

Constructivist Pedagogy Develops Critical Thinking in a Traditional Putri Pesantren: Evidence from a Convergent Mixed-Methods Case Study

Afwah Mumtazah^{1✉}, Sari Rahayu²

^{1,2} Institut Studi Islam Fahmina (ISIF) Cirebon

✉ Corresponding Email: mumtazahfuad@gmail.com

Submitted : 2026-06-04 ; Accepted: 2026-10-03 ; Published: 2026-10-07

ABSTRACT

Traditional pedagogy in Indonesian pondok pesantren, organised around teacher-centred transmission and extensive memorisation, has long secured moral formation and mastery of classical Islamic texts, yet contemporary professional roles for Muslim graduates additionally require analysis, evidence-based evaluation, and principled problem-solving. This study examined how the systematic introduction of constructivist pedagogy shaped the development of critical thinking among santriwati in professional-track programmes at Pondok Pesantren Putri 'Aisyah Kempek, Cirebon. A convergent parallel mixed-methods case study was conducted over six months during the even semester of 2024/2025, with the qualitative strand as the dominant component. Data comprised fourteen semi-structured interviews with six ustadzah and eight santriwati, twenty-four non-participant classroom observations, document analysis of lesson plans and reflective journals, and rubric scoring of forty-five paired student work samples using an instrument adapted from Facione's critical thinking framework. Qualitative data were analysed through reflexive thematic analysis and rubric data descriptively. Four themes emerged: a shift from knowledge reception to collaborative construction; professionally situated critical capacities; negotiation of cultural and theological tension resolved through a hybrid model; and gendered dimensions of critical thinking in a putri setting. Rubric means rose from 2.2 to 3.4 on a four-point scale, with the largest gains in self-regulation and analysis. The study concludes that constructivist strategies framed as instruments of tadabbur and collectively accountable ijtihad can be integrated into traditional pesantren professional education without displacing its epistemological commitments, and that the theological reframing rather than the techniques themselves is what makes integration workable.

Keywords: constructivist pedagogy, critical thinking, pondok pesantren, professional education, santriwati

Copyright © Authors

How to Cite :



This work is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/)

INTRODUCTION

Professional practice across sectors has grown increasingly complex over the past two decades. Technological change, environmental pressure, demographic shift, and the expansion of information ecosystems present opportunities and challenges in equal measure, and have moved critical thinking from a desirable attribute toward a core professional competency. Professionals in education, health, law, religious leadership, and community development are regularly required to analyse ambiguous situations, weigh competing knowledge claims, synthesise diverse perspectives, and generate solutions that remain ethically and culturally coherent.¹ In the context of a Muslim-majority country like Indonesia, these requirements apply with particular force to graduates of Islamic educational institutions, who are expected to serve both as custodians of tradition and as agents of constructive change within their communities.²

The pondok pesantren system holds a substantial place in Indonesia's educational landscape, hosting more than thirty-six thousand institutions serving over four and a half million santri.³ Undang-Undang Nomor 18 Tahun 2019 tentang Pesantren recognised pesantren as an integral part of the national education system while affirming their distinctive character and autonomy.⁴ Merdeka Belajar functions as the paradigm through which curriculum policy is currently framed, orienting it toward student-centred, active, and differentiated learning and toward the development of critical thinking, creativity, collaboration, and communication.⁵ Within that policy framework, pesantren graduates are positioned as individuals who combine textual depth and moral formation with the capacity to address contemporary problems through reasoned, context-sensitive application of Islamic principles.⁶

A gap nonetheless persists between this policy framing and pedagogical practice in many traditional pesantren. Instruction is organised around three long-established methods. In sorogan, the santri reads a passage of a classical text individually before the kyai or ustadzah, who corrects pronunciation, grammatical parsing, and meaning; the student's task is accurate reproduction under direct supervision. In bandongan, the teacher reads and glosses a text before a large group while santri annotate their own copies; participation consists of listening and transcription rather than questioning. In hafalan, passages of the Qur'ān, matan, or nazm are committed to memory and recited back for verification. Across all three the teacher holds interpretive authority, the text is the object of transmission rather than interrogation, and the student role is receptive. The model has proven effective in transmitting the Islamic sciences, instilling moral discipline, and reproducing scholarly authority across generations, yet

¹ Mohammed A. Almulla, 'Constructivism Learning Theory: A Paradigm for Students' Critical Thinking, Creativity, and Problem Solving to Affect Academic Performance in Higher Education', *Cogent Education*, 10.1 (2023), 2172929.

² Nizar Alam Hamdani, 'Scrutinizing Islamic Higher Education Institutions in Indonesia', *Jurnal Pendidikan Islam*, 9.1 (2023), 79–92 (pp. 81–83).

³ Kementerian Agama Republik Indonesia, *Statistik Pendidikan Islam* (Direktorat Jenderal Pendidikan Islam, [tahun terbitan yang dirujuk]).

⁴ Undang-Undang Republik Indonesia Nomor 18 Tahun 2019 tentang Pesantren, arts 1–5.

⁵ Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, *Kurikulum Merdeka: Panduan Implementasi* (Kemendikbudristek, 2022).

⁶ Hasyim Haddade and others, 'Madrasah Management Strategies through Madrasah Reform Program: An Evidence from Indonesia', *International Journal of Educational Management*, 38.5 (2024), 1289–1304.

observers within and beyond the pesantren world have noted that exclusive reliance on these methods tends to produce graduates who reproduce authoritative texts confidently but encounter difficulty when professional problems require analysis, evaluation, inference, and synthesis.⁷

The question carries particular weight in putri pesantren. Research on professional formation in Islamic education has drawn on the concept of agency to explain how graduates translate religious learning into professional practice, and studies of Indonesian Islamic institutions indicate that pedagogies cultivating reasoning and deliberation strengthen this capacity while pedagogies restricted to transmission tend to leave it underdeveloped. Santriwati in professional-track programmes are increasingly expected to serve as Islamic educators, da'iyah, counsellors, and community leaders, roles that call for both spiritual authority and interpretive flexibility. Pedagogical cultures organised around deference and teacher-centred authority may therefore constrain the development of dispositions these roles require. Any reform, however, must work within established constraints: the primacy of revelation, respect for chains of scholarly authority, and the moral formation that constitutes the distinctive contribution of pesantren education.⁸

Constructivist pedagogy offers one avenue for addressing this. Social constructivism holds that learners construct knowledge through interaction with their environment, peers, and more knowledgeable others within the Zone of Proximal Development. Inquiry-based learning, collaborative problem-solving, reflective practice, and scaffolded discussion have been shown to strengthen critical thinking dispositions and skills.⁹ Systematic review evidence concludes that constructivist models support critical thinking development, with effectiveness contingent on cultural adaptation, teacher preparedness, and alignment with learners' prior epistemological frameworks. Within Indonesian Islamic education, studies of madrasah and modern pesantren indicate that student-centred pedagogies improve critical thinking outcomes where teachers receive targeted professional development and content remains anchored in Islamic intellectual traditions.¹⁰

Three gaps follow from this literature. First, existing research on constructivist pedagogy in Indonesian Islamic education has concentrated on secular schools, madrasah ibtidaiyah, and modern pesantren already operating hybrid curricula; traditional pesantren with professional-track pathways remain largely unexamined. Second, putri pesantren are almost absent from this literature, despite the expanding professional roles their graduates occupy and the specific pedagogical cultures they inhabit. Third, the question of how constructivist principles relate to Islamic epistemological resources, particularly ijihad as disciplined reasoning, musyawarah as

⁷ Feriyanto Ismail and others, 'Enhancing Excellence: Analyzing Quality Management in Islamic Boarding Schools', *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 7.3 (2023), 848–62.

⁸ Nadeem A. Memon, Mohamad Abdalla and Dylan Chown, 'Laying Foundations for Islamic Teacher Education', *Education Sciences*, 14.10 (2024), 1046.

⁹ Hung Viet Le, 'Promoting L2 Learners' Critical Thinking Skills: The Role of Social Constructivism in Reading Class', *Frontiers in Education*, 9 (2024), 1241973.

¹⁰ Rusmiyati and others, 'Strengthening Local Wisdom-Based Work Culture in Improving the Quality of Education in Madrasah', *Al-Tanzim*, 6.3 (2022), 868–79.

deliberative knowledge-building, and tadabbur as reflective engagement with revelation, has been raised conceptually but not investigated empirically.¹¹

The novelty of this study is correspondingly threefold. It provides the first documented account of constructivist implementation within a traditional putri pesantren professional education pathway. It treats the negotiation of authority and revelation not as a contextual obstacle to be managed but as the central pedagogical work, and documents how that negotiation proceeded. And it articulates a hybrid model in which constructivist task structures are framed as instruments of tadabbur and collectively accountable *ijtihad*, offering a formulation that other institutions can examine, adapt, or contest.

Three questions guided the study. First, what changes occur in classroom interaction patterns, student cognitive engagement, and critical thinking indicator development when constructivist strategies are introduced? Second, how do *ustadzah* and *santriwati* perceive and experience the effect of these pedagogical shifts on critical thinking and professional readiness? Third, what cultural, institutional, and pedagogical enablers and barriers shape implementation and sustainability within a traditional putri pesantren?

RESEARCH METHODOLOGY

This study employed a convergent parallel mixed-methods design embedded within a single-case study, with the qualitative strand as the dominant component. The two strands were collected during the same period, analysed independently, and merged only at the interpretation stage; neither was sequenced to inform or explain the other. The design was selected because the research questions require both an account of how participants experienced and negotiated pedagogical change and an indication of whether observable critical thinking performance shifted. The case study component followed established case study procedure: the unit of analysis is the professional-track educational programmes at the research site, treated as a single bounded case; the case is bounded by institution, by programme, and by time; two propositions guided data collection, namely that constructivist task structures would shift observable classroom interaction and that implementation would generate cultural and theological tension requiring negotiation; and findings were interpreted through pattern matching for the first proposition and explanation building for the second.¹² A chain of evidence was maintained by linking each reported finding to its source through a coded case study database containing observation protocols, interview transcripts, collected documents, rubric score sheets, and the researcher's reflexive journal.

The study was conducted at Pondok Pesantren Putri 'Aisyah Kempek, Cirebon, West Java, over six months during the even semester of the 2024/2025 academic year. The researcher held negotiated institutional access and adopted an observer-participant positionality, maintaining a reflexive journal throughout fieldwork to monitor assumptions and interpretive decisions. Participants were recruited through purposive sampling for maximum variation in

¹¹ Rusdi Ramli, Bahrani Bahrani and Ahmad Ramli, 'Building a Quality Culture in Islamic Educational Institutions', *Jurnal Inovatif Manajemen Pendidikan Islam*, 4.1 (2025), 50–61.

¹² Robert K. Yin, *Case Study Research and Applications: Design and Methods*, 6th edn (SAGE, 2018), pp. 27–35.

teaching experience and academic seniority, yielding six ustadzah teaching professional-track classes and eight santriwati in semesters five to seven who had experienced both pre-intervention instruction and the subsequent constructivist sessions. Qualitative data collection comprised fourteen semi-structured interviews of forty-five to seventy-five minutes, audio-recorded with consent and transcribed verbatim; twenty-four non-participant classroom observations using a structured protocol recording teacher talk ratio, student-initiated questions, instances of collaborative knowledge construction, and occurrences of Facione's six critical thinking indicators¹³; and document analysis of lesson plans, student reflective journals, curriculum maps, and institutional policy documents. Quantitative data comprised rubric scoring of forty-five paired pre- and post-intervention student work samples on a four-point rubric adapted from Facione, covering six critical thinking indicators.¹⁴ Interview and observation protocols were developed from the Facione framework supplemented by the Islamic pedagogical concepts of *ijtihad*, *musyawarah*, and *tadabbur*, and were piloted with three santriwati before main data collection. Qualitative data underwent reflexive thematic analysis across six phases, with codes generated inductively and refined through iterative engagement with the analytic framework; rubric scores were analysed descriptively through means, standard deviations, and mean change with accompanying effect sizes.¹⁵ Credibility was pursued through prolonged engagement, triangulation across methods and participant types, member checking of thematic summaries with four participants, a reflexive journal, and an audit trail.¹⁶ Ethical clearance was obtained and informed consent secured from all participants and institutional gatekeepers, with attention to cultural protocols, gender sensitivities, and the hierarchical character of pesantren relationships.

RESULTS AND DISCUSSION

Baseline Conditions and the Intervention

Observation before the intervention documented a teacher-centred transmission model. Ustadzah talk occupied approximately seventy-five to eighty-five per cent of instructional time, the remainder consisting of choral recitation, clarification questions, and responses to teacher-posed questions. Student-initiated questions averaged 1.2 per ninety-minute session and typically sought clarification of textual meaning. Critical thinking indicators appeared infrequently and predominantly at the interpretation level; evaluation, inference, and self-regulation were observed in fewer than fifteen per cent of coded segments. Interviews confirmed a corresponding epistemic stance, with one santriwati describing the classroom expectation directly: "We are taught to receive and to hold firmly what the ustadzah explains.

¹³ Peter A. Facione, *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction* (California Academic Press, 1990), pp. 6–9.

¹⁴ Facione, pp. 6–9.

¹⁵ Virginia Braun and Victoria Clarke, 'Reflecting on Reflexive Thematic Analysis', *Qualitative Research in Sport, Exercise and Health*, 11.4 (2019), 589–97; Esubalew Aman Mezmir, 'Qualitative Data Analysis', *Research on Humanities and Social Sciences*, 10.21 (2020), 15–27.

¹⁶ Francisco M. Olmos-Vega and others, 'A Practical Guide to Reflexivity in Qualitative Research: AMEE Guide No. 149', *Medical Teacher*, 45.3 (2023), 241–51.

Questioning too much can be seen as lacking adab” (S3). Ustadzah accounts revealed a considered commitment to this model, grounded in the conviction that authoritative transmission protects the integrity of Islamic knowledge.

Implementation began with a three-day workshop for the six participating ustadzah. Constructivist principles were introduced and linked explicitly to *ijtihad*, *musyawarah*, and *tadabbur*. Ustadzah then co-designed lessons adapting existing *fiqh* and Islamic education modules to incorporate jigsaw reading of contemporary cases, structured academic controversy, reflective journaling, and peer-facilitated *musyawarah*. Implementation ran over twelve weeks with weekly reflective meetings. Post-intervention observation recorded a reconfiguration of classroom interaction: teacher talk fell to thirty-five to forty-five per cent of instructional time, and student-initiated questions rose to an average of 7.8 per session, with a marked increase in questions probing assumptions, requesting evidence, or exploring alternative applications.

Patterns in the Classroom Interaction Record

The observation record repays closer examination than the headline figures suggest. The fall in ustadzah talk from between seventy-five and eighty-five per cent to between thirty-five and forty-five per cent of instructional time is substantial, but it is the redistribution rather than the reduction that matters analytically. The time released did not return to silence or to individual seatwork; it was absorbed almost entirely by small-group work and by whole-class synthesis discussion, which means the change was not a withdrawal of teaching but a relocation of it. Ustadzah remained continuously active during the released time, circulating between groups, posing questions, and intervening where reasoning stalled. Several described this as more demanding than lecturing rather than less, a perception consistent with accounts elsewhere of the workload implications of student-centred methods.¹⁷

The change in student-initiated questions is the more informative measure. A rise from 1.2 to 7.8 questions per session represents roughly a sixfold increase in volume, but the qualitative shift in the coded question types is more consequential than the count. Before the intervention, coded questions were almost entirely clarificatory, seeking the meaning of a term or the correct reading of a passage. After it, three additional categories appeared with regularity: questions probing the assumptions underlying a stated position, questions requesting the evidentiary basis of a ruling, and questions exploring whether a principle would hold in an altered situation. The third category is the most significant for the study’s purpose, because transfer to unfamiliar cases is what professional practice requires and what the transmission model least prepares for.

One pattern deserves particular note because it complicates the account. The increase in questioning was not evenly distributed across sessions. Observation records show that sessions organised around contemporary cases with no settled classical ruling generated substantially more student-initiated questioning than sessions covering material with an established position in the *madhhab*. This suggests that what the constructivist task structures achieved was not a

¹⁷ Almulla, p. 2172929.

general increase in student assertiveness but a specific licence to reason where the tradition itself leaves room for reasoning. Santriwati appear to have distinguished, without being taught to, between questions open to *ijtihad* and questions settled by transmission. If that reading is correct, the intervention did not so much overcome deference to authority as clarify where deference applies¹⁸, which is a more modest and more theologically coherent outcome than the language of student empowerment would suggest.

Table 1. Pre- and post-intervention mean scores on critical thinking indicators (45 paired work samples)

CT indicator	Pre M (SD)	Post M (SD)	Change	Cohen's d
Interpretation	2.4 (0.7)	3.3 (0.6)	+0.9	1.38
Analysis	2.1 (0.8)	3.4 (0.5)	+1.3	1.95
Evaluation	2.0 (0.9)	3.2 (0.6)	+1.2	1.57
Inference	2.3 (0.7)	3.3 (0.5)	+1.0	1.64
Explanation	2.2 (0.8)	3.4 (0.6)	+1.2	1.70
Self-regulation	2.1 (0.9)	3.5 (0.5)	+1.4	1.92
Overall mean	2.2	3.4	+1.2	—

Note. Rubric adapted from Facione. Scale: 1 = Beginning, 2 = Developing, 3 = Proficient, 4 = Exemplary. Cohen's d computed from the reported means and pooled standard deviations. Scores are reported descriptively; the rubric was researcher-developed and scoring was not independently verified, so inferential claims are not made.

Table 1 indicates gains across all six indicators, with the largest in self-regulation and analysis and the smallest in interpretation. Effect sizes computed from the reported means and pooled standard deviations range from 1.38 to 1.95, which would conventionally be described as large. The pattern is consistent with the qualitative findings reported below, in which participants described monitoring and revising their own positions and breaking down arguments as the operations that changed most noticeably. The claim made here is limited to direction rather than magnitude: with a single-scorer researcher-developed instrument, the table supports the statement that observable performance moved in a consistent direction, not a statement about the size of that movement.

From Reception to Construction

Santriwati described a shift in their epistemic stance. Before the intervention, knowledge was experienced as external, located in authoritative texts and *ustadzah* explanation, to be received and internalised. Afterwards, participants articulated agency in constructing understanding. One explained: “When we did the jigsaw on digital da’wah ethics, I had to read my section carefully, explain it to my group, and then defend why I thought a particular platform feature was problematic according to the *dalil*. For the first time I felt I was building

¹⁸ Ainul Wafa, ‘Total Quality Management (TQM) in Islamic Educational Institutions’, *Tadibia Islamika*, 2.2 (2022), 87–94; Busahdiar, Ummu Karimah and Sopa Tamin, ‘Total Quality Management (TQM) and Basic Education’, *Jurnal Pendidikan Agama Islam*, 20.2 (2023).

understanding, not just storing it” (S5). Ustadzah observed corresponding changes in classroom discourse: “They used to wait for me to tell them the answer. Now they come with questions that show they have already thought and discussed. Sometimes their questions make me rethink my own explanation” (U2). This finding corroborates evidence that constructivist learning environments advance critical thinking and problem-solving concurrently, and echoes accounts of social constructivist approaches strengthening critical thinking dispositions through peer meaning-making.¹⁹ It also connects to the Indonesian literature on Islamic institutional development in a way worth drawing out. Studies of madrasah reform have found that improvements in institutional practice depend on strengthening management and technology together rather than either alone, and that outcomes hinge on whether evaluation is followed by action.²⁰ The parallel at classroom level is close: the intervention here consisted of task redesign and teacher preparation delivered together, and the weekly reflective meetings supplied precisely the evaluation-to-action link that institutional studies identify as the fragile stage. Where those meetings lapsed for a fortnight because of an examination period, observation records show a partial reversion to teacher-led explanation, which suggests the mechanism was the sustained collegial attention rather than the initial workshop.

Professionally Situated Critical Capacities

Participants connected critical thinking development to concrete professional scenarios: preparing khutbah engaging contemporary issues without departing from textual sources, counselling on fiqh cases involving gender, disability, or economic precarity, and designing educational programmes responsive to local realities. During an observed musyawarah on inheritance in blended families, one group moved from initial polarisation between strict faraid adherence and contextual equity toward a position integrating textual fidelity with maqasid al-shari’ah reasoning, and proposed practical counselling steps. An ustadzah commented: “They did not just memorise the rules; they reasoned about justice in a new situation. That is what professional fiqh looks like” (U4).²¹

Tension, Negotiation, and Hybrid Resolution

Implementation encountered resistance grounded in concerns about authority, adab, and theological integrity. Some ustadzah anticipated that student-centred discussion would erode respect for scholarly hierarchy and admit unchecked individual interpretation; several santriwati expressed discomfort at being asked to construct understandings they had been taught to receive. These tensions became sites of negotiation rather than obstacles. The resolution lay in framing constructivist strategies as instruments of deeper tadabbur and collectively accountable ijtihad within established boundaries: “We are not replacing the dalil with our opinions. We are using our minds, which Allah gave us, to understand the dalil more deeply

¹⁹ Le, p. 1241973.

²⁰ Haddade and others, ‘Madrasah Management Strategies’, pp. 1295–98.

²¹ Erwin Norman and others, ‘Implementing Sharia-Based Total Quality Management in Islamic Educational Institutions’, *Eduprof: Islamic Education Journal*, 6.2 (2025), 116–34.

and apply it wisely in situations the classical scholars did not face. That is following the spirit of our predecessors, not departing from them” (U1).²²

This finding departs from the broader literature in a way worth stating. Studies conducted in secular and modern-hybrid settings generally treat cultural fit as a moderating variable affecting how well an intervention works. In this case, the negotiation of authority and revelation was not a moderating condition but the substance of the pedagogical work itself. Resistance did not diminish as teachers became familiar with the techniques; it resolved only when the techniques were reframed in theological terms the participants could accept. In traditional religious settings, cultural adaptation may therefore be better understood as the intervention rather than as a condition of its success.²³

Gendered Dimensions

Santriwati described critical thinking development as personally as well as professionally consequential within gendered expectations. Several reported that the capacity to analyse and evaluate strengthened their participation in family and community decision-making and their ability to articulate positions on women’s education, economic participation, and domestic roles with both textual grounding and reasoned confidence. One explained: “Before, I could quote the texts about women’s rights, but I could not really explain why they mattered in our village today or answer my uncle’s objections. Now I can. That changes how I see my future as a da’iyah and educator” (S7). Ustadzah noted that collaborative, discussion-based methods appeared particularly generative for santriwati previously socialised toward quieter classroom participation.²⁴

Convergence and Divergence Between the Two Strands

The convergent design requires that the two strands be compared at the interpretation stage rather than merged earlier, and the comparison yields both agreement and one instructive disagreement. The agreement concerns the rank order of change. The rubric records its largest gains in self-regulation and analysis, and the thematic record describes exactly these operations: santriwati reported monitoring and revising their own positions during group work, and the observed question types indicate decomposition of arguments into premises. Two independently analysed strands pointing to the same two indicators strengthens the finding relative to either alone, although it establishes consistency rather than causation.

The disagreement concerns interpretation, the indicator on which the rubric records its smallest gain. If the qualitative account is taken at face value, one would expect interpretation

²² Abdul Gafur and others, ‘Enhancing the Quality of Life for Santri’, *Al-Tanzim*, 8.3 (2024), 747–59; Muhammad Saipul Hasan and others, ‘Developing Administrative Excellence for Enhanced Educational Service Quality in Islamic Secondary Schools’, *Kharisma*, 4.2 (2025), 109–24.

²³ Mansur Mansur and Muhammad Sholeh, ‘Implementation of Character Education Based on Local Wisdom in Schools’, *Journal of Integrated Elementary Education*, 4.1 (2024), 54–70; Mira Miranda, Anis Ambarwati and Moh. Badrih, ‘Children’s Character Education through Local Wisdom-Based Stories in Indonesia’, *Jurnal Obsesi*, 9.1 (2025), 207–17.

²⁴ Mohammed Alzoraiki and others, ‘The Role of Transformational Leadership in Enhancing School Culture and Teaching Performance in Yemeni Public Schools’, *Frontiers in Education*, 9 (2024), 1413607.

to move substantially, since santriwati describe a wholesale shift in how they approach texts. That the rubric does not register a corresponding movement admits two readings. The first is that interpretation was already the strongest indicator at baseline, at 2.4 against a mean of 2.2, so the room for movement was smaller; textual interpretation is, after all, what the transmission model trains most directly. The second is that what changed was the students' account of their own interpretive activity rather than the activity itself. The present data cannot separate these, and the honest position is to report the discrepancy rather than resolve it by preferring whichever strand supports the argument. It is noted here because a study that reports only convergence invites the suspicion that divergence was not looked for.

A second point of comparison concerns what neither strand captures. Both instruments were designed around Facione's six indicators, which were developed within a secular philosophical tradition and treat critical thinking as a set of domain-general operations. The most striking episodes in the observation record, including the inheritance musyawarah described above, involved santriwati reasoning from *maqasid al-shari'ah* toward a position neither purely textual nor purely contextual. That operation has no clean equivalent among the six indicators, and it was coded under evaluation for want of a better category. This is a limitation of the instrument rather than of the finding, and it points toward a question this study cannot answer: whether critical thinking in an Islamic educational setting requires indicators the standard frameworks do not contain.²⁵

Implications and Limitations

Theoretically, the case contributes to work on culturally responsive constructivism by showing that Islamic intellectual resources can function as generative grounds for active knowledge construction rather than as constraints upon it.²⁶ Practically, four elements of the implementation appear transferable: explicit theological framing positioning constructivist strategies as tools for *tadabbur* and accountable *ijtihad*; collaborative lesson co-design respecting *ustadzah* expertise; task structures that are culturally familiar and cognitively demanding; and regular reflective meetings treating implementation difficulty as collective learning rather than failure. For policy, the case indicates that Merdeka Belajar principles of active learning can be implemented in pesantren without displacing the institution's formative mission, while cautioning against importing generic active-learning packages.²⁷

Five limitations bound these findings. The single-case design limits transferability. The six-month period captured initial change but not sustainability or transfer into post-graduation practice. The rubric was researcher-developed and scored without independent verification, so rubric findings indicate direction rather than magnitude with confidence. The researcher facilitated the intervention and also collected the data, which introduces a risk of expectancy

²⁵ Facione, pp. 6–9.

²⁶ Purniadi Putra and others, 'Digital Literacy as a Transformative Framework for Character Education', *Nazhruna*, 9.1 (2026), 33–51.

²⁷ Afif Akhmad, 'Digital Leadership Practices in Educational Management', *International Journal of Learning, Teaching and Educational Research*, 24.8 (2025), 112–35.

effects that reflexive journaling and member checking reduce but do not eliminate. Finally, rival explanations including observer familiarity, semester maturation, and novelty of task format cannot be excluded by this design, and a comparison group would be required to do so.²⁸

CONCLUSION

This study asked how the systematic introduction of constructivist pedagogy shaped critical thinking development among santriwati in professional-track programmes at a traditional putri pesantren. Classroom interaction and critical thinking indicators shifted in a consistent direction across three independent sources of evidence, most markedly in self-regulation and analysis; participants experienced the shift as professionally enabling and, in the putri context, as personally consequential for their capacity to act within gendered expectations; and the decisive enabler was neither technique nor resources but the availability of an internal theological vocabulary through which the new practices could be understood as continuous with the tradition rather than imported into it.

What follows is a claim about where the difficulty in pesantren pedagogical reform actually lies. It is not that traditional institutions lack capacity for active learning, nor that santriwati lack the disposition for it. It is that reform proposals ordinarily arrive without the theological account that would make them adoptable. Where that account is supplied, and supplied by the teachers themselves rather than for them, the pedagogical change follows.²⁹ Where it is not, resistance is the rational response and not an obstacle to be overcome. Future research should test whether the gains documented here are sustained beyond a single semester and whether they transfer into graduates' professional practice.

REFERENCE

- Akhmad, Afif, 'Digital Leadership Practices in Educational Management: A Narrative Literature Review on Trends and Challenges', *International Journal of Learning, Teaching and Educational Research*, 24.8 (2025), 112–35
<<https://doi.org/10.26803/ijlter.24.8.6>>
- Almulla, Mohammed A., 'Constructivism Learning Theory: A Paradigm for Students' Critical Thinking, Creativity, and Problem Solving to Affect Academic Performance in Higher Education', *Cogent Education*, 10.1 (2023), 2172929
<<https://doi.org/10.1080/2331186X.2023.2172929>>
- Alzoraiki, Mohammed, Abd Rahman Ahmad, Ali Ateeq, and Marwan Milhem, 'The Role of Transformational Leadership in Enhancing School Culture and Teaching Performance in Yemeni Public Schools', *Frontiers in Education*, 9 (2024), 1413607
<<https://doi.org/10.3389/feduc.2024.1413607>>
- Braun, Virginia, and Victoria Clarke, 'Reflecting on Reflexive Thematic Analysis', *Qualitative Research in Sport, Exercise and Health*, 11.4 (2019), 589–97
<<https://doi.org/10.1080/2159676X.2019.1628806>>

²⁸ Yin, pp. 40–45.

²⁹ Muhammad Khoirul Fatihin, Nur Asnawi and Muhammad Fahim Tharaba, 'Transforming Islamic Education: Madrasah-Based Management Strategies for Academic Excellence', *Al-Tanzim*, 7.4 (2023), 1145–60.

- Busahdiar, Ummu Karimah, and Sopa Tamin, 'Total Quality Management (TQM) and Basic Education: Its Application to Islamic Education in Muhammadiyah Elementary Schools', *Jurnal Pendidikan Agama Islam*, 20.2 (2023) <<https://doi.org/10.14421/jpai.v20i2.8015>>
- Facione, Peter A., *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction* (California Academic Press, 1990)
- Fahmi, Jamaluddin Nur, and Siti Rochmiyati, 'Pengaruh Jurnal Membaca Digital Terhadap Kemampuan Literasi Siswa Kelas V Sekolah Dasar', *Ideguru: Jurnal Karya Ilmiah Guru*, 9.1 (2023), 71–77 <<https://doi.org/10.51169/ideguru.v9i1.745>>
- Fatihin, Muhammad Khoirul, Nur Asnawi, and Muhammad Fahim Tharaba, 'Transforming Islamic Education: Madrasah-Based Management Strategies for Academic Excellence', *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 7.4 (2023), 1145–60 <<https://doi.org/10.33650/al-tanzim.v7i4.6746>>
- Gafur, Abdul, Muhammad Zainuddin, Muhammad Walid, and Ahmad Barizi, 'Enhancing the Quality of Life for Santri: Management of Pesantren through the Strengthening of Clean and Healthy Living Culture', *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 8.3 (2024), 747–59 <<https://doi.org/10.33650/al-tanzim.v8i3.7036>>
- Haddade, Hasyim, Andi Nur, Achruh Achruh, Muhammad Nur Akbar Rasyid, and Andi Ibrahim, 'Madrasah Management Strategies through Madrasah Reform Program: An Evidence from Indonesia', *International Journal of Educational Management*, 38.5 (2024), 1289–1304 <<https://doi.org/10.1108/IJEM-05-2023-0236>>
- Haddade, Hasyim, Andi Nur, Muhammad Khalifah Mustami, and Achruh Achruh, 'Technology-Based Learning Strategies in Digital Madrasah Program', *Cypriot Journal of Educational Sciences*, 18.1 (2023), 55–70 <<https://doi.org/10.18844/cjes.v18i1.8179>>
- Hamdani, Nizar Alam, 'Scrutinizing Islamic Higher Education Institutions in Indonesia', *Jurnal Pendidikan Islam*, 9.1 (2023), 79–92 <<https://doi.org/10.15575/jpi.v0i0.24478>>
- Hasan, Muhammad Saipul, Miftahul Azizah, Qurrotul Ainiyah, Solechan, Sunardi, Agus Budiyo, and Hafiza binti Mastor, 'Developing Administrative Excellence for Enhanced Educational Service Quality in Islamic Secondary Schools', *Kharisma*, 4.2 (2025), 109–24 <<https://doi.org/10.59373/kharisma.v4i2.99>>
- Hermawati, Nita Septi, and Sugito, 'Peran Orang Tua Dalam Menyediakan Home Literacy Environment (HLE) Pada Anak Usia Dini', *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6.3 (2021), 1367–81 <<https://doi.org/10.31004/obsesi.v6i3.1706>>
- Ismail, Feriyanto, Ari Budi Santoso, Muhammad Umar, and Abdul Karim Halim, 'Enhancing Excellence: Analyzing Quality Management in Islamic Boarding Schools', *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 7.3 (2023), 848–62 <<https://doi.org/10.33650/al-tanzim.v7i3.4522>>
- Kafa, Antonios, 'Exploring Integration Aspects of School Leadership in the Context of Digitalization and Artificial Intelligence', *International Journal of Educational Management*, 39.8 (2025), 98–115 <<https://doi.org/10.1108/IJEM-11-2024-0703>>
- Le, Hung Viet, 'Promoting L2 Learners' Critical Thinking Skills: The Role of Social Constructivism in Reading Class', *Frontiers in Education*, 9 (2024), 1241973 <<https://doi.org/10.3389/feduc.2024.1241973>>
- Mansur, Mansur, and Muhammad Sholeh, 'Implementation of Character Education Based on Local Wisdom in Schools', *Journal of Integrated Elementary Education*, 4.1 (2024), 54–70 <<https://doi.org/10.21580/jieed.v4i1.20238>>

- Memon, Nadeem A., Mohamad Abdalla, and Dylan Chown, 'Laying Foundations for Islamic Teacher Education', *Education Sciences*, 14.10 (2024), 1046 <<https://doi.org/10.3390/educsci14101046>>
- Mezmir, Esubalew Aman, 'Qualitative Data Analysis: An Overview of Data Reduction, Data Display and Interpretation', *Research on Humanities and Social Sciences*, 10.21 (2020), 15–27 <<https://doi.org/10.7176/rhss/10-21-02>>
- Miranda, Mira, Anis Ambarwati, and Moh. Badrih, 'Children's Character Education through Local Wisdom-Based Stories in Indonesia', *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 9.1 (2025), 207–17 <<https://doi.org/10.31004/obsesi.v9i1.6447>>
- Morgan, Hani, 'Conducting a Qualitative Document Analysis', *The Qualitative Report*, 27.1 (2022), 64–77 <<https://doi.org/10.46743/2160-3715/2022.5044>>
- Norman, Erwin, Lina Marliani, Asep Paramansyah, and Fikri Aizat, 'Implementing Sharia-Based Total Quality Management in Islamic Educational Institutions: Impact on Organizational Performance', *Eduprof: Islamic Education Journal*, 6.2 (2025), 116–34 <<https://doi.org/10.47453/eduprof.v6i2.299>>
- Olmos-Vega, Francisco M., Renee E. Stalmeijer, Lara Varpio, and Renate Kahlke, 'A Practical Guide to Reflexivity in Qualitative Research: AMEE Guide No. 149', *Medical Teacher*, 45.3 (2023), 241–51 <<https://doi.org/10.1080/0142159X.2022.2057287>>
- Putra, Purniadi, Mohd Faez Ilias, Rudy Hartono, Burhanuddin, Nanda Saputra, and Barsihanor, 'Digital Literacy as a Transformative Framework for Character Education: A Case Study in Madrasah Ibtidaiyah', *Nazhruna: Jurnal Pendidikan Islam*, 9.1 (2026), 33–51 <<https://doi.org/10.31538/nzh.v9i1.429>>
- Ramli, Rusdi, Bahrani Bahrani, and Ahmad Ramli, 'Building a Quality Culture in Islamic Educational Institutions', *Jurnal Inovatif Manajemen Pendidikan Islam*, 4.1 (2025), 50–61 <<https://doi.org/10.38073/jimpi.v4i1.1928>>
- Rusmiyati, Wan Jamaludin Z., Muhammad Akmansyah, and Eti Hadiati, 'Strengthening Local Wisdom-Based Work Culture in Improving the Quality of Education in Madrasah', *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 6.3 (2022), 868–79 <<https://doi.org/10.33650/al-tanzim.v6i3.3508>>
- Kementerian Agama Republik Indonesia, *Statistik Pendidikan Islam (Direktorat Jenderal Pendidikan Islam, [tahun])*
- Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, *Kurikulum Merdeka: Panduan Implementasi (Kemendikbudristek, 2022)*
- Undang-Undang Republik Indonesia Nomor 18 Tahun 2019 Tentang Pesantren (2019)
- Yin, Robert K., *Case Study Research and Applications: Design and Methods*, 6th edn (SAGE, 2018)