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RECONSTRUCTING CRITICAL THINKING IN ISLAMIC HIGHER EDUCATION: INTEGRATING CLASSICAL EPISTEMOLOGY AND CONTEMPORARY PEDAGOGY

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Abstrak

Artikel ini merekonstruksi pemikiran kritis dalam pendidikan tinggi Islam di Indonesia melalui sintesis integratif antara epistemologi Islam klasik dan pedagogi kontemporer. Alih-alih menggunakan pemetaan bibliometrik, penelitian ini menerapkan tinjauan literatur integratif yang mempertemukan tiga rumpun kajian, yaitu pemikiran kritis dalam pendidikan tinggi, epistemologi dan pendidikan Islam, serta pedagogi aktif-reflektif. Literatur dipilih secara purposif berdasarkan relevansi konseptualnya terhadap pendidikan tinggi Islam dan kontribusinya terhadap penalaran, dialog, refleksi, etika, dan pembelajaran aktif. Analisis dilakukan melalui identifikasi konsep, pembacaan komparatif, kategorisasi tematik, dan sintesis interpretatif. Temuan menunjukkan bahwa pemikiran kritis dalam pendidikan tinggi Islam tidak dapat direduksi secara memadai menjadi keterampilan kognitif yang bebas nilai. Pemikiran kritis lebih tepat dipahami sebagai praktik penalaran yang menghubungkan wahyu dan akal, teks dan konteks, verifikasi berbasis bukti, dialog argumentatif, refleksi diri, adab, dan tanggung jawab sosial. Sintesis ini menghasilkan suatu kerangka rekonstruktif yang mencakup lima dimensi: landasan epistemik, verifikasi analitis, interpretasi dialogis, regulasi diri reflektif, dan tanggung jawab etis-praksis. Berbagai pedagogi kontemporer—termasuk *problem-based learning*, *case-based learning*, penulisan reflektif, diskusi isu kontroversial, dan pembelajaran kolaboratif—dapat digunakan untuk mengoperasionalkan kelima dimensi tersebut. Dengan demikian, artikel ini menawarkan jembatan konseptual antara tradisi epistemologi Islam dan pendidikan tinggi abad ke-21 tanpa mengaburkan perbedaan historis di antara keduanya.

Kata kunci: Pemikiran Kritis; Pendidikan Tinggi Islam; Epistemologi Islam; Pedagogi Kontemporer; Adab; Tinjauan Integratif.

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Abstract

This article reconstructs critical thinking in Indonesian Islamic higher education through an integrative synthesis of classical Islamic epistemology and contemporary pedagogy. Rather than employing bibliometric mapping, the study uses an integrative literature review that brings together three bodies of scholarship: critical thinking in higher education, Islamic epistemology and education, and active-reflective pedagogies. Literature was purposively selected for its conceptual relevance to Islamic higher education and its contribution to reasoning, dialogue, reflection, ethics, and active learning. The analysis involved concept identification, comparative reading, thematic categorisation, and interpretive synthesis. The findings show that critical thinking in Islamic higher education cannot be adequately reduced to value-neutral cognitive skills. It is better understood as a practice of reasoning that connects revelation and reason, text and context, evidential verification, argumentative dialogue, self-reflection, adab, and social responsibility. The synthesis produces a reconstructive framework comprising five dimensions: epistemic grounding, analytical verification, dialogical interpretation, reflective self-regulation, and ethical-praxical responsibility. Contemporary pedagogies—including problem-based learning, case-based learning, reflective writing, controversial-issue discussion, and collaborative learning—can operationalize these dimensions. The article thus offers a conceptual bridge between Islamic epistemological traditions and twenty-first-century higher education without collapsing their historical differences.

Keywords: Critical Thinking; Islamic Higher Education; Islamic Epistemology; Contemporary Pedagogy; Adab; Integrative Review

INTRODUCTION

Islamic higher education in Indonesia is confronting an increasingly complex knowledge environment. Students encounter rapidly circulating digital information, fragmented religious authority, polarized discourse, advances in artificial intelligence, and demands to make judgments in situations for which no single answer is readily available. Under such conditions, mastery of Islamic subject matter alone is insufficient. Students need the capacity to evaluate claims, examine evidence, distinguish stronger from weaker arguments, engage disagreement proportionately, and take intellectual responsibility for their judgments. Higher education scholarship conceptualises critical thinking as a higher-order process involving analysis, evaluation, inference, reflection, and a disposition to reconsider judgments when better reasons become available (Andreucci-Annunziata et al., 2023; Rivas et al., 2023). Critical thinking, therefore, does not develop automatically simply because students enter university; it must be cultivated through learning experiences that deliberately create opportunities to question, test, compare, and reflect.

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In Islamic higher education, the issue is more complex because reasoning takes place in relation to revelation, scholarly tradition, normative authority, and ethical responsibility. Critical thinking should not be positioned as the opposite of religious commitment. A more productive question is how critical reasoning can operate within an Islamic epistemic framework without becoming passive submission to authority and without being reduced to value-neutral skepticism. Halstead (2004) shows that Islamic education is oriented toward the formation of the person across intellectual, moral, and spiritual dimensions, while Sahin (2018) argues for a critical, reflective, and interdisciplinary field of Islamic Education Studies. Altinyelken (2021) likewise demonstrates that young Muslims may understand Islamic education as a space that should move beyond memorisation toward understanding, questioning, and reflection. In Indonesia, Islamic higher education occupies a strategic position at the intersection of Islamic sciences, the social sciences and humanities, science, and national concerns (Abdullah, 2017).

The difficulty is that two relevant bodies of scholarship often proceed in parallel. Research on critical thinking in higher education primarily addresses instructional strategies, dispositions, evidence-based judgment, problem-based learning, reflective learning, and student engagement (Andreucci-Annunziata et al., 2023; Yu & Zin, 2023). Scholarship on Islamic education, by contrast, more frequently addresses values, curriculum, moderation, epistemology, knowledge integration, and educational identity. Recent studies have begun to connect these domains through controversial religious issues, critical pedagogy, outcome-based education, and the reconstruction of Islamic epistemology (Karwadi et al., 2025; Muslimin & Abidin, 2023; Usiono et al., 2026). Yet an explicit framework is still needed to explain how Islamic epistemic sources and norms can be translated into practices of reasoning and learning design in higher education.

Addressing this gap, the article reconstructs critical thinking in Islamic higher education by integrating classical Islamic epistemology with contemporary pedagogy. It asks three questions: (1) which epistemic dimensions should be retained when critical thinking is translated into Islamic higher education; (2) how can contemporary pedagogical strategies actualise those dimensions; and (3) what conceptual framework can connect the two without ahistorically equating classical concepts with modern educational competencies? The article's novelty lies in conceptualising critical thinking as a practice of inquiry that is simultaneously epistemic, analytical, dialogical, reflective, and ethical-praxical. In this formulation, critical thinking is not merely a problem-solving skill but an intellectual habit of seeking epistemic grounds, testing reasons, remaining open to correction, sustaining the ethics of disagreement, and directing knowledge toward socially responsible ends.

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LITERATURE REVIEW

Critical thinking in higher education is defined in multiple ways, yet there is broad convergence around the abilities to interpret information, analyze relationships, evaluate evidence, draw inferences, explain reasons, and exercise self-regulation. A systematic review of systematic reviews indicates that critical thinking encompasses both skills and dispositions and can be developed through deliberately designed instruction (Andreucci-Annunziata et al., 2023). Rivas et al. (2023) demonstrate its relevance to academic performance, while pedagogical scholarship stresses the need to move students from receiving information to testing it. Critical thinking is therefore not adequately represented by the ability to express an opinion; its quality depends on the relationship among claims, evidence, reasons, alternatives, and the willingness to revise a judgment.

Learning strategies play an important role in developing this capacity. Problem-based learning places students before open-ended problems that require problem identification, information seeking, evaluation of alternatives, and the formulation of solutions. Yu and Zin's (2023) review indicates that problem-based learning models explicitly oriented toward critical thinking can strengthen reasoning activity. Case-based learning, concept mapping, reflective writing, collaborative inquiry, and structured discussion likewise create opportunities to compare perspectives and justify decisions (Andreucci-Annunziata et al., 2023). In religious education, discussion of controversial issues is particularly important because students learn to distinguish criticism of an argument from rejection of the identity or dignity of those who hold a different position.

Islamic education scholarship provides grounds for extending critical thinking beyond cognitive skills. Halstead (2004) situates Islamic education within an orientation toward the formation of the good person, while Sahin (2018) argues for moving beyond a simplistic opposition between Islamic education and liberal-secular education. Stimpson and Calvert (2021) show that Qur'anic educational philosophy contains orientations toward reasoning, moral action, and the formation of knowledge through relationships among text, human agency, and practice. The integration of revelation and reason, therefore, need not be understood as a restriction on rationality. The more significant question is how normative sources, rational argument, experience, and ethical consequences can be related in an accountable manner.

The classical tradition also provides more specific resources for this reconstruction, although these resources should not be presented as if medieval scholars had formulated modern critical-thinking competencies. Al-Ghazali's discussions of knowledge, intellect, ethical formation, and the responsibilities of teachers and learners connect intellectual activity with moral and spiritual discipline. Contemporary scholarship drawing on Ihya' 'Ulum al-Din has shown how this educational vision can inform the teaching of critical

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thinking while retaining a holistic Islamic epistemological orientation (Mohd Zhaffar et al., 2022). Ibn Taymiyya offers a different but equally relevant epistemic example. His sustained analysis of the relation between sound reason and authentic revelation treats rational inquiry as indispensable while questioning forms of reasoning built on defective premises; El-Tobgui's (2020) comprehensive study demonstrates the centrality of sense perception, reliable report, reason, and fitrah in this epistemological project. Al-Shatibi, meanwhile, is especially important for methodological reasoning. His use of istiqra' (induction) in the identification of maqasid shows how multiple particular textual indications can be considered together in order to establish more general normative purposes; recent scholarship likewise identifies inductive reasoning as a rational source in maqasid theory (Kamali, 2025). These examples do not establish a single classical theory of critical thinking. Rather, they demonstrate historically distinct practices of source evaluation, rational inference, inductive synthesis, ethical self-discipline, and attention to the purposes of knowledge. For the present framework, their value lies precisely in these epistemic functions, not in an anachronistic claim that al-Ghazali, Ibn Taymiyya, or al-Shatibi anticipated contemporary educational taxonomies in identical form.

Within Islamic epistemological discourse, categories such as bayani, burhani, and irfani are often used to describe diverse ways of obtaining and organizing knowledge. This article does not treat these categories as timeless or uniform across Islamic intellectual history. Rather, it uses them as reminders that Islamic traditions have recognized complex relationships among text, rational demonstration, experience, and self-formation. Contemporary reconstructions of Islamic educational epistemology similarly seek to overcome the dichotomy between religious and general knowledge by locating knowledge within an integrative horizon (Afandi et al., 2026; Khairi, 2025). Educationally, this implies that students should be trained not only to identify what a text says, but also to examine how an interpretation is constructed, what evidence supports it, which contexts matter, and what moral consequences follow.

The ethical dimension is a crucial distinction. Critical thinking within Islamic education cannot stop at the capacity to win an argument. Adab concerns the appropriate ways of acquiring, communicating, and using knowledge. It includes intellectual honesty, acknowledgement of limitation, accurate citation, respect for interlocutors, and an orientation toward the common good. Strong criticism is therefore not synonymous with rhetorical aggression. Jarmer (2025) shows that religious education needs pedagogically structured space for critique of religion and critical thinking, while Muslimin and Abidin (2023) demonstrate that controversial religious issues can be used to cultivate argumentation and openness among university students. Within an Islamic

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framework, such spaces for critique should be connected to epistemic responsibility and an ethics of dialogue.

Taken together, the literature reveals an opportunity for integration that has not yet been fully articulated. Contemporary pedagogy provides learning mechanisms—problems, cases, dialogue, reflection, collaboration, and technology—whereas Islamic epistemology provides orientations concerning the sources, limits, purposes, and responsibilities of knowledge. If these are separated, Islamic education risks two extremes: normative transmission without sufficient intellectual activity, or adoption of modern methods without an ethical-spiritual horizon. This article therefore proposes the principle of functional translation: Islamic scholarly concepts and practices are not literally converted into modern classroom techniques; instead, their epistemic functions—verification, argumentation, interpretation, reflection, and accountability—are translated into contemporary learning design.

RESEARCH METHODS

This study employs an integrative literature review with a conceptual-interpretive orientation. The design was selected because the aim is not to count publications or construct bibliometric maps, but to integrate scholarship from different theoretical traditions in order to generate a new conceptual framework. The review draws on articles and books available in the initial manuscript and on supplementary literature relevant to three domains: critical thinking in higher education, Islamic epistemology and education, and contemporary pedagogy. Sources were purposively selected when they contributed directly to one or more of the following themes: definitions and dispositions of critical thinking, revelation-reason relations, the ethics/adab of knowledge, dialogue and disagreement, active learning, reflection, problem-based learning, or Islamic higher education. Because no replicable Scopus/Web of Science dataset is available, the study does not claim to be a systematic or bibliometric review and does not report corpus counts, temporal trends, co-occurrence patterns, or VOSviewer visualisations.

Because the review is conceptual rather than exhaustive, source inclusion was guided by theoretical relevance rather than by a claim of comprehensive coverage. Classical figures were incorporated only where their epistemological or educational ideas could be supported by identifiable primary traditions and specialist scholarship, while contemporary studies were used to clarify pedagogical mechanisms and higher-education implications. This procedure reduces the risk of treating historical concepts as interchangeable with present-day competencies and keeps the synthesis proportionate to the evidence reviewed.

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The analysis proceeded in four stages. First, key concepts were extracted from the literature and grouped into epistemic, analytical, dialogical, reflective, ethical, and pedagogical categories. Second, comparative reading was used to identify convergences and tensions between critical-thinking scholarship and Islamic education scholarship. Third, the categories were synthesized into functional relationships between Islamic epistemological foundations and contemporary pedagogical strategies. Fourth, the synthesis was conceptually tested through a principle of non-equivalence: classical terms were not assumed to be identical to modern educational competencies but were compared according to their reasoning functions. Interpretive credibility was strengthened by drawing on literature across fields, avoiding causal claims unsupported by empirical data, and clearly distinguishing literature-based findings, authorial interpretation, and pedagogical implications.

RESULTS AND DISCUSSION

1. Results

Critical Thinking as an Epistemic Practice, Not Merely a Cognitive Skill

The synthesis indicates that critical thinking in Islamic higher education should begin with epistemic questions: where knowledge comes from, on what grounds a claim is accepted, and how knowledge is used responsibly. Critical-thinking scholarship emphasizes evidence evaluation, inference, and self-regulation (Andreucci-Annunziata et al., 2023), while Islamic education scholarship adds the relationship among revelation, reason, experience, and moral orientation (Sahin, 2018; Stimpson & Calvert, 2021). Their integration suggests that students should not be taught critical thinking as a context-free universal technique; they must also understand the kind of authority they are engaging and the standards of justification appropriate to that form of knowledge.

In Islamic learning, normative texts occupy a position different from academic opinion, but this difference in status does not eliminate the need for interpretation. Students still need to identify context, compare interpretations, examine argumentative consistency, and distinguish among text, interpretation, and social application. The relationship between revelation and reason becomes productive here: reason is not positioned as revelation's competitor but as the capacity through which revelation is understood, connected, interpreted, and responsibly applied. This framework avoids two reductions at once: a rationalism that neglects normative horizons and a textualism that suppresses intellectual activity.

Analytical Verification: From Information Reception to Reason-Grounded judgment

The second dimension is analytical verification. Digital transformation exposes students to religious information from lecturers, books, articles, videos, social media,

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short sermon clips, and generative systems. Because these sources vary greatly in quality, tabayyun can be educationally translated into habits of examining source, context, evidence, authority, and possible bias before accepting or disseminating a claim. This function converges with critical thinking's emphasis on evaluating reasons and evidence but adds an ethical emphasis: misinformation is not merely a cognitive problem; it can also have moral and social consequences. Islamic higher education should therefore shift assignments from reproducing answers toward demonstrating why an answer is justified. Students might compare two arguments on a contemporary fiqh issue, examine primary and secondary sources, assess the strength of evidence, identify assumptions, and explain why one conclusion is more defensible than its alternatives. Problem-based and case-based learning are relevant because they place knowledge in situations requiring judgment rather than recall (Yu & Zin, 2023). The quality of an answer should consequently be assessed not only by its conformity with course content but also by the transparency and quality of the reasoning process.

Dialogue and Ikhtilaf as Arenas for Testing Arguments

The third dimension is dialogical-interpretive. Religious education scholarship shows that controversial issues can provide productive contexts for critical thinking when lecturers maintain academic safety and distinguish criticism of arguments from attacks on identity (Jarmer, 2025; Muslimin & Abidin, 2023). The tradition of ikhtilaf offers an important conceptual resource because disagreement is not always treated as a failure of knowledge; within limits, it may arise from differences in method, evidence, priority, or context. Islamic higher education can use this function to train students to read interpretive plurality without collapsing into either relativism or fanaticism. Educative dialogue requires rules. Students should learn to reconstruct an opposing argument fairly before criticizing it, distinguish premises from conclusions, raise reasoned objections, and change their position when stronger evidence becomes available. Adab is not an addition applied after thinking has occurred; it is a condition that allows the testing of arguments to remain productive. Without adab, discussion can become rhetorical competition; without critique, adab can be reduced to politeness that preserves passive acceptance. Their integration produces academic dialogue that is rigorous toward ideas while respectful toward persons.

Reflection and Self-Regulation in the Formation of the Learner

The fourth dimension is reflective. Critical thinking is directed not only outward toward other people's arguments but inward toward one's own assumptions, biases, and limitations. Self-regulation is central to many conceptualizations of critical thinking (Andreucci-Annunziata et al., 2023). In Islamic education, reflection can be enriched

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through intellectual muhasabah: a willingness to ask whether one is seeking truth or merely defending a position, whether sources have been read fairly, and whether the ethical consequences of an intellectual judgment have been considered. Reflective writing can serve as a practical instrument for this dimension. After a debate or case analysis, students should be asked not only for a conclusion but also to explain how their understanding changed, which argument most seriously challenged their initial position, what evidence remains unavailable, and which questions still require investigation. Such practices shift learning away from performing certainty toward cultivating intellectual humility. This is especially important in Islamic higher education because religious knowledge is often closely connected to identity; the stronger the identity investment, the more important it becomes to distinguish belief, interpretation, and argumentative quality.

Adab and Social Responsibility as the Horizon of Critical Thinking

The fifth dimension is ethical-praxical. Critical thinking can produce high analytical ability while still being used for manipulation, domination, or harmful information practices. Islamic education must therefore ask not only whether an argument is logically coherent but also how knowledge is used. Adab, scholarly trustworthiness, honesty, fairness in representing other positions, and orientation toward public benefit provide a normative horizon for intellectual activity. On this account, the quality of reasoning is assessed through both procedural accuracy and responsible use of its outcomes. This dimension is particularly relevant to students operating in digital environments. The capacity to construct arguments should be accompanied by an ethics of citation, information verification, contextual integrity, restraint in disseminating unverified claims, and awareness of the social consequences of academic and religious language. Digital literacy in Islamic higher education therefore cannot stop at technical competence. It must be connected to epistemic responsibility: students should understand that clicking, sharing, citing, and using AI are also knowledge practices with ethical consequences.

2. Discussion

The findings above identify five interdependent dimensions of critical thinking within Islamic higher education. The discussion now considers how these dimensions can be translated into contemporary pedagogy, curriculum design, academic culture, and institutional practice without treating classical Islamic concepts as direct equivalents of modern educational competencies. This distinction is essential because the article's contribution lies in functional translation: historically situated epistemic and ethical

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resources are interpreted for contemporary educational purposes while their original conceptual boundaries are respected.

Contemporary Pedagogy as a Mechanism of actualization

The synthesis suggests that Islamic epistemology provides orientation, while contemporary pedagogy provides mechanisms of actualization. Problem-based learning can train problem identification and evaluation of alternatives; case-based learning can connect principles to contextual situations; collaborative learning can cultivate negotiation of reasons; reflective writing can develop self-regulation; and controversial-issue discussion can train students to manage disagreement. These strategies need not be treated as 'Western methods' that are automatically incompatible with Islamic education. What should be evaluated are their pedagogical functions, underlying assumptions, and compatibility with educational aims.

Usiono et al. (2026), in their study of Islamic Education Philosophy learning, highlight the importance of students' critical-thinking experiences, interests, motivation, and perceived relevance in instructional design. Other studies in Islamic education likewise indicate a movement from predominantly transmissive instruction toward more reflective and analytical activity (Indah et al., 2025; Karwadi et al., 2025). Transformation, therefore, cannot be achieved merely by replacing lectures with discussion. Lecturers need to design sequences of tasks that explicitly require students to identify problems, gather evidence, compare arguments, formulate judgments, respond to criticism, and reflect on the consequences of those judgments.

A Reconstructive Framework for Critical Thinking in Islamic Higher Education

On the basis of these five dimensions, this article proposes a Reconstructive Framework for Critical Thinking in Islamic Higher Education. The framework is not presented as an empirically validated causal model but as a conceptual framework to be tested in subsequent research. Its relationships are layered: epistemic grounding shapes how sources and authority are understood; analytical verification tests claims; dialogical interpretation brings alternatives into encounter; reflection enables self-correction; and ethical-praxical responsibility directs the use of knowledge. Contemporary pedagogy functions as the environment and mechanism through which all five dimensions are activated (Andreucci-Annunziata et al., 2023; Kholis, 2025; Sahin, 2018; Stimpson & Calvert, 2021).

The contribution of the framework lies in its rejection of a simple dichotomy between tradition and modernity. Islamic epistemological heritage is not treated as a ready-made package of classroom methods, while contemporary pedagogy is not treated as a value system that must be adopted wholesale. They are connected through functional

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translation. Verification, for example, can be translated into source evaluation; dialogue into structured academic discussion; reflection into reflective writing; and adab-based responsibility into norms of argumentation and academic integrity. This approach enables innovation without severing epistemic identity (Adawiah & Sakdiah, 2025; Hafidz, 2023; Sahin, 2018).

Table 1. A Reconstructive Framework for Critical Thinking in Islamic Higher Education

Dimension	Primary Function	Pedagogical Practice	Learning Indicator
Epistemic grounding	Determining the sources, authority, and limits of knowledge	Text-context analysis; source comparison	Distinguishing text, interpretation, evidence, and opinion
Analytical verification	Testing claims, evidence, assumptions, and inferences	PBL; case analysis; source evaluation	Providing reasons and evidence; identifying bias/assumptions
Dialogical interpretation	Testing arguments through structured disagreement	Academic debate; controversial-issue discussion; collaborative inquiry	Fairly reconstructing and evaluating alternative arguments
Reflective	Evaluating one's thinking process and remaining open to revision	Reflective writing; learning journal; peer feedback	Acknowledging limitations and revising positions on the basis of reasons
Ethical-praxical	Connecting knowledge with adab and responsibility	Ethical case discussion; academic integrity tasks	Using knowledge honestly, proportionately, and responsibly

The framework also has implications for assessment. If critical thinking is a learning outcome, assessment cannot rely solely on recall-based questions. Rubrics should evaluate the quality of questions, use of evidence, structure of reasons, consideration of alternatives, responses to objections, reflection on limitations, and integrity in the use of sources. Portfolios, argumentative essays, policy briefs, case analyses, oral defences, and collaborative projects can be combined. In Islamic studies courses, students may be asked to relate textual evidence and academic literature to contemporary problems while explicitly identifying the limits of the inferences they draw (Andreucci-Annunziata et al., 2023; Rivas et al., 2023).

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A further implication concerns the lecturer's role. Lecturers do not lose authority by creating space for dialogue; rather, authority shifts from being the sole provider of answers to being the designer of an epistemic environment. Lecturers establish standards for sources, pose challenging questions, correct errors, protect the ethics of discussion, and model how scholars revise their positions. This model is more demanding than one-way lecturing because lecturers must distinguish productive disagreement, misconception, and unsupported claims (Andreucci-Annunziata et al., 2023; Pradana & Awanda, 2025).

At curriculum level, critical thinking should not be confined to a single methodology or philosophy course. The five dimensions should appear progressively across courses: beginning with source literacy and basic argumentation, developing through case analysis and comparison of interpretations, and culminating in research, policy evaluation, and complex problem solving. In this way, critical thinking becomes an academic culture rather than an additional topic. This development should be accompanied by information and AI literacy so that students can verify digital sources, understand the limitations of generative systems, and maintain academic responsibility (Andreucci-Annunziata et al., 2023; Kholis, 2025).

Theoretically, the article extends discussions that treat critical thinking as a universal competence that can simply be 'added' to Islamic education. The synthesis shows that translation across epistemologies requires conceptual work. Some functions are comparable but not identical. Terms such as tafakkur, tadabbur, nazar, ijtihad, and ikhtilaf should not be treated as direct equivalents of modern critical-thinking competencies. A more defensible approach is to identify reasoning functions that can be learned—such as examination of reasons, interpretation, analogy, comparison, correction, and responsibility—and then investigate how those functions can inform contemporary educational design (Adawiah & Sakdiah, 2025; Sahin, 2018; Ula et al., 2026).

This approach also positions moderation and plurality as potential outcomes of the quality of reasoning rather than as curricular slogans. Students who can understand the grounds of disagreement, weigh evidence proportionately, and distinguish certainty from probability may be better equipped to respond maturely to diversity. The article does not, however, claim that critical thinking automatically produces moderation. That relationship requires empirical testing. What the literature supports is the more limited proposition that dialogical and reflective learning environments provide stronger conditions for examining prejudice and broadening perspective (Hafidz, 2023; Muslimin & Abidin, 2023).

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A major strength of the framework is its capacity to connect cognitive and moral dimensions without sacrificing either. Islamic higher education can retain normative commitments while cultivating an academic culture open to questioning and correction. Conversely, active learning can be adopted without abandoning adab and spiritual responsibility. This position is relevant to Islamic higher education institutions facing internationalisation, digitalisation, and twenty-first-century competency demands while remaining responsible for the depth of Islamic scholarly traditions (Sahin, 2018; Usiono et al., 2025).

From Epistemology to Learning Design

A central challenge in integrating epistemology and pedagogy is the risk of remaining at the level of normative declaration. Islamic education scholarship frequently affirms the importance of integrating revelation and reason without always explaining how this principle should change what students actually do in the classroom. The framework proposed here requires translation at the level of tasks. If the learning objective is to evaluate a contemporary religious claim, students should be provided with materials that allow them to distinguish primary sources, scholarly interpretations, empirical findings, and public opinion. They can then construct an argument map showing relationships among premises, evidence, objections, and conclusions. In this design, the integration of revelation and reason becomes an observable process rather than an epistemological slogan (Kholis, 2025; Usiono et al., 2025).

The same principle applies to Qur'anic exegesis, hadith, fiqh, Islamic history, and philosophy of Islamic education. In tafsir, students can compare interpretations with attention to language, context, method, and social problematics. In hadith studies, source criticism can be connected to transmission, context, and the public use of hadith-based arguments. In fiqh, case studies can require students to identify relevant facts, normative principles, differences of opinion, and the social implications of legal choices. In Islamic history, students can compare narratives and sources and thereby learn that reconstructing the past requires evidence evaluation. These disciplinary variations show that critical thinking need not be taught only through a dedicated course; it can be cultivated through the epistemic practices characteristic of each discipline (Jazil et al., 2025; Ula et al., 2026).

Learning design should also differentiate levels of complexity. Early-stage students can practice identifying claims, sources, and reasons. At an intermediate level, they can compare interpretations, evaluate conflicting evidence, and write argumentative responses. At advanced levels, they can address open problems requiring interdisciplinary integration, such as Islamic ethics in relation to artificial intelligence,

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environmental issues, the digital economy, public health, or religious plurality. Such progression is necessary so that critical thinking is scaffolded rather than demanded all at once (Andreucci-Annunziata et al., 2023; Pradana & Awanda, 2025).

Technology should be positioned proportionately. Digital learning expands access to texts, journals, videos, databases, and primary sources, but it also increases exposure to decontextualized information. Digital activities should therefore be accompanied by source-evaluation tasks. Generative AI, for example, can itself become an object of critical learning: students can compare AI-generated answers with academic sources, identify unsupported claims, assess bias, and write corrections. Technology is thereby treated neither as a threat nor as an automatic solution, but as an epistemic environment requiring literacy and responsibility (Fischer et al., 2024).

From the lecturer's perspective, such integration also requires a change in feedback practices. Feedback that merely labels an answer right or wrong is insufficient for developing reasoning. Lecturers should identify where an argument lacks evidence, which assumptions remain unstated, which sources are weak, and which alternatives have not been considered. Students can also be asked to explain how they revised their work. Assessment then becomes part of the formation of self-regulation rather than merely the assignment of a final grade (Andreucci-Annunziata et al., 2023; Pradana & Awanda, 2025).

Authority, Academic Freedom, and the Boundaries of Critique

Reconstructing critical thinking in Islamic higher education must also address authority. Religious education always involves forms of authority: sacred texts, interpretive traditions, teachers, institutions, and communities. Developing critical thinking does not mean abolishing all authority, because academic knowledge itself depends on expertise, method, and sources of differing credibility. The challenge is to transform the relationship to authority from acceptance without reasons into trust that can be explained. Students need to understand why a source is regarded as authoritative, the limits of its competence, and when its claims require additional verification (Jarmer, 2025; Sahin, 2018).

Academic freedom in this context is not freedom without norms. It is the space to ask questions, test interpretations, and raise objections within standards of argumentation and responsibility. Jarmer (2025) shows that critique of religion in religious education requires a pedagogical framework that allows learners to confront difficult questions without turning the classroom into a space of humiliation. A similar principle applies to Islamic higher education: lecturers should distinguish legitimate academic questions, unsupported provocation, and demeaning speech. Such boundaries

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should be articulated through norms of discussion rather than mere prohibition (Jarmer, 2025; Muslimin & Abidin, 2023). The concept of adab helps organize the relationship between freedom and limits. Adab is not equivalent to passive obedience to lecturers. In academic settings, it includes the courage to offer reasoned correction, willingness to listen, accuracy in citation, and the ability to acknowledge error. Lecturers are equally bound by adab: they should not use authority to close legitimate questions, humiliate students, or equate academic disagreement with moral disobedience. Adab thus becomes a reciprocal norm that sustains critical inquiry (Halstead, 2004; Usiono et al., 2025).

Ikhtilaf can be used as a pedagogical resource for teaching that disagreement has structure. Not all disagreements are equally strong, and not all opinions possess equivalent evidential support. Students can be trained to identify the causes of disagreement, the kinds of evidence used, methods of interpretation, and consequences of each position. This is richer than merely presenting lists of schools or views. It transforms the internal plurality of Islamic traditions into a laboratory for comparative reasoning (Muslimin & Abidin, 2023; Ula et al., 2026). The framework is also relevant to religious moderation. Moderation cannot be taught adequately as a list of attitudes to be accepted; it must also be cultivated through the capacity to evaluate extreme claims, understand context, distinguish principle from application, and test generalisations. Critical thinking grounded in adab can help students engage digital content that uses decontextualized texts or identity narratives to mobilise emotion. The effectiveness of this relationship, however, requires empirical investigation and should not be assumed solely from conceptual coherence (Hafidz, 2026).

Implications for the Curriculum and Academic Culture of Islamic Higher Education Institutions

At the institutional level, reconstructing critical thinking requires more than individual methodological innovation. Curricula need to map where analysis, evidence evaluation, argumentation, reflection, and academic responsibility are introduced, practiced, and assessed. If every course assumes that students already possess these capacities without providing scaffolding, critical thinking becomes an outcome that is named but not taught. Conversely, if responsibility is confined to only a few courses, students may struggle to transfer reasoning habits across disciplines (Andreucci-Annunziata et al., 2023; Kholis, 2025). Curriculum mapping can begin by linking the five dimensions of the framework to programme learning outcomes. Epistemic grounding can be introduced through foundational Islamic studies and disciplinary orientation; analytical verification through research methodology and source-based courses; dialogical interpretation through subjects with established traditions of disagreement;

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reflection through field practice and seminars; and ethical-praxical responsibility across all activities involving data, sources, technology, and decision-making (Muhlison, 2022; Naomira & Hemawati, 2026). This approach maintains critical thinking as a curriculum-wide competence while preserving disciplinary context (Andreucci-Annunziata et al., 2023; Kholis, 2025).

Academic culture also determines whether these capacities become lived practices. Students will struggle to learn to ask questions if questions are perceived as threats to authority. They will likewise struggle to learn integrity if academic practices tolerate plagiarism, unverified citation, or opaque use of AI. Institutions therefore need consistency between what they teach and what they practice. Seminars, student scholarly forums, peer review, writing clinics, and research supervision can become spaces for developing epistemic habits (Kholis, 2025; Pradana & Awanda, 2025). Faculty development is an important condition. Active-learning strategies can fail when they are implemented merely as variations in classroom activity without clear reasoning objectives. Group discussion, for example, does not automatically produce critical thinking. Lecturers need to design prompts requiring evidence, construct argumentation rubrics, manage disagreement, and provide feedback on thinking processes. Professional development should therefore move beyond introducing methods toward pedagogical content knowledge: how critical inquiry is cultivated within the distinctive character of a discipline (Andreucci-Annunziata et al., 2023; Pradana & Awanda, 2025).

Ultimately, the success of this reconstruction needs to be assessed through evidence. Higher education institutions can develop longitudinal assessments of changes in students' argumentative quality from entry to graduation, conduct classroom-based research, and compare strategies across programmes. Such empirical evidence is necessary if the conceptual framework is not to remain a normative ideal. The next agenda is therefore to move from conceptual reconstruction toward design, implementation, and validation (Hafidz, 2023; Kholis, 2025).

Conceptual Positioning and the Limits of the Claims

The resulting framework should be positioned cautiously within debates on 'Islamic critical thinking'. This article does not claim that there is one singular definition of Islamic critical thinking valid across all periods, disciplines, and Muslim communities. Islamic intellectual traditions are plural and have developed through different historical configurations. Critical thinking is therefore used here as a contemporary educational category brought into dialogue with Islamic epistemic resources through functional comparison. This position avoids claiming that a modern concept existed in identical form within classical intellectual traditions (Adawiah & Sakdiah, 2025; Sahin, 2018).

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This limitation matters because loose use of classical terminology can generate anachronism. Tafakkur, tadabbur, nazar, ijtihad, qiyas, and ikhtilaf possess semantic and disciplinary histories that cannot be reduced to a single list of 'critical-thinking skills'. Their pedagogical value emerges precisely when those differences are respected. Lecturers can introduce such concepts in their historical contexts and then ask students to compare their reasoning functions with modern academic practices. Such comparison can cultivate historical consciousness alongside conceptual competence (Adawiah & Sakdiah, 2025; Ula et al., 2026). Historical caution does not mean that tradition cannot inspire contemporary education. Education necessarily selects and reinterprets intellectual inheritances. What is required is transparency about what belongs to the historical concept, what constitutes the author's interpretation, and what is a new pedagogical design. The principle of functional translation used in this article is intended to maintain that transparency. It permits innovation while preventing exaggerated claims of continuity (Sahin, 2018; Stimpson & Calvert, 2021).

The framework also does not claim that active pedagogy is always superior to lecturing. Lectures can be effective for orientation, conceptual explanation, and presentation of information students do not yet possess. The problem arises when transmission becomes the only mode of learning and students are given no opportunity to use knowledge to evaluate, interpret, and solve problems (Fadhli et al., 2023; Faisal, 2026). The recommended approach is therefore balanced pedagogy: direct instruction where necessary, followed by activities requiring inquiry, dialogue, application, and reflection (Andreucci-Annunziata et al., 2023; Yu & Zin, 2023).

Within these boundaries, the article's contribution can be stated proportionately. It does not demonstrate the effectiveness of an intervention and does not statistically map the entire literature. Its contribution is to provide a conceptual vocabulary for designing and researching critical thinking in Islamic higher education with greater precision. The five-dimensional framework can function as a design hypothesis to be tested empirically. By limiting its claims, the article establishes a stronger foundation for subsequent research (Andreucci-Annunziata et al., 2023; Hafidz, 2023).

CONCLUSION

This article answers the research questions by showing that the reconstruction of critical thinking in Islamic higher education can be organized through five integrated dimensions: epistemic grounding, analytical verification, dialogical interpretation, reflection, and ethical-praxical responsibility. Islamic epistemology provides orientations concerning the sources, purposes, and responsibilities of knowledge, while contemporary pedagogy provides mechanisms for activating reasoning through

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problems, cases, dialogue, collaboration, reflection, and evidence evaluation. Critical thinking in Islamic higher education should therefore not be reduced either to skepticism or to value-neutral cognitive skills. It is better understood as a practice of inquiry connecting revelation and reason, text and context, argumentation and adab, and knowledge and social responsibility.

The most important conceptual finding is the principle of functional translation. Islamic intellectual heritage need not be reproduced literally as a set of modern pedagogical techniques; instead, its epistemic functions can be carefully translated into learning design. This principle enables Islamic higher education to develop critical learning without severing its relationship with tradition, while avoiding the romantic claim that classical practices are identical to modern critical thinking. The study's strength lies in its cross-disciplinary synthesis and in a framework that can inform curriculum development, lecturer practice, and value-oriented assessment of critical thinking.

The study is limited by its conceptual character and purposive selection of literature. The resulting framework is therefore not an empirically validated model and should not be interpreted as a representative bibliometric mapping of the field. Future research should test the five dimensions through classroom studies, instrument development, pedagogical experiments, and comparative research across Islamic higher education institutions. Such work is needed to establish how the framework operates across disciplines, how students understand the relationship between critique and religious authority, and which strategies are most effective in cultivating reasoning that is both analytically rigorous and ethically grounded.

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