terhadap kemampuan berpikir kreatif peserta didik sekolah dasar. *Dwija Cendekia: Jurnal Riset Pedagogik*, 6(3), 654-663.
- Cahayana, M. R., Purwaningsih, E., Putri, A. M., Artanti, K. P. A. I., & Ihshan, M. I. (2026). Integration of Creative problem solving and deep learning in physics education to support SDG-4 quality education: a systematic literature review. *Jurnal Penelitian Pendidikan IPA*, 12(4), 149-152.
- Daniah, N. R., Sujadmiko, I., Zainuri, A., & Zahra, F. F. (2025). Pengaruh lembaga pendidikan Islam deep learning Kurikulum Berbasis Cinta pengembangan materi ajar pada sekolah dasar. *Tarbiyah: Jurnal Pendidikan dan Pembelajaran*, 2(4), 177-188.
- Dipayana, I. K., Winangun, I. M. A., & Suparya, I. K. (2026). Bridging worlds: an integrative framework for deep learning and ethnoscience in elementary IPAS education. *Jurnal Konseling dan Pendidikan*, 14(2), 331-338.
- Efendi, Y., Putri, R. M., Putra, A. D., & Pratiwi, A. (2026). Optimalisasi pembelajaran deep learning pada implementasi Kurikulum Merdeka di sekolah dasar: analisis literatur. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 11(1), 20-35.
- Eryanto, D., & Prasetyono, H. (2025). Efektivitas pembelajaran mendalam dalam implementasi Kurikulum Merdeka di SD Negeri Cikampek Selatan I. *Jurnal Evaluasi Pendidikan*, 16(2), 88-94.
- Fadhlurahman, M. Z., Irwandani, & Firmansyah, D. (2026). Deep learning in elementary school: systematic literature review. *Jurnal Penelitian Pendidikan IPA (JPPIPA)*, 12(3), 8-19.
- Fauziah, U. N., Ramadani, S., Mahfuroh, L., Adetia, M. F., & Sutari, D. (2025). Implementasi prinsip-prinsip deep learning dalam pembelajaran di sekolah dasar. *Edukasi Tematik*, 6(3), 171-176.

- Fikri, K., Mahardika, K., Waluyo, J., & Soepomo, B. (2025). From epistemology to pedagogy: philosophical foundations for deep learning in the Merdeka Curriculum. *Jurnal Kiprah Pendidikan*, 4(4), 725-732.
- Hayatie, M., & Siswati, V. (2026). Kurikulum berbasis cinta di sekolah dasar: implementasi pendidikan afektif untuk membentuk karakter siswa. *Jurnal Pendidikan Sosial dan Humaniora*, 5(2), 1799-1818.
- Kartika, I., & Arifudin, O. (2026). Implementasi kurikulum cinta dalam pendidikan agama Islam untuk meningkatkan karakter siswa. *Antologi Kajian Multidisiplin Ilmu (Al-Kamil)*, 4(1), 56-70.
- Komara, R., Widyamahati, T., Sahara, & L. N. (2026). Pembelajaran mendalam (deep learning) dalam pendidikan dasar: a systematic literature review terhadap pemahaman konseptual, HOTS, dan kualitas pembelajaran. *Jurnal Ilmiah Ilmu Pendidikan*, 9(3), 67-82.
- Lathifah, A., Saputro, B. A., Prasetyowati, D., & Rachmawati, Y. (2023). Perkembangan sosial emosional peserta didik usia dasar. *Jurnal Ilmiah PGSD FKIP Universitas Mandiri*, 9(4), 1796-1808.
- Maarif, M. S., Susanto, T. T. D., Mayasari, L. I., & Takdir, M. (2025). Evaluasi kesesuaian kurikulum sekolah dasar dengan pedagogik deep learning: tinjauan literatur sistematis. *Prosiding Fakultas Ilmu Pendidikan Universitas Negeri Jakarta*, 3(1), 558-566.
- Maharani, A., Nugraha, L., Zainuri, A., & Hamzah, A. (2025). Implementasi kurikulum berbasis cinta pada madrasah ibtidaiyah di Kota Palembang: sebuah studi literatur. *El Banar: Jurnal Pendidikan dan Pengajaran*, 8(2), 100-111.
- Marina, S., Komalasari, H., & Komalasari, D. (2026). Deep learning pedagogy in SBDP instruction for the 6C skill in elementary school. *Jurnal Cakrawala Pendas*, 12(2), 300-317.
- Mudjib, R., Wastralangkara, W. W., Syalsabilla, A. A., & Susilawati, W. (2025). Problematika teknologi dalam pendekatan deep learning matematis di Indonesia. *Polinomial: Jurnal Pendidikan Matematika*, 4(4), 88-102.
- Mutmainnah, N., Adrias, A., & Zulkarnaini, A. P. (2025). Implementasi pendekatan deep learning terhadap pembelajaran Matematika di sekolah dasar. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(1), 848-871.
- Nurrohman, F. A., Zakarya, M. A., Akyas, G., & Saputra, A. H. (2026). Adaptive curriculum integration in Islamic primary education: bridging the Kurikulum Merdeka and Kurikulum Berbasis Cinta in an Indonesian madrasah. *Heutagogia: Journal of Islamic Education*, 6(1), 71-81.
- Permatasari, A., Mulyasari, E., Hendriawan, D., Rokayah, E., & Bait, E. H. (2025). Analisis pengembangan kurikulum mikro mata pelajaran Ilmu Pengetahuan Alam dan Sosial (IPAS) pada implementasi Kurikulum Merdeka di sekolah dasar. *Jurnal Pendidikan Dasar*, 13(2), 45-60.
- Ramadhani, R. A., Muhith, A., & Sutomo, M. (2026). Integrating deep learning and a love-based curriculum to enhance meaningful learning in Islamic primary education. *Al-Adzka: Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah*, 16(1), 58-72.
- Rusdiana, R., Yaqin, H., Hamdan, H., & Ma'ruf, H. (2026). Reactualizing 'aql and qalb in Islamic education: a deep learning and love-based approach within the Merdeka Curriculum framework. *Al Ghazali: Jurnal Pendidikan dan Pemikiran Islam*, 6(1), 325-341.

- Saputri, S., & Ardivanto, A. (2025). Penanaman pendidikan karakter pada peserta didik di sekolah dasar. *Jurnal Edukasi dan Riset*, 6(1), 166-173.
- Shulhan, S. (2025). Pentingnya implementasi kurikulum berbasis cinta pada madrasah ibtidaiyah untuk membentuk kepribadian anak. *Mubtadi: Jurnal Pendidikan Ibtidaiyah*, 5(1), 86-98.
- Yustinaningrum, B. (2025). Inseri pendekatan deep learning dan kurikulum berbasis cinta terintegrasi pada mata pelajaran Matematika. *Santika: Seminar Nasional Tadris Matematika*, 5(1), 341-348.
- Zainuddin, A. H., Al Kamil, M. N., & Japar, R. (2026). Penerapan pembelajaran mendalam (deep learning) di sekolah dasar: studi literatur. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 11(1), 20-32.
- Zainuri, A., Maulana, N. I., Saputri, E. Y., & Zahra, F. F. (2025). Penggunaan pengembangan Islam dan ilmu pengetahuan kurikulum berbasis cinta pengembangan materi ajar pada sekolah dasar. *Journal of Literature Review*, 1(2), 721-740.