

From Policy to Pedagogy: Designing and Implementing Deep Learning within Independent Curriculum in Islamic Higher Education Context

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Abstract

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This study aims to analyze the design, implementation, and systemic challenges of integrating deep learning principles within the Independent Curriculum (Kurikulum Merdeka) framework in Islamic higher education. Utilizing a qualitative multi-site case study design at two State Islamic Universities in Surakarta and Yogyakarta, this research explores the contextualization of learning autonomy within a religious value framework. Data were gathered through in-depth interviews with ten key informants (policymakers, lecturers, and students), classroom observations, and documentary analysis of semester lesson plans (RPS) between August and December 2025. Data analysis was conducted thematically through coding, categorization, and cross-site comparison to ensure the validity of the findings. The findings reveal that curriculum integration is driven by an epistemological shift from content transmission toward meaningful knowledge construction aligned with the Islamic concepts of 'ilm (*knowledge*) and adab (ethics). Classroom practices reflect student-centered pedagogy through reflective inquiry, project-based collaboration, and authentic assessment. However, significant obstacles were identified, including rigid semester time constraints, varying levels of student readiness for independent learning, and an urgent need for enhanced lecturers' pedagogical capacity to manage dialogical classrooms. Theoretically, this study contributes to the recontextualization of deep learning as a manifestation of ta'auqul (critical reasoning) and tadabbur (reflective contemplation). Practically, it offers a framework for transforming policy into an integrative pedagogical practice. This study's limitation lies in its focus on state universities; therefore, future research is encouraged to explore private Islamic higher education institutions with diverse religious organizational backgrounds to broaden the generalizability of findings across a wider spectrum of higher education.

Kata Kunci:

Kurikulum Merdeka, Deep Learning, Pendidikan Tinggi Islam, Pedagogi, Studi Kasus.

Abstrak

Penelitian ini bertujuan untuk menganalisis desain, implementasi, serta tantangan sistemik dalam mengintegrasikan prinsip deep learning ke dalam Kurikulum Merdeka di lingkungan pendidikan tinggi Islam. Menggunakan desain studi kasus kualitatif multisitus di dua Universitas Islam Negeri di Surakarta dan Yogyakarta, penelitian ini mengeksplorasi kontekstualisasi otonomi belajar dalam kerangka nilai-nilai religius. Data dikumpulkan melalui wawancara mendalam terhadap sepuluh informan kunci (pengambil kebijakan, dosen, dan mahasiswa), observasi kelas, serta analisis dokumen RPS selama periode Agustus hingga Desember 2025. Analisis data dilakukan secara tematik melalui tahap pengodean, kategorisasi, dan perbandingan lintas situs untuk menjamin validitas temuan. Hasil penelitian menunjukkan bahwa integrasi kurikulum didorong oleh pergeseran epistemologis dari transmisi konten menuju konstruksi pengetahuan bermakna yang selaras dengan konsep 'ilm (ilmu) dan adab (etika)'. Praktik kelas merefleksikan pedagogi berpusat pada mahasiswa melalui inkuiri reflektif, kolaborasi berbasis proyek, dan asesmen autentik. Namun,

ditemukan hambatan signifikan berupa keterbatasan waktu semester, variasi kesiapan mandiri mahasiswa, serta urgensi peningkatan kapasitas pedagogis dosen dalam mengelola kelas secara dialogis. Secara teoretis, studi ini berkontribusi pada rekontekstualisasi deep learning sebagai manifestasi nilai ta'aqul dan tadabbur. Secara praktis, penelitian ini menawarkan kerangka kerja transformasi kebijakan menuju praktik yang lebih integratif. Keterbatasan penelitian ini terletak pada fokusnya pada universitas negeri, sehingga penelitian selanjutnya disarankan untuk mengeksplorasi perguruan tinggi Islam swasta dengan latar belakang organisasi keagamaan yang berbeda guna memperluas generalisasi temuan dalam spektrum pendidikan tinggi yang lebih luas.

INTRODUCTION

The enactment of the Independent Curriculum (*Kurikulum Merdeka*) represents a major shift in Indonesia's educational paradigm, emphasizing learner autonomy, differentiated instruction, and competency-based outcomes (Fisabilillah et al., 2025; Ibrahim et al., 2024). While its implementation has been widely discussed in primary and secondary education, its translation into higher education, particularly within Islamic universities, remains conceptually and practically complex. Islamic higher education institutions operate within a dual mandate: academic excellence and the integration of Islamic values. The introduction of deep learning pedagogy, which prioritizes critical inquiry, reflective thinking, and meaningful knowledge construction, further intensifies this complexity (Fitrah et al., 2025).

In this study, deep learning is operationally defined as a pedagogical approach that emphasizes students' active construction of knowledge through critical inquiry, reflective thinking, problem-solving, and the (van Kesteren et al., 2018). It involves instructional strategies such as inquiry-based learning, project-based tasks, collaborative discussions, and authentic assessment, designed to promote higher-order thinking rather than surface-level memorization (Shapiro, 1999). Within the context of Islamic higher education, deep learning is further conceptualized as the integration of intellectual engagement with ethical and spiritual reflection, aligning cognitive development with the values of *'ilm* (knowledge) and *adab* (ethics). This operational definition guides the analysis of curriculum design, classroom practices, and assessment strategies examined in this study (Linn et al., 2004).

The urgency of this research lies in the growing demand for higher education institutions to move beyond procedural curriculum compliance toward transformative pedagogical practice. Previous studies on *Kurikulum Merdeka* largely focus on school-level readiness (Rizki & Fahkrunisa, 2022a; F. R. Sitorus, 2024), teacher perceptions (Afida & Prihatin, 2024; Lestari et al., 2024), and implementation challenges in basic education settings (Fauzan et al., 2023; Hafiz et al., 2024). Meanwhile, research on deep learning in higher education often centers on Western contexts, detached from Islamic epistemological frameworks (M. Chen, 2022; Winje & Løndal, 2020). Limited scholarly attention has been given to how Islamic universities interpret national curriculum reform while maintaining their distinctive religious-academic identity. Without such an investigation, curriculum reform risks becoming administrative formalism rather than pedagogical transformation. (Varga et al., 2022).

Several strands of literature inform this study. Research on curriculum reform emphasizes the importance of institutional alignment, leadership commitment, and lecturer agency in translating policy into practice (Purnomo et al., 2026; Waly et al., 2025). Studies on deep learning highlight metacognition, problem-based learning, inquiry-driven instruction, and authentic assessment as central mechanisms for fostering higher-order thinking (Archer-Kuhn et al., 2020; Saputra et al., 2025). Within Islamic education discourse, scholars stress the integration of knowledge (*'ilm*), ethics (*adab*), and character formation (*tarbiyah*) as foundational principles.

(Maidugu & Isah, 2024). Emerging research in Indonesian higher education suggests growing interest in student-centered learning and outcome-based education, yet empirical analyses remain fragmented and often descriptive. Few studies adopt multisite qualitative designs to capture cross-institutional dynamics. (Halomoan et al., 2026; Nurhasanah et al., 2025).

Despite these contributions, significant research gaps persist. *First*, there is limited conceptual integration between Independent Curriculum principles and deep learning theory within Islamic higher education settings. *Second*, existing studies rarely examine curriculum reform through a design implementation challenge continuum, resulting in a partial understanding of reform dynamics. (Varga et al., 2022). *Third*, the institutional culture of Islamic universities, shaped by religious values, governance structures, and academic traditions, has not been sufficiently analyzed as a mediating factor in curriculum transformation. This study addresses these gaps by proposing an integrative analytical lens that connects policy design, pedagogical practice, and institutional constraints. (Brod, 2021). Its novelty lies in combining deep learning pedagogy with Independent Curriculum reform within an Islamic higher education context using a qualitative multisite design, thereby offering a contextualized and theoretically informed account of curriculum innovation. (Varga et al., 2022).

Based on these considerations, this study aims to explore how the Independent Curriculum and deep learning are integrated within Islamic higher education institutions. (Zeeb et al., 2019). Specifically, the research investigates: (1) how the integration of Independent Curriculum and deep learning is conceptually designed and constructed within institutional curriculum frameworks; (2) how the integrated approach is implemented in classroom practices and academic activities; and (3) what pedagogical, institutional, and cultural challenges emerge during its implementation. Through a qualitative multisite study employing in-depth interviews, classroom observation, and document analysis, this research seeks to provide a comprehensive understanding of policy translation into pedagogical practice and to contribute a contextualized model for curriculum reform in Islamic higher education.

METHOD

This study employed a qualitative multisite case study design. (Jenkins et al., 2018) to explore how the Independent Curriculum and deep learning were designed, implemented, and experienced within Islamic higher education. A qualitative approach was selected because the integration of curriculum reform and pedagogical transformation involves interpretive processes, institutional culture, and lived academic experiences that cannot be adequately captured through numerical data. (Delaisse & Huot, 2025). The multisite design enabled cross-contextual comparison and pattern identification across two public Islamic universities located in Surakarta and Yogyakarta. These institutions were selected for their active engagement in curriculum reform and for their representation of Islamic higher education within the national system. (Rikhye et al., 2018).

The participants consisted of ten (n=10) interviewees selected through purposive sampling based on their direct involvement in curriculum development and implementation. They included two curriculum policy makers (*one from each university*), two heads of departments, two lecturers actively implementing the Independent Curriculum, and four undergraduate students enrolled in courses designed under the reformed framework. (Ajgaonkar et al., 2021; Olmen et al., 2018). This composition allowed for multi-level perspectives, ranging from policy formulation to classroom experience. Classroom observations focused on instructional practices, student

engagement, and evidence of deep learning. Document analysis examined curriculum blueprints, semester learning plans, and assessment rubrics. Data collection was conducted between August and December 2025 to ensure sustained engagement and contextual immersion. (Jenkins et al., 2018).

Data were analyzed using thematic analysis to identify recurring patterns and meanings across data sources. The analysis followed systematic procedures. (Anderson et al., 2014). *First*, all interview recordings were transcribed verbatim, and field notes from observations were compiled. *Second*, the researcher conducted data familiarization by repeatedly reading transcripts and documents to gain a holistic understanding. (Castleberry & Nolen, 2018). *Third*, initial codes were generated inductively, capturing significant statements related to curriculum design, implementation practices, and challenges. *Fourth*, codes were grouped into broader categories and emerging themes. *Fifth*, themes were reviewed and refined through cross-site comparison to identify similarities and contextual variations. Finally, themes were interpreted in relation to deep learning theory and curriculum reform frameworks. Triangulation across interviews, observations, and documents was applied to enhance credibility and analytical rigor. (Stake, 2013).

RESULTS AND DISCUSSION

Result

Integration of Independent Curriculum and Deep Learning Design

The first key finding reveals that the design of the Independent Curriculum integrated with deep learning emerged from both regulatory demands and internal academic reflection. Interview data indicate that curriculum reform was not merely a response to national policy shifts but also a strategic effort to address concerns about surface learning, passive classroom culture, and limited critical engagement among students. Policymakers emphasized that previous curriculum structures were considered overly content-driven and insufficiently transformative.

The move toward integration was therefore framed as an epistemic shift from content transmission to knowledge construction. Deep learning principles were deliberately introduced to strengthen analytical thinking, reflective engagement, and contextual problem-solving. The design phase involved curriculum mapping, learning outcome revision, and alignment of assessment strategies to ensure that autonomy and intellectual depth became structural features rather than rhetorical aspirations. Curriculum Policymaker said:

“The decision to integrate Independent Curriculum principles with deep learning was based on our internal evaluation. We found that many courses were still emphasizing content completion rather than meaningful understanding. Students could reproduce theories, but they struggled to analyze or apply them critically.”

“In our perspective, curriculum reform should not stop at administrative adjustment. We saw the Independent Curriculum as an opportunity to strengthen deep learning practices. Many lecturers were already experimenting with project-based learning and reflective assignments. What we did was institutionalize these approaches within the curriculum framework.”

The second key finding concerns the core design orientation and intended purpose of integrating Independent Curriculum and deep learning within Islamic higher education. The design framework was structured around three pillars: student autonomy, higher-order thinking, and integration of Islamic values. Autonomy was operationalized through flexible learning pathways and project-based assignments. Deep learning elements were embedded through analytical tasks, collaborative inquiry, and reflective assessment. Importantly, policymakers stressed that

curriculum reform must remain aligned with Islamic epistemological commitments, particularly the integration of knowledge (*'ilm*) and ethical formation (*adab*).

The purpose of integration was therefore not solely academic enhancement but holistic intellectual development. Curriculum documents reflected an intention to cultivate graduates who are critically aware, ethically grounded, and socially responsive. Thus, the design process positioned deep learning as a pedagogical mechanism to actualize the philosophical foundation of Islamic higher education. Curriculum Policymaker said:

"We intended to ensure that deep learning supports our institutional identity. Islamic higher education is not only about mastering disciplinary knowledge but also about developing ethical and reflective individuals."

"We designed the curriculum around meaningful engagement. Students are encouraged to question, analyze, and relate knowledge to contemporary issues. At the same time, we emphasize moral responsibility and academic integrity. Deep learning, in our understanding, strengthens the integration between intellectual rigor and spiritual awareness, which is central to our institutional mission."

Document analysis further corroborates the interview findings. Curricula from both universities show revised graduate learning outcomes that emphasize critical thinking, problem-solving, collaboration, and ethical reasoning. Semester Learning Plans (RPS) demonstrate the incorporation of project-based learning, case analysis, and reflective assignments as structured components of instruction. Assessment rubrics indicate alignment with higher-order cognitive domains, moving beyond factual recall toward analytical and evaluative competencies.

Policy documents explicitly reference flexibility, student-centered learning, and outcome-based education as guiding principles. Additionally, institutional guidelines include statements highlighting the integration of Islamic values within academic activities. The consistency between policy documents and interview narratives suggests that the integration of Independent Curriculum and deep learning was intentionally conceptualized at the structural level, rather than emerging as isolated pedagogical initiatives.

These design practices reflect the core principles of deep learning theory, particularly the emphasis on meaningful knowledge construction, metacognitive engagement, and higher-order thinking. The shift from content coverage to inquiry-oriented learning aligns with constructivist perspectives, where learners actively construct understanding through interaction, reflection, and contextual problem-solving. The incorporation of project-based learning, reflective tasks, and authentic assessment operationalizes deep learning by encouraging analysis, synthesis, and evaluation rather than rote memorization.

Furthermore, the integration of Islamic values into curriculum design extends the notion of deep learning beyond cognitive depth to include ethical and reflective dimensions, thereby situating learning within a holistic epistemological framework. This indicates that the curriculum design not only adopts deep learning in principle but also translates it into observable pedagogical structures and intended learning outcomes.

The Implementation of Independent Curriculum and Deep Learning in Classroom Practice

The second finding demonstrates that the implementation of the Independent Curriculum, integrated with deep learning, was evident in student-centered instructional strategies, inquiry-based discussions, and project-oriented assessment. Lecturers reported shifting from lecture-dominant delivery toward facilitative roles, encouraging students to question, debate, and

relate theoretical concepts to contemporary issues. Learning activities frequently involved case analysis, collaborative problem-solving, and reflective writing tasks. Students were given flexibility in selecting project themes aligned with course outcomes, which strengthened their sense of ownership and autonomy.

Heads of departments emphasized monitoring mechanisms to ensure alignment between the designed curriculum frameworks and classroom enactment. Although implementation varied across courses, a consistent emphasis on critical engagement, contextual application, and reflective dialogue was evident. The integration was therefore not merely structural but pedagogically enacted through interactive learning environments and authentic assessment practices. The Head of Department said.

“We encourage lecturers to move beyond content delivery. In our monitoring meetings, we ask how students are being engaged in inquiry and reflection. The Independent Curriculum allows flexibility, but deep learning ensures that flexibility leads to intellectual depth, not superficial activities.” Moreover, the lecturer said:

“In my class, I rarely use full lectures now. Students work in groups analyzing real cases, then present arguments supported by theory. I guide the discussion and challenge their reasoning. This approach makes them more active and responsible for their learning.”

An additional pattern observed across interviews was the deliberate integration of assessment with deep learning indicators. Lecturers explained that the grading criteria were redesigned to evaluate analytical rigor, originality of argument, quality of collaboration, and reflective insight. Rather than relying solely on mid-term and final examinations, they incorporated project portfolios, presentations, and reflective essays as components of cumulative assessment. This shift required greater preparation and feedback time, yet participants viewed it as essential for sustaining deep engagement. Students acknowledged that such assessment methods demanded more effort but encouraged continuous learning rather than short-term memorization. Department leaders further noted that internal academic forums were organized to share best practices and refine implementation strategies across courses.

“We changed our assessment rubric to focus on argument strength, evidence use, and reflection. Exams are still there, but they are not the only measure. Students now build portfolios and present their projects, which reflect deeper understanding and continuous learning.”

Classroom observations confirmed these interview accounts. In observed sessions, lecturers structured learning around problem scenarios and guiding questions rather than sequential slide presentations. Students engaged in small-group discussions, negotiated interpretations, and presented analytical responses supported by references. The lecturer functioned as a facilitator, probing arguments and inviting alternative perspectives. Reflective activities, such as brief learning journals and peer feedback, were integrated at the end of sessions. Assessment tasks emphasized reasoning quality and conceptual integration instead of factual recall. The classroom atmosphere was dialogical and participatory, indicating alignment between Independent Curriculum principles and deep learning practices. However, variations in facilitation skills and time management suggested differing levels of pedagogical readiness among lecturers.

These classroom practices can be further understood through the lens of deep learning and experiential learning theory. The emphasis on project-based tasks, collaborative inquiry, and reflective activities reflects core elements of deep learning, where students engage in active meaning-making and higher-order cognitive processing. At the same time, these practices align with experiential learning theory, particularly the cyclical process of concrete experience, reflective

observation, abstract conceptualization, and active experimentation. Students' involvement in real-world case analysis and project work represents concrete experience, while reflective discussions and journals facilitate critical reflection. The integration of theory into presentations and problem-solving tasks demonstrates abstract conceptualization, and the application of knowledge in new contexts illustrates active experimentation. This synergy indicates that implementing the Independent Curriculum not only promotes deep cognitive engagement but also fosters experiential knowledge construction, making learning more meaningful, contextual, and transformative.

Challenges of Independent Curriculum and Deep Learning Practice

The third finding reveals that integrating the Independent Curriculum and deep learning encountered several pedagogical, institutional, and learner-related challenges. Although the curriculum framework promotes autonomy and critical inquiry, its classroom realization requires significant shifts in mindset and competence. Lecturers reported difficulties in balancing content coverage with inquiry-based exploration, particularly within limited semester timeframes. Some students initially struggled to adapt to autonomous learning expectations, as they were accustomed to structured instruction and exam-oriented preparation. Additionally, designing authentic assessment tasks and providing meaningful feedback demanded greater time and cognitive investment from lecturers.

To deepen the interpretation, these challenges can be understood through the lens of deep learning theory, particularly the distinction between surface and deep approaches to learning and the role of metacognitive engagement. Deep learning requires learners to actively construct meaning, relate new knowledge to prior understanding, and engage in critical reflection. In this study, the observed difficulties, such as limited student readiness, uneven participation, and dependence on lecturer guidance, indicate that many students were still transitioning from surface learning habits toward deeper cognitive engagement. From an experiential learning perspective, deep learning occurs through cycles of concrete experience, reflective observation, abstract conceptualization, and active experimentation.

However, classroom observations suggest that this cycle was not always fully achieved due to time constraints and varying levels of student preparedness. As a result, learning activities sometimes remained at the level of discussion without reaching reflective abstraction or application, thereby limiting the depth of learning outcomes. The lecturer said:

“One of the main challenges is time management. Deep discussions and project guidance require more time than traditional lectures. Sometimes we feel pressured to complete all materials while still maintaining meaningful engagement. It requires careful planning and flexibility.”

Furthermore, the relevance of these findings becomes particularly significant within the context of Islamic higher education, where learning is not only cognitive but also ethical and spiritual. Deep learning aligns with the Islamic educational principles of *ta'qqul* (critical reasoning), *tadabbur* (reflective contemplation), and *tarbiyah* (holistic development). The challenges identified in this study, therefore, reflect not merely pedagogical limitations but also the complexity of integrating intellectual depth with moral and spiritual formation. When students struggle to engage critically or reflect meaningfully, the intended integration between knowledge (*ilm*) and ethical awareness (*adab*) may not be fully realized.

Thus, the relevance of deep learning in Islamic higher education lies in its potential to bridge cognitive, reflective, and ethical dimensions of learning. The challenges identified in this

study highlight that achieving such integration requires not only curriculum redesign but also sustained cultivation of reflective habits, academic discipline, and value-oriented inquiry among students.

Another challenge concerns student readiness for independent and reflective learning. While some students embraced autonomy, others experienced uncertainty and anxiety when given open-ended tasks. Lecturers observed variations in analytical skills and self-regulation abilities, which influenced the depth of classroom discussion. Students acknowledged that deep learning activities were intellectually demanding and required stronger preparation habits. The transition from memorization-based evaluation to reflective and project-based assessment also required adaptation. These findings suggest that successful implementation depends not only on curriculum design but also on cultivating learner autonomy and resilience. The Student said:

“At first, I felt confused because the lecturer did not give very detailed instructions like before. We had to design our own project framework. It was challenging, but gradually I realized it helped me become more independent.”

“The discussions are interesting, but sometimes I feel unprepared to argue deeply. It requires reading more references and thinking critically. Not all students are used to this learning style.”

A further challenge identified by lecturers involves pedagogical capacity and professional development. Not all instructors possess equal experience in facilitating dialogical learning or designing higher-order assessment tasks. Some expressed the need for continuous training and collaborative forums to refine their strategies. The shift toward deep learning also requires emotional commitment, as lecturers must manage diverse student responses and sustain engagement throughout the semester. Despite these obstacles, participants viewed the challenges as part of an ongoing institutional transformation rather than as barriers to reform. The lecturer said:

“Implementing deep learning is not only about changing methods, but also changing our teaching mindset. We need continuous discussion and training to improve facilitation skills. It is a learning process for lecturers as much as for students.”

Classroom observations further illuminated practical challenges in enacting deep learning within the Independent Curriculum framework. In several sessions, time constraints became apparent when rich discussions had to be concluded prematurely to accommodate the remaining instructional agenda. While some groups demonstrated strong analytical exchange, others relied heavily on more active peers, indicating uneven participation and varying levels of preparedness. In certain instances, students required repeated prompting before articulating arguments, suggesting limited confidence in critical dialogue.

Lecturers occasionally intervened more dominantly than intended to maintain focus or clarify misconceptions, reflecting the tension between facilitation and control. Moreover, reflective activities at the end of class were sometimes shortened due to time limitations. These observational findings confirm that although the integration of Independent Curriculum and deep learning was substantively implemented, sustaining consistent depth and balanced engagement remains an ongoing pedagogical challenge.

Table 1. Research Findings Summary

Research Focus	Key Findings	Data Validation
Curriculum Design	A shift from content transmission to meaningful knowledge construction. The design is built on three pillars: student	<i>Interviews:</i> Statements from policymakers regarding internal evaluations.

	autonomy, higher-order thinking, and the integration of Islamic values (<i>'ilm & adab</i>).	<i>Documentation:</i> Analysis of curriculum blueprints and Semester Learning Plans (RPS) emphasizing HOTS.
Classroom Practice	Transition to student-centered learning through inquiry-based discussions and projects. Lecturers act as facilitators. Assessment has shifted toward portfolios and reflective essays.	<i>Interviews:</i> Lecturers' reports on changes in teaching methods. <i>Field Observation:</i> Observed dialogical and participatory classroom atmospheres (instead of one-way lectures).
Challenges	Emerging obstacles include semester time constraints, uneven student readiness (accustomed to surface learning), and the need for enhanced pedagogical capacity among lecturers.	<i>Interviews:</i> Lecturers' concerns over time management and students' accounts of initial confusion with autonomy. <i>Field Observation:</i> Discussions cut short by time and uneven participation within student groups.

Source: Data Collection, 2026

DISCUSSION

The integration of the Independent Curriculum and deep learning within Islamic higher education, as evidenced by this study, transcends mere administrative alignment, revealing a complex interplay between epistemic design, pedagogical enactment, and systemic friction. (L. S. Sitorus et al., 2025). While the findings confirm a shift from rote content transmission to meaningful knowledge construction, this transformation is not a linear policy adoption but a deliberate recalibration of pedagogy to mirror Islamic educational values (Varga et al., 2022). Unlike conventional implementations that often prioritize procedural outcomes, this study highlights how classroom practices characterized by student-centered inquiry and reflective project-based assessments reposition lecturers as facilitators of both intellectual and ethical growth. However, the emergence of structural constraints, such as acute time limitations and uneven student readiness, underscores a persistent gap between the idealistic goals of "*Independent Learning*" and the practical realities of high-stakes academic environments. (Wei & Yang, 2026).

What critically distinguishes these findings from the broader literature is the epistemological negotiation inherent in Islamic higher education. Existing research on the *Kurikulum Merdeka* has largely remained confined to school-level readiness or teacher perceptions. (Rizki & Fahkrunisa, 2022) This study exposes how curriculum reform is filtered through the dual mandate of academic rigor and spiritual formation. By moving beyond deep learning as a generic constructivist tool, these results demonstrate its contextual reconstruction into Islamic principles of reflective inquiry (*tadabbur*) and critical reasoning (*ta'auqul*). This suggests that deep learning in this context is not a borrowed Western concept but a pedagogical vessel for reviving traditional Islamic epistemological roots. (N. L. Sitorus, 2024).

Furthermore, by adopting a design-implementation-challenge continuum, this study challenges the fragmented nature of previous curriculum analyses. Earlier scholars have frequently examined policy design or classroom practice in isolation, often failing to capture their dynamic tension (Varga et al., 2022). In contrast, this research argues that the pedagogical friction observed

in the classroom, such as the struggle for student autonomy, is fundamentally rooted in how deep learning is operationalized at the structural level (Pavlick, 2022). This integrative perspective reframes curriculum reform in Islamic universities not as a technical exercise but as a value-laden transformation, in which institutional identity and learner culture serve as the primary mediators of change. Consequently, the novelty of this work lies in its capacity to bridge the chasm between policy discourse and lived pedagogical experience within a single, robust analytical framework (Cho & Hwang, 2024).

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The first finding implies that curriculum reform in Islamic higher education is most effective when conceptualized as an epistemological transformation rather than a procedural adjustment. The integration of deep learning within the Independent Curriculum signals a deliberate move from content accumulation toward meaning-making and reflective inquiry. By embedding autonomy and higher-order thinking into graduate learning outcomes, institutions reframed curriculum as a vehicle for intellectual and ethical formation. (Fitriyah & Wardani, 2022; Rani et al., 2023). This suggests that policy translation becomes transformative when institutional actors internalize reform principles and reinterpret them through their educational philosophy. In the Islamic higher education context, the integration of critical inquiry with moral consciousness reflects an attempt to reconcile national educational reform with religious-academic identity. (Irwan & Aslan, 2024).

This interpretation aligns with theories of curriculum reform that emphasize institutional agency and contextual adaptation. (Gouëdard et al., 2020). Curriculum change is not a linear implementation of policy but a process of reinterpretation shaped by organizational culture. The integration of deep learning resonates with constructivist learning theory, which positions learners as active constructors of knowledge. (Bernauer & Fuller, 2017). Moreover, B Chen argues that constructive alignment between outcomes, activities, and assessment is central to achieving deep learning. The findings also complement studies suggesting that meaningful reform in higher education requires alignment between philosophical foundations and pedagogical design. (Nurhasanah et al., 2025). Within Islamic education scholarship, the emphasis on integrating knowledge and ethics parallels the concept of holistic education that unites cognitive and moral development. Thus, the first finding reinforces theoretical perspectives that curriculum reform must integrate epistemology, pedagogy, and institutional identity. (B. Chen & Chen, 2026) .

The second finding implies that the success of curriculum integration ultimately depends on classroom enactment. While policy design establishes structural direction, pedagogical practice determines whether deep learning is genuinely realized (Hadi, 2023). The shift toward facilitative teaching, project-based assessment, and dialogical engagement indicates a transformation of instructional roles (Rukmana, 2023). Student autonomy became meaningful when learners were required to analyze, synthesize, and reflect rather than reproduce information (Sholeh et al., 2024).

However, variations in facilitation skills and participation levels reveal that implementation is uneven and context-sensitive. (Aini, 2023). This suggests that pedagogical transformation requires sustained support mechanisms and collaborative learning among lecturers. The finding highlights that independent learning is not synonymous with unstructured freedom; rather, it requires guided autonomy and carefully designed intellectual challenges. (Sholeh et al., 2024).

This interpretation is supported by research on student-centered learning and inquiry-based pedagogy, which emphasizes the lecturer's role as cognitive coach rather than knowledge transmitter. (Tang, 2023). Deep learning theory posits that meaningful understanding emerges from active engagement and reflective processing. (Wang et al., 2024). Studies on higher education reform further indicate that successful implementation depends on professional learning communities and institutional commitment. (Heng, 2025; Ramadlan & Aminuddin, 2025). The observed integration of project-based tasks and reflective journals aligns with evidence suggesting that authentic assessment fosters deeper conceptual understanding. (Zhang, 2025). Thus, the second finding corroborates theoretical and empirical claims that deep learning requires pedagogical redesign, consistent facilitation, and assessment alignment to move beyond surface approaches. (Heng, 2025; Ramadlan & Aminuddin, 2025).

The third finding implies that transformative curriculum reform inevitably encounters resistance, adaptation challenges, and structural constraints. The difficulties reported by lecturers and students demonstrate that autonomy and deep inquiry demand new competencies and cultural adjustments. (Cho & Hwang, 2024). Time limitations, uneven readiness, and the need for pedagogical upskilling reflect systemic tensions between reform ideals and practical realities. These challenges suggest that sustainable integration requires gradual capacity-building rather than immediate compliance. Importantly, the struggles experienced by both lecturers and students reveal that deep learning is a developmental process shaped by institutional support and learner maturation. Reform, therefore, should be understood as iterative and reflective rather than definitive. (Wang et al., 2024).

This finding aligns with change management literature, which emphasizes that educational reform is complex and often accompanied by implementation gaps. (Cohen et al., 2018). Research on learner autonomy indicates that students require scaffolding to transition from dependent to self-regulated learning. (Sahlberg, 2023). Similarly, studies on deep learning caution that without adequate support, students may revert to surface strategies when confronted with demanding tasks (X. Chen et al., 2022). Professional development research also highlights the importance of sustained training and collegial dialogue in improving instructional quality. (Everett, 2024). Therefore, the third finding reinforces existing scholarship suggesting that pedagogical transformation requires systemic reinforcement, continuous reflection, and institutional investment.

To make this present study more contributive, Figure 1 illustrates a conceptual learning model, proposed based on the findings, that integrates the Independent Curriculum with deep learning principles within Islamic higher education. At the center of the model lies the Independent Curriculum framework, which serves as the structural foundation guiding educational direction. Surrounding this core are three interconnected pillars: student autonomy and engagement, higher-order thinking and inquiry, and integration of Islamic values (Cho & Hwang, 2024). These pillars represent the model's philosophical orientation. Meanwhile, the integration of Islamic values ensures that intellectual development remains aligned with ethical formation (*adab*), spiritual awareness, and moral responsibility. The circular structure of the model signifies that these

elements operate dynamically and interdependently rather than in a hierarchical manner. (Everett, 2024).

The lower section of the figure translates these philosophical pillars into operational components: curriculum design, classroom practice, and assessment strategies. Assessment strategies are designed to be authentic and reflective, emphasizing analytical rigor, problem-solving, and continuous feedback rather than memorization. (X. Chen et al., 2022). Arrows connecting these elements indicate constructive alignment, in which policy design informs pedagogical practice and assessment reinforces the intended competencies. (B. Chen & Chen, 2026). Overall, the model demonstrates that integrating the Independent Curriculum with deep learning requires coherence among structural planning, instructional enactment, and evaluative mechanisms to achieve meaningful, holistic learning outcomes.

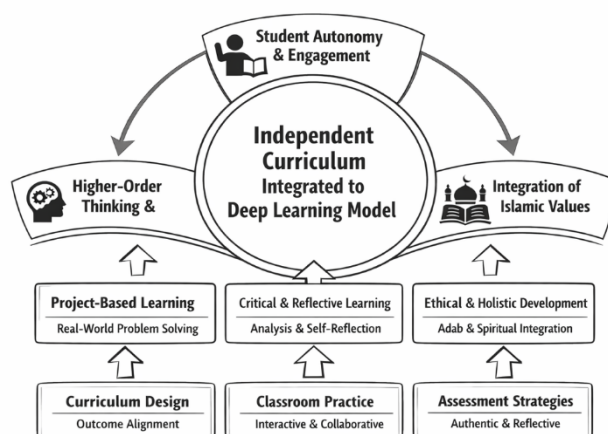


Figure 1. Integration of Independent Curriculum and Deep Learning Model

Theoretically, this study contributes to the integration of curriculum reform theory, deep learning pedagogy, and Islamic higher education philosophy within a unified analytical framework. It extends constructivist and deep learning perspectives into a non-Western, faith-based higher education context. In practice, the findings suggest that institutions should align curriculum design with clear, deep learning indicators, provide structured professional development for lecturers, and cultivate gradual student readiness for autonomous inquiry. Policy implementation should be accompanied by reflective monitoring mechanisms to ensure that autonomy leads to intellectual depth rather than superficial flexibility. Overall, the study offers a contextualized model for translating national curriculum reform into meaningful pedagogical transformation within Islamic higher education settings.

CONCLUSION

This study examined the integration of the Independent Curriculum and deep learning within Islamic higher education through a qualitative multisite design. The findings indicate that curriculum reform was not merely enacted as policy compliance but as an epistemological transformation emphasizing student autonomy, critical inquiry, and ethical formation. Classroom practices demonstrated a shift toward student-centered learning, project-based assessment, and reflective engagement. However, the implementation process revealed key challenges, including time constraints, uneven student readiness, and the need for sustained pedagogical capacity. These findings suggest that effective curriculum reform requires alignment among institutional vision,

pedagogical practice, and learner adaptation to ensure that autonomy leads to meaningful, sustained deep learning.

Theoretically, this study contributes by contextualizing deep learning within an Islamic higher education framework, highlighting its integration with principles such as *ta'addul* (critical reasoning), *tadabbur* (reflection), and *tarbiyah* (holistic development). In practice, the findings offer implications for multiple stakeholders: institutional leaders should ensure strategic alignment and continuous professional development; lecturers should design structured yet inquiry-driven learning with appropriate scaffolding; and policymakers should support implementation through adaptive guidelines and capacity-building programs. To enhance effectiveness, curriculum reform should be implemented gradually and supported by continuous evaluation, ensuring that pedagogical transformation is both contextually grounded and sustainably enacted.

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