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Internalizing *Fathonah* Character in Critical Reasoning: A Case Study of Islamic Values Integration in Science and Social Studies

Supriyadi[1]*, Enik Setiyawati[1], Tobroni[2], Moncef Ben Abdeljelil[3]
Asyraf Isyraqi Bin Jamil[4]

[1]Universitas Muhammadiyah Sidoarjo, Indonesia

[2]Universitas Muhammadiyah Malang, Indonesia

[3]University of Sousse, Tunisia

[4]University Malaya, Malaysia

supriyadi@umsida.ac.id*

Abstract

This study aims to analyze the internalization of the *fathonah* (intellectual excellence) character in strengthening students' critical reasoning through the reconstruction of the discovery learning model within Natural and Social Sciences (IPAS) instruction at Al-Uswah Nature Integrated Islamic Elementary School (SDIT), Pasuruan. Primary education currently faces the challenge of cognitive disruption due to the massive influx of unverified information, necessitating the reinforcement of high-integrity critical reasoning. This research employed a qualitative case study design, with data collected through observation, interviews, and documentation involving fourth-grade teachers and students. Data analysis followed the interactive model of Miles, Huberman, and Saldaña, conducted simultaneously through data condensation, data display, and conclusion drawing. To ensure data trustworthiness, technical triangulation, prolonged engagement, and peer debriefing were utilized. The research findings reveal that the internalization of prophetic values successfully transformed mechanistic cognitive procedures into transcendental learning experiences through the reconstruction of a five-phase syntax: (1) stimulation as initial *tafakkur* (reflection); (2) data collection as scientific *amanah* (trustworthiness); (3) data processing as a manifestation of *itqan* (precision/excellence); (4) verification as an act of theological *tabayyun* (validation); and (5) generalization as the formulation of *hikmah* (wisdom). The synthesis between *fathonah* values and Vygotsky's Social Constructivism generates a "character ecosystem" where the scaffolding process provides not only cognitive support but also axiological assistance through the shared language of the classroom community. Students' critical reasoning is no longer value-free; instead, it transforms into high-integrity reasoning capable of filtering intellectual hoaxes. Theoretically, this study contributes to the Prophetic Constructivism model, while practically offering a non-dichotomous curriculum prototype that aligns global science competency standards with spiritual identity. This model positions character as the soul of the entire intellectual process in navigating the post-truth era.

Keywords: Critical Reasoning, Discovery Learning, *Fathonah* Character, IPAS, Prophetic Constructivism

INTRODUCTION

Contemporary primary education is currently facing an escalation of cognitive disruption due to the massive influx of unverified information. This phenomenon elevates critical reasoning to an existential

urgency that transcends mere academic competence. At the national level, the implementation of the *Kurikulum Merdeka* (Independent Curriculum) still faces a discrepancy in aligning the graduate dimensions of the *Profil Pelajar Pancasila* (Pancasila Student Profile) through the reinforcement of religious character (Istiqomah & Haryanto, 2023; Pertiwi et al., 2023; Tri & Yusuf, 2025). The phenomenon of declining spiritual values in Natural and Social Sciences (IPAS) instruction has emerged as a critical issue, risking the production of individuals with high logical capacity but fragile ethics, which ultimately threatens social cohesion (Bahtiar & Muhammad, 2024; Chen et al., 2023; Tawiah et al., 2024). This aligns with findings that science education overly oriented toward materialism tends to neglect the transcendental dimension, causing students to fail in comprehending the interconnectedness between natural laws and moral responsibility (Mahmudi et al., 2022; Ningsih et al., 2022). Field evidence indicates that without the integration of religious values, IPAS instruction will only produce cognitive intelligence devoid of character, contributing to the rising crisis of empathy and exploitative behavior toward the environment (Danumiharja et al., 2023; Saputro et al., 2025). Therefore, reinforcing the dimensions of faith and piety within the curriculum is imperative to ensure that scientific progress remains guided by a solid ethical compass in order to preserve human harmony (Kemendikbudristek, 2022).

Conversely, the practical application of discovery learning models is often reduced to achieving mere technical scientific literacy, failing to penetrate the deeper structures of student character (Hariyanto et al., 2024; Putri & Dewi, 2022). This condition necessitates a pedagogical reconstruction that integrates the *fathonah* character as a moral filter for the sharpness of critical reasoning (Arifuddin et al., 2025; Rosalini Rosalini et al., 2025; Yuyung et al., 2024). Such integration serves as a crucial prerequisite to ensure that students' critical reasoning is oriented toward the common good. This is achieved by transforming intellectual responsibility into a moral-transcendental commitment, thereby   the sustainability of human values within the realm of science (O'Toole et al., 2026; Rahmawati et al., 2022).

The urgency of critical reasoning within the domain of primary-level science has undergone a paradigmatic shift, moving from a mere cognitive activity toward a dialectical process that interlaces logical acuity with a moral foundation through the *fathonah* character (Adawiah & Sakdiah, 2025; Rafi et al., 2025). This transformation positions reasoning ability as an instrument for students to conduct credible and precise data verification, ensuring that the resulting scientific validation remains anchored in the principle of honest objectivity (Imamah, 2025; Oscar, 2025; Yolviansyah et al., 2022). The implementation of the discovery learning model converts the student reasoning process into a medium for the substantial internalization of prophetic values. Within this framework, the autonomous discovery of concepts requires students to be accountable for every formulated logical conclusion, transcending the boundaries of academic accountability to reach a dimension of profound ethical responsibility.

Preliminary findings at SDIT Alam Al-Uswah Pasuruan within the IPAS subject confirm a reciprocal relationship between the *fathonah* character and the dimension of critical reasoning within the discovery learning syntax. Although the stimulation and data collection phases demonstrate inclusive collaborative performance, a sharp discrepancy persists at the verification stage. In this crucial phase, students tend to simplify the formulation of conclusions without preceding them with systematic validation procedures. This indicates that the acceleration of cognitive capacity has not been accompanied by a profound internalization of *fathonah* values within inquiry-based activities. The theoretical foundation of this research further elaborates on the internalization of the *fathonah* character within the dimension of critical reasoning through the discovery learning model.

The *fathonah* character, which terminologically represents intellectual intelligence guided by moral wisdom, constitutes a comprehensive manifestation of the Islamic intellectual profile that transcends mere

cognitive capacity (Affandi et al., 2024; Sari et al., 2022; Taja et al., 2021). The integration of *fathonah* into the dimension of critical reasoning enables students not only to sharpen their problem-solving skills but also to fortify their integrity in the pursuit of scientific truth (Desfita et al., 2024; Hulkin & Zakaria, 2024; Nabila et al., 2024). This synergy transforms intellectual activities in primary schools from mere secular academic mechanisms into a form of transcendental devotion that prioritizes intellectual honesty (Mubin et al., 2025; Risdamuddin et al., 2025). In the context of science, *fathonah* converges the moral responsibility of conveying the truth (*tabligh*), honesty (*shiddiq*), and trustworthiness (*amanah*) into a fundamental scientific objectivity (Faisol et al., 2024; Hashi, 2024; Siswahyuningsih et al., 2025). In the era of information disruption, this intelligence manifests through the practice of *tabayyun* as a verification mechanism. It validates the sharpness of students' critical reasoning to mitigate the risks of destructive skepticism (Ahmad, 2025; Tatang et al., 2025). The internalization of *fathonah* is understood not merely as a cognitive accompaniment, but as an essential moral filter. It establishes the process of data verification as a prophetic obligation that fortifies both personal and social integrity (Faisol et al., 2024; Fatimah et al., 2025; Hakim et al., 2025).

Character internalization in this study is defined as an integrative process involving the assimilation of external values into an individual's personality structure. Consequently, these values are no longer perceived as a normative burden, but rather as autonomous life principles (Islamudin et al., 2025; Patria & Loka, 2025). Theoretically, this process transcends mere compliance or superficial identification, internalization demands an inner consensus, where students consciously adopt the *fathonah* character as the bedrock for both their actions and critical thinking (Achadah et al., 2022; Mashoedi et al., 2025). The simultaneous reinforcement of cognitive and affective aspects through the habituation of Islamic values is key to manifesting the *fathonah* character within intellectual behavior that is responsive to the challenges of the digital era (Ma`arif et al., 2024; Saepudin, 2023; Saepurahman et al., 2025). Internalization in this study is viewed as a dialectical interplay between reason and revelation, where the critical reasoning of Islamic Integrated Primary School (SDIT) students is encouraged to pursue scientific truth in Science and Social Studies (IPAS), while remaining guided by the 'moral radar' of *fathonah* that transforms knowledge into wisdom. Furthermore, strengthening internalization within the discovery learning model is based on the assumption that values take deeper root when discovered independently by students through experiential learning (Ananda et al., 2022; Syafruddin et al., 2025). The effectiveness of this internalization is manifested as intellectual integrity, where students' critical reasoning is continuously calibrated by a rigorous moral compass. This synergy fosters a consistent habituation of scientific behavior that transcends formal academic boundaries, embedding itself organically within the fabric of their social reality (Nugroho et al., 2025; Sunardi et al., 2025).

The implementation of the discovery learning model in this study is systematically designed through six integrative stages that synergize the dimension of critical reasoning with the internalization of the *fathonah* character. This process commences with the stimulation phase, presenting Science and Social Studies (IPAS) phenomena that challenge the students' initial reasoning (Aprillia & Frasandy, 2023; Arifianto & Koeswanti, 2022; Grisselda et al., 2023), This is followed by problem identification, providing a space for students to map core issues and formulate logical hypotheses with precision. This intellectual acuity is then tested during the data collection and processing phases, where critical reasoning is sharpened through systematic observation, while the *fathonah* character manifests as scientific integrity and meticulousness to mitigate information bias (Ardita et al., 2023; Sitta et al., 2022). Theoretically, this reconstruction is rooted in Jerome Bruner's cognitive constructivism, which emphasizes the autonomous organization of information (Azmi et al., 2025; Brunetti et al., 2024; Tohari & Rahman, 2024), However, in this context, cognitive structures are expanded through the reinforcement of prophetic values, enabling students to validate knowledge transcendentally. Through an authentic learning-by-doing approach, Science and Social Studies (IPAS) instruction is transformed; it is no

longer merely an empirical cognitive process, but functions as a laboratory of morality and intellect. In this space, students play an active role as both discoverers of knowledge and guardians of integrity for the scientific truths they uncover (Hartono et al., 2025; Kurniasih et al., 2023).

This study integrates Vygotsky's social constructivism framework and the Prophetic Education paradigm as an axiological foundation for transforming student cognition. Knowledge is not viewed as a passive transmission of information, but rather as the result of active construction through dynamic sociocultural interactions (Adawiah & Sakdiah, 2025; Ardiwansyah et al., 2025; Dewi et al., 2025). In IPAS instruction, the teacher's role is crucial in initiating adaptive scaffolding to bridge the Zone of Proximal Development (ZPD), aiming to optimize the transition from a student's actual ability to their latent potential (Permana et al., 2025; Xue, 2023). Furthermore, this study reconstructs pedagogical praxis through the triadic pillars of Prophetic Education: humanization, liberation, and transcendence (Bakar et al., 2025; Robaeah et al., 2024). This synergy repositions the *fathonah* character not merely as a mechanistic cognitive intelligence, but as a prophetic intelligence that integrates rational acuity with the profanity of conscience (Setiawan et al., 2022; Siswahyuningsih et al., 2025). This theoretical convergence empowers students to evolve into agents of change who possess a transcendental vision in understanding natural and social phenomena holistically.

The discourse on the internalization of *fathonah* character within the dimension of critical reasoning through the discovery learning model has been extensively explored from various socio-pedagogical perspectives. Current literature generally focuses on the implementation of the Pancasila Student Profile in Islamic educational institutions as an instrument to strengthen national identity (Robaeah et al., 2024; Setiawan et al., 2022). However, these studies still leave an analytical gap, particularly regarding the substantial integration of *fathonah* values within the science curriculum. On the other hand, the effectiveness of discovery learning in escalating critical thinking skills at the elementary school level has been validated by recent meta-analyses, showing a positive significance toward students' intellectual independence (Ardiwansyah et al., 2025; Dewi et al., 2025). Nevertheless, these two research trends are still dominated by a cognitive-positivistic orientation and the technical effectiveness of the model, while qualitative exploration regarding the internalization process of religious characters within scientific inquiry activities remains highly limited (Akmam et al., 2025; Fadly, 2023).

While previous discourse has partially examined critical reasoning and character development, a literature gap remains regarding the reconstruction of discovery learning as a 'moral radar' that orchestrates students' critical thinking through the *fathonah* character. A crucial imbalance persists due to the dichotomy between cognitive skill development (hard skills) and Islamic integrity (soft skills). To date, no in-depth case studies have been found that illustrate how *fathonah* can transform the verification phase in discovery learning from a mere technical validation into a transcendental *tabayyun* activity. This research emerges to fill that gap by synergizing the discovery learning model, the dimension of critical reasoning, and the *fathonah* character within the context of IPAS instruction.

The novelty of this research lies in the epistemological reconstruction of the verification phase within the discovery learning model, reconceptualizing it as a manifestation of theological *tabayyun*. The *fathonah* character is positioned as a transcendental filter to ensure that cognitive outcomes achieve not only scientific accuracy but also moral authenticity. This study aims to analyze the internalization mechanisms of this character in strengthening students' critical reasoning, while documenting the non-dichotomous acculturation between national competency standards and the institution's spiritual identity. The projected research output is a pedagogical prototype that synergizes logical acuity and moral integrity as a response to the intellectual crisis in the era of information disruption.

METHOD

This study adopts a qualitative approach with a case study design to construct an in-depth understanding of the internalization mechanisms of the *fathonah* character within the dimension of students' critical reasoning. The research locus, SDIT Alam Al-Uswah Pasuruan, was selected through purposive sampling to explore the naturalistic phenomenon of prophetic value integration within the science curriculum. Key informants were determined via purposive sampling, consisting of teachers and fourth-grade students who are in a crucial transition phase toward formal operational reasoning. The credibility of findings is maintained through technical triangulation, including: (1) participant observation to record manifestations of the *fathonah* character during the discovery learning phases; (2) semi-structured interviews to explore the transformation of critical thinking into transcendental tabayyun activities; and (3) document audits of instructional materials and reflective portfolios. The objectivity of the analysis is reinforced by developing an observation instrument based on a synthesis matrix, which converges the Pancasila Student Profile standards with the prophetic character indicators presented in Table 1.

Table 1. Synthesis Matrix: Integration of Critical Reasoning and *Fathonah* Character

Discovery Learning Phase	Critical Reasoning Dimension	*Fathonah* Character Manifestation	Observable Behavioral Indicators (Student Activities)
Stimulation & Problem Statement	Asking questions and critically identifying problems.	Spiritual Intelligence (*Dhikr*): Recognizing natural phenomena as *Ayat Kauniyah* (Signs of God).	Students pose curiosity-based questions that bridge scientific theory with the greatness of the Creator.
Data Collection	Obtaining and processing information and ideas.	*Amanah* and *Syaja'ah*: Responsibility and courage in exploring primary data.	Students collect experimental data independently, diligently, and objectively without manipulating research variables.
Data Processing	Analyzing and evaluating reasoning and its procedures.	*Itqan* (Meticulousness): Striving for optimal standards of intellectual quality.	Students process data with high precision, double-checking for errors in calculations, and ensuring logical coherence.
Verification	Reflecting on thinking and thought processes.	Theological *Tabayyun*: Validating data truth based on moral honesty.	Students cross-check data not only for technical accuracy but as a form of moral accountability to God.
Generalization	Logical decision-making and drawing conclusions.	Wisdom (*Hikmah*): Formulating conclusions that bring *Maslahat* (Public good).	Students conclude findings with wisdom, acknowledging human limitations and understanding the benefit of knowledge for the environment.

Data analysis was conducted circularly using the Miles, Huberman, and Saldaña interactive model, utilizing the Indicator Synthesis Matrix as an analytical compass (Miles et al., 2014). This matrix was operationalized during the data condensation stage to codify fragments of student behavior into dimensions of critical reasoning and transcendental manifestations of the *fathonah* character. During the data display phase, the matrix served to map the consistency between discovery learning phases and the internalization of

prophetic values, thereby detecting the formation of students' 'moral radar.' Conclusions were drawn through a non-dichotomous synchronization of national competency standards and the institution's spiritual identity. The validity of the findings was reinforced through prolonged engagement and peer debriefing to ensure the accuracy of the reconstructed pedagogical model.

RESULT AND DISCUSSION
Result

This study uncovers the internalization mechanisms of the *fathonah* character in optimizing students' critical reasoning through the discovery learning model at SDIT Alam Al-Uswah Pasuruan. Through a synthesis of participant observation, phenomenological interviews, and documentary audits, a significant reconstruction of Bruner's operational structure of discovery learning was identified. The findings demonstrate that the integration of *fathonah* values is not merely a terminological insertion but a substantial transformation of the DNA within every learning phase. Analysis of the fourth-grade Science and Social Studies (IPAS) teaching modules confirms an expansion of instructional objectives, moving beyond cognitive mastery of science toward a spiritual-ethical dimension. Teachers position intellect (*fathonah*) as a divine mandate (*amanah*) to uncover theological truths within natural phenomena, which systemically redefines the six standard phases of discovery learning into a holistic-prophetic instructional flow.

Table 2. Comparison of Conventional vs. *Fathonah*-Based Discovery Learning Syntax

Discovery Learning Phase	Conventional Syntax (General)	*Fathonah*-Based Syntax (Reconstruction)	Shift of Mindset
Stimulation	Providing stimuli to trigger technical curiosity.	*Tafakkur Kauniyah*: Presenting natural phenomena as signs of the Creator's greatness.	From objective curiosity to spiritual awe.
Problem Statement	Identifying problems and formulating temporary hypotheses.	Identifying Wisdom (*Hikmah*): Finding the core issues related to human welfare (*Maslahat*).	From mere problem-solving to meaning-seeking.
Data Collection	Gathering information to prove the hypothesis.	Scientific Mandate (*Amanah*): Collecting data objectively as a form of moral accountability.	From technical procedure to moral/ethical duty toward data.
Data Processing	Processing data logically and mathematically.	*Itqan* (Precision): Processing data with the highest standards of diligence and excellence.	From procedural accuracy to worship through knowledge.
Verification	Matching data with theory for validation.	Theological *Tabayyun*: Validating data truth through transcendental moral honesty.	From right/wrong validation to truth/falsehood (moral radar).
Generalization	Drawing general conclusions from experimental results.	Formulating Wisdom: Concluding findings for the purpose of gratitude and public good.	From pure scientific law to beneficial knowledge (*Ilm Nafi'*).

The reconstruction of the discovery learning model in this study represents an epistemological reorientation that transforms technical procedures into transcendental pedagogical experiences. First, the stimulation phase is reconstructed as Initial *tafakkur*, where natural phenomena are positioned as *ayat kauniyah* (signs of God) to connect physical facts with theological wisdom. Second, data collection is transformed into a scientific mandate (*amanah*), emphasizing objective honesty as a manifestation of *fathonah's* intellectual integrity. Third, data processing is positioned as a manifestation of Itqan, demanding profound accuracy as a form of cognitive accountability. Fourth, the verification phase is redefined as an act of theological *tabayyun*, employing a transcendental filter to validate truth and prevent premature simplification and intellectual hoaxes. Fifth, the generalization phase culminates in the formulation of wisdom (*hikmah*), where learning outcomes are no longer limited to scientific laws but are oriented toward public welfare (*maslahat*) through inclusive intellectual policies.

This study produces a reconstruction of the discovery learning syntax that transforms mechanistic reasoning into integrated reasoning through transcendental intellectual activities. Findings at SDIT Alam Al-Uswah demonstrate that reorienting the stimulation phase into *tafakkur* activities shifts the perception of natural phenomena into *ayat kauniyah*, triggering reflective scientific literacy. The integration of *amanah* and *itqan* characters in data processing elevates science experiments from mere technical procedures to moral responsibilities. The crucial point of this reconstruction lies in the verification phase, which is transformed into an act of theological *tabayyun*. Through the 'Data Honesty Check' instrument, students' critical reasoning is validated both empirically and ethically to mitigate intellectual ego. This syntax culminates in the formulation of wisdom (*hikmah*) at the generalization phase, where scientific laws are oriented toward public welfare. Data triangulation synergy proves that this non-dichotomous model successfully creates a holistic equilibrium between analytical sharpness and spiritual integrity.

Table 3. Reconstruction of *Fathonah*-Based Discovery Learning Syntax

Conventional Syntax	Prophetic Reconstruction	*Fathonah* Character Manifestation
Stimulation	Initial *Tafakkur*	Identifying natural phenomena as *ayat kauniyah* (divine signs).
Data Collection	Scientific *Amanah*	Integrity and honesty in data acquisition and exploration.
Data Processing	*Itqan* Activities	High precision and profound accuracy in data analysis.
Verification	Act of *Tabayyun*	Data cross-checking as a moral filter and anti-hoax mechanism.
Generalization	Formulating *Hikmah*	Conclusions based on public welfare and social benefit (*maslahah*).

Table 3 presents a systematic deconstruction and reconstruction of the discovery learning syntax, integrated with the spectrum of *fathonah* values. The data indicate that each stage of discovery is no longer viewed as a value-neutral cognitive procedure, but rather as a series of activities imbued with ethico-transcendental significance. This reconstruction begins by transforming the stimulation phase into Initial *tafakkur*, aiming to convert technical curiosity into theological awareness through the observation of natural phenomena as *ayat kauniyah*. In the intermediate stages, the data collection and data processing phases are redefined as instruments of scientific mandate (*amanah*) and *itqan* activities. This redefinition emphasizes that

accuracy and integrity in handling data are representations of intellectual honesty, which directly mitigates the risk of scientific manipulation from an early stage.

This study successfully synthesizes the discovery learning model with the *fathonah* character as a new paradigm for strengthening students' critical reasoning. The findings indicate that the integration of prophetic values transforms technical logic into integrated reasoning, where the scientific verification phase substantively shifts into a culture of *tabayyun*. This model proves effective as a spiritual scaffolding that mitigates the impact of cognitive disruption by functioning spiritual values as a moral filter in processing information. The strength of this research lies in the synthesis of Vygotsky's social constructivism and prophetic education, producing an inclusive 'Intellectual Integrity' model suitable for the entire spectrum of student engagement. Nevertheless, the sociocultural homogeneity of the research subjects remains a limitation in generalizing the results; therefore, further research is required to test these integration parameters within more heterogeneous educational environments.

Discussion

The findings of this study confirm that the reconstruction of discovery learning syntax through the integration of *fathonah* values has transformed the learning model from a mechanistic cognitive process into a transcendental pedagogical experience (Azmi et al., 2025; Brunetti et al., 2024; Tohari & Rahman, 2024). The redefinition of the stimulation phase into *tafakkur* activities demonstrates that students' critical reasoning does not arise from vacuous skepticism, but is instead rooted in reflective observation of the macrocosmic order (Adawiah & Sakdiah, 2025; Hashi, 2024). This phenomenon validates the argument that the integration of prophetic values into science serves as an effective instrument for constructing a holistic student worldview, while simultaneously eliminating the dichotomy between scientific literacy and religious identity within the classroom (Arifuddin et al., 2025; Desfita et al., 2024; Imamah, 2025).

Fundamentally, this reconstruction marks a paradigmatic transition from 'technical discovery' toward 'the discovery of meaning.' Within this constellation, critical rationality and transcendental belief are no longer positioned dichotomously; instead, they interact symbiotically to construct the students' cognitive structures (Mahmudi et al., 2022; Ningsih et al., 2022). This refinement underscores that science education functions as an instrument for the de-secularization of knowledge, wherein empirical phenomena are positioned as *ayat kauniyah* (divine signs) that necessitate both intellectual accountability and spiritual integrity (Danumiharja et al., 2023; Saputro et al., 2025). This transformation proves that the internalization of *fathonah* values is capable of bridging the discrepancy between scientific literacy and religious identity, creating a cognitive equilibrium that is profoundly relevant in navigating information disruption in the contemporary era (Faisol et al., 2024; Siswahyuningsih et al., 2025).

The integration of *fathonah* values into the stimulation phase through *tafakkur* techniques transforms the instructional orientation from a mere transfer of knowledge into an existential quest for meaning (Bakar et al., 2025; Robaeah et al., 2024). This aligns with the premise that the synergy of spiritual values within an active learning model significantly escalates students' cognitive engagement, as knowledge is inextricably linked to humanity's transcendental purpose (Rahmawati et al., 2022; Yuyung et al., 2024). The reconstruction of prophetic-value-based learning models within the national education context represents a strategic curriculum decolonization effort. This approach effectively constructs student identity without negating global scientific competency standards (Affandi et al., 2024; Khairullina & Fathonah, 2024; Sari et al., 2022). Such efforts enable educational institutions to integrate religious epistemology into the active learning structure, thereby empowering students to master global literacy while remaining firmly rooted in strong character foundations (Faisol et al., 2024; Hakim et al., 2025). Consequently, education no longer

functions as an agent of cultural alienation; instead, it serves as a means of intellectual emancipation that harmoniously aligns scientific reasoning with spiritual wisdom (Arifuddin et al., 2025; Yuyung et al., 2024).

The success of internalizing *fathonah* character in this study reaffirms the urgency of 'Systemic Value Infiltration' as an antithesis to 'Partial Value Indoctrination.' Previous discourses have frequently highlighted the failures of character education, which often becomes reduced to theoretical rote learning and remains fragmented from core academic disciplines (Faisol et al., 2024; Siswahyuningsih et al., 2025). Conversely, these data provide evidence that the reconstruction of prophetic values within the discovery learning stages is capable of positioning morality as an integral part of the inquiry process. The *tabayyun* (verification) activity during the verification phase habituates students to perceive honesty and precision not merely as curricular requirements, but as fundamental methodological instruments in achieving the validity and originality of scientific findings. This pattern aligns with the embedded values theory, which asserts that character formation achieves its highest effectiveness when it is functionally integrated into the students' cognitive structures (Ananda et al., 2022; Syafruddin et al., 2025). Consequently, this model offers a prototype for an integrative curriculum capable of simultaneously accelerating both academic and spiritual achievements without creating a dichotomy of learning burdens.

The synthesis between *fathonah* values and Vygotsky's Social Constructivism in this study constructs a 'Character Ecosystem' within the learning environment of SDIT Alam Al-Uswah Pasuruan. In this ecosystem, the scaffolding process undergoes a meaningful expansion; it encompasses not only technical cognitive assistance but also axiological scaffolding through the habituation of a shared language of *tabayyun* and *itqan*. These findings reinforce the argument that a value-laden learning environment facilitates the internalization of complex scientific concepts by establishing a meaningful connection between new knowledge and the student's transcendental value system (Ardiwansyah et al., 2025; Fadly, 2023). The 'Integrated Reasoning' model offers a refinement of Social Constructivism theory by inserting 'Moral Agency' as a determinant variable in how students construct knowledge amidst the era of disruption (Hartono et al., 2025; Mashoedi et al., 2025).

From the perspective of Social Constructivism, *fathonah* values function as a theological *tabayyun* mechanism that enhances the quality of interaction within the Zone of Proximal Development (ZPD) (Permana et al., 2025; Xue, 2023). The implementation of these values introduces a new dimension to scaffolding, where the interaction between teacher and student is no longer perceived as a neutral cognitive transmission. This process serves as a strategic medium to fortify data integrity and intellectual honesty, ensuring that every step in scientific problem-solving is firmly anchored in uncompromising values of truth (Ardita et al., 2023; Ma`arif et al., 2024; Sitta et al., 2022). Consequently, the ZPD transforms into an ethical dialectical space, where the construction of scientific knowledge is harmonized with the development of students' prophetic character (Siswahyuningsih et al., 2025; Yolviansyah et al., 2022). These results provide scientific legitimacy to the notion that character integration within the learning space accelerates the mechanisms of cognitive assimilation and accommodation through the provision of a robust axiological framework. Empirically, the practice of collective values in the form of *amanah*-based cooperation is proven to optimize student performance in IPAS subjects. This phenomenon indicates that moral integrity within group collaboration correlates positively with the depth of scientific understanding and the social maturity of the students (Danumiharja et al., 2023; Ningsih et al., 2022).

This research provides scientific legitimacy to the notion that the reconstruction of prophetic values within discovery learning is capable of positioning morality as an integral part of the inquiry process, where *tabayyun* activities habituate students to perceive honesty and precision as fundamental methodological instruments for achieving scientific validity. Theoretically, these findings enrich the Prophetic Constructivism

model by expanding cognitive scaffolding into axiological assistance that fortifies students' intellectual integrity, while practically offering a non-dichotomous curriculum prototype that aligns global science competency standards with spiritual identity. However, this study is limited by the homogeneity of subjects within a single institution; thus, generalizing the results to broader sociocultural contexts requires caution. Consequently, recommendations for future research include testing these value-integration parameters in more heterogeneous educational environments.

CONCLUSION

This study concludes that the internalization of the *fathonah* character strengthens students' critical reasoning through a methodological reconstruction of the discovery learning model. The findings indicate that integrating prophetic values within the learning space positions morality as an integral part of the inquiry process rather than a mere curricular requirement. Through the reconstructed stages, including *tafakkur* (stimulation), *scientific amanah* (data collection), *itqan* (data processing), *theological tabayyun* (verification), and *hikmah* (generalization), a transformation occurs, shifting mechanistic critical thinking into 'Integrated Critical Reasoning.' Theoretically, this research contributes to the Prophetic Constructivism model by expanding cognitive scaffolding into axiological assistance that fortifies students' intellectual integrity. Practically, it offers a non-dichotomous curriculum prototype that successfully aligns global science competency standards with spiritual identity, effectively mitigating cognitive disruption in the post-truth era.

However, this study is limited by the homogeneity of the research subjects within a single institution, necessitating caution when generalizing the findings to broader sociocultural contexts. Furthermore, the duration of this study may not have fully captured the long-term habituation of students' scientific behavior beyond the formal school environment. Consequently, recommendations for future research include testing these value-integration parameters in more heterogeneous educational settings. Ultimately, these findings call upon educators to act as architects of intellectual character, capable of unifying academic excellence with prophetic integrity to preserve human harmony.

AUTHOR CONTRIBUTIONS STATEMENT

All authors, SS, ES, TT, MBA, AIBJ, were involved in the development and writing of this article.

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