

Contextualization of Surah Al-Mulk Verse 14 on CCTV-Assisted Supervision for Character Building in a Children's Tahfiz Pesantren

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Article Accepted: November 24, 2025, Revision: July 27, 2026, Approved: July 30, 2026

Abstrak

Pembentukan karakter merupakan salah satu tujuan utama pendidikan pesantren, namun dinamika kehidupan santri pada era digital menghadirkan tantangan baru dalam menjaga konsistensi perilaku, baik ketika berada di bawah pengawasan maupun saat tidak diawasi secara langsung. Penelitian ini **bertujuan** untuk menganalisis bagaimana penggunaan Closed-Circuit Television (CCTV) dimaknai sebagai sarana pendidikan karakter melalui kontekstualisasi QS. Al-Mulk ayat 14 tentang pengetahuan Allah Yang Maha Mengetahui terhadap seluruh perbuatan manusia. Penelitian ini menggunakan **metode** kualitatif dengan desain studi kasus di sebuah pesantren tahfiz anak. Data diperoleh melalui observasi, wawancara mendalam dengan pengasuh, guru, pengelola, dan santri, serta analisis dokumen kelembagaan. Analisis dilakukan menggunakan *codebook thematic analysis* melalui proses pengodean bertahap, pengembangan tema, dan triangulasi sumber. **Hasil** penelitian menunjukkan bahwa CCTV tidak dipahami sebagai instrumen pengendalian semata, melainkan sebagai media pedagogis yang membantu menghubungkan pengawasan eksternal dengan pembentukan kesadaran internal (*muraqabah*). Temuan juga memperlihatkan bahwa efektivitas CCTV bergantung pada proses internalisasi nilai-nilai keagamaan melalui pembinaan, keteladanan, dan refleksi spiritual sehingga kepatuhan santri tidak berhenti pada rasa diawasi, tetapi berkembang menjadi kesadaran moral yang berkelanjutan. Penelitian ini **berkontribusi** dalam memperluas pemahaman mengenai implementasi teknologi pengawasan dalam pendidikan Islam dengan menunjukkan bahwa fungsi pedagogis CCTV menjadi lebih bermakna ketika ditempatkan sebagai instrumen pendukung internalisasi nilai-nilai Qur'ani, bukan sebagai mekanisme kontrol yang berdiri sendiri.

Kata Kunci: *Muraqabah, Pembentukan Karakter, Pendidikan Islam, Pesantren Tahfiz Anak, QS. Al-Mulk Ayat 14.*

Abstract

Character building is a primary objective of pesantren (Islamic boarding school) education; however, the dynamics of student life in the digital era present new challenges in maintaining behavioral consistency, whether under direct supervision or otherwise. This study **aims** to analyze how the use of Closed-Circuit Television (CCTV) is interpreted as a tool for character education by contextualizing Surah Al-Mulk, verse 14, regarding Allah's All-Knowing nature concerning all human actions. A qualitative **method** with a case study design was employed at a pesantren focused on Quranic memorization (tahfiz) for children. Data were gathered through observation, in-depth interviews with caregivers, teachers, administrators, and students, and analysis of institutional documents. Analysis was conducted using a thematic analysis codebook involving a staged coding process, theme development, and source triangulation. **The results** indicate that CCTV is not perceived merely as an instrument of control but as a pedagogical medium that helps bridge external surveillance with the cultivation of internal awareness (muraqabah). The findings also reveal that the effectiveness of CCTV relies on the internalization of religious values through guidance, role modeling, and spiritual reflection; consequently, student compliance transcends the mere feeling of being watched and evolves into a sustained moral consciousness. This study **contributes** to a broader understanding of surveillance technology implementation in Islamic education by demonstrating that the pedagogical function of CCTV becomes more meaningful when positioned as a tool supporting the internalization of Quranic values, rather than as a standalone control mechanism.

Keywords: *Character Building, Children's Tahfiz Boarding School, Islamic Education, Muraqabah, Surah Al-Mulk Verse 14.*

Introduction

Digital surveillance technologies have become integral to the transformation of educational management, particularly within Islamic boarding schools (Adiwisastra et al., 2020; Tantowi et al., 2025). In children's *tahfidz* institutions such as PPATQ Raudlatul Falah, the intensity of daily activities, high student mobility, and young age group create a clear need for structured supervision systems. Recent scholarship indicates that digital tools, including Closed-Circuit Television (CCTV), extend beyond physical security, functioning as pedagogical instruments that support character formation, self-discipline, and a humane learning environment (Alvarez-Atencio et al., 2022; Brinck et al., 2023; Gonçalves et al., 2021). Contemporary Islamic education literature increasingly explores how emerging technologies can be harmonized with spiritual and moral principles to build adaptive, ethical, and forward-looking educational ecosystems (Abubakari & Kalinaki, 2024; Achruh et al., 2024; Subiyantoro et al., 2026).

The global discourse on the intersection of revelation and technology shows that Islamic educational institutions are actively seeking ways to contextualize Qur'anic values

within modern management and instructional practices (Nasir et al., 2025; Nurhayati et al., 2025; Tanti et al., 2025; Taufikin et al., 2024). Recent studies advocate a holistic framework that integrates moral, spiritual, and digital dimensions, ensuring institutional relevance amid the complexities of the information age (Cai & Lin, 2025; Romanenko et al., 2025). Within this context, the concept of *muraqabah*, the continuous inner awareness of God's constant watchfulness, serves as a critical bridge between Qur'anic teachings and modern surveillance practices. QS Al-Mulk verse 14 underscores God's all-encompassing knowledge, providing an ethical foundation for the thoughtful application of CCTV in Islamic educational settings.

Despite the increasing use of CCTV, many institutions struggle to optimize its function from both normative and pedagogical standpoints (Lall et al., 2025; Massuh Villavicencio, 2025). Existing literature on school surveillance primarily examines digital monitoring through secular frameworks, focusing on physical security, risk mitigation, or institutional control (Johnson & Jabbari, 2022; Sheik et al., 2024). While these perspectives highlight improved discipline and reduced rule violations, they frequently critique surveillance for fostering punitive atmospheres, eroding trust, and infringing upon student privacy (Hefner, 2022, 2023; Riedel, 2022). Conversely, studies within Islamic educational contexts often explore digital adoption in administrative or instructional domains without addressing the psychological and moral impact of physical monitoring systems (Arim et al., 2024; Wulan et al., 2021). Previous research thus presents a clear dichotomy: surveillance is either treated as an unexamined tool for secular behavior enforcement or rejected as an invasive mechanism of distrust.

The theoretical framework of this research grounds digital governance in divine-supervision principles. QS Al-Mulk verse 14 asserts that the Creator possesses complete, subtle awareness of all creations. When translated into educational management, this principle establishes that human oversight, whether physical or digital, must be executed with benevolence (*ihsan*), responsibility (*amanah*), and respect for human dignity (Abu Bakar et al., 2025). Under this framework, CCTV does not replace internal piety with external coercion; rather, it provides an objective institutional apparatus that accelerates decision-making, ensures fair conflict resolution, and reinforces the practice of *muraqabah* in daily life (Hidayat, 2025; Srinivasan et al., 2024; Taufikin, 2021).

To investigate this conceptual synthesis, the inquiry is guided by three research questions, stated explicitly as follows: (1) How does QS Al-Mulk verse 14 provide an ethical foundation for CCTV use in Islamic boarding schools? (2) In what ways does

CCTV implementation at PPATQ Raudlatul Falah shape student character, discipline, and daily conduct? (3) How does integrating *muraqabah* values with surveillance technology enhance professional care and security management within the boarding school?

In direct correspondence with these three questions, the study pursues three parallel research objectives. (1) It aims to examine how QS Al-Mulk verse 14 provides an ethical foundation for CCTV use in Islamic boarding. (2) It aims to analyze how CCTV implementation at PPATQ Raudlatul Falah shapes student character, discipline, and daily conduct. (3) It aims to explore how integrating *muraqabah* values with surveillance technology enhances professional care and security management within the boarding school. Taken together, the primary significance of this study lies in formulating a Qur'anic-based surveillance model that reconciles technological efficiency with spiritual character building, offering a scalable framework for modern Islamic educational institutions worldwide.

Research Method

This study employs a qualitative approach using an intrinsic case study design to examine the implementation of CCTV through the lens of *muraqabah* and Qur'anic values within the specific context of PPATQ Raudlatul Falah (Firmansyah et al., 2025; Hefner, 2022). This design enables an in-depth exploration of how digital surveillance operates in the daily lives of students and in the governance of the institution, while also allowing for an interpretive understanding of the meanings constructed by various stakeholders. The intrinsic case study approach was selected because the research is not solely concerned with CCTV as a technological object, but with its educational, spiritual, and managerial significance particularly its connection to QS Al-Mulk verse 14 in shaping student care and value-based discipline.

The study was conducted at PPATQ Raudlatul Falah, a *tahfidz*-oriented Islamic boarding school for children aged 6–12 years located in Pati, Central Java. The institution is characterized by a structured *tahfidz* regimen, intensive daily activities, and a dormitory environment requiring continuous supervision (Farid & Masykuri, 2023). CCTV cameras are strategically installed at key points including entrance gates, dormitory corridors, public activity areas, and around the mosque making this setting particularly relevant for examining the interplay between digital surveillance practices and Qur'anic-based educational values (Ghani et al., 2024; Syafe'i et al., 2025).

Participants were selected using purposive sampling based on their direct involvement in implementing the CCTV system within the boarding school environment. A total of 27 participants were involved, representing three groups: (1) caregivers and *murobbi* responsible for daily student supervision; (2) *ustadz* and instructional staff involved in academic and religious learning; and (3) students of diverse ages and backgrounds enrolled at PPATQ Raudlatul Falah. Participants were selected through purposive sampling to include individuals whose experiences were directly relevant to CCTV use within the boarding school (Campbell et al., 2020; Suhartono et al., 2024). They contributed insights regarding perceptions, behaviors, and daily interactions shaped by the digital surveillance system.

Table 1. Demographic Characteristics of Research Participants

Participant Group	Code	Number	Gender (M/F)	Age	Duration of Service/Residence	Primary Role
Caregiver	CG1	1	1/0	52 years	18 years	Primary Caregivers and Decision-Makers
Murobbi	MB1–MB6	6	4/2	28–45 years	4–15 years	Dormitory supervisors and daily guidance
Ustaz	US1–US8	8	5/3	26–43 years	3–12 years	Quran and character education instructors
Students	Grades 1–12	12	7/5	6–12 years	1–5 years	Students in the Quran memorization program
Total		27	10/17			

Note: All participant identities were anonymized using codes to maintain confidentiality in accordance with research ethics principles.

The research instruments consisted of observation protocols, semi-structured interview guides, and documentation notes (Bowen, 2009; Knott et al., 2022; Marlina et al., 2024; Walsh, 2020). Observations focused on students’ daily activities in CCTV-monitored areas, capturing behavioral patterns, interaction dynamics, and responses to the presence of surveillance. Semi-structured interviews were conducted with caregivers, *murobbi*, and *ustadz* to explore their understanding of CCTV as an instrument supporting character formation, discipline reinforcement, and evidence-based conflict resolution. Documentation included ethically approved CCTV excerpts used solely to contextualize specific situations, without disclosing personal identities.

Data were analyzed using a thematic analysis framework consisting of five stages (Braun & Clarke, 2019): (1) familiarization through repeated review of field notes, interview transcripts, and observation records; (2) initial coding to identify emerging concepts and behavioral patterns; (3) organizing codes into overarching themes related to CCTV functions, *muraqabah* values, and caregiving practices; (4) constructing analytical narratives based on interconnections among themes; and (5) validating interpretations through triangulation of data sources and collection methods. The analysis was inductive in nature, allowing themes to emerge organically from the empirical data rather than imposing predetermined theoretical categories. Interpretations of QS Al-Mulk verse 14 were woven into the analysis to deepen understanding of how divine supervision values intersect with digital surveillance.

To ensure credibility, the study incorporated source triangulation, technique triangulation, and member checking (Creswell & Creswell, 2022; Marlina et al., 2024). Source triangulation was achieved by comparing accounts from caregivers, teachers, and students. Technique triangulation involved cross-verifying observations, interviews, and documentation. Member checking was conducted by presenting participants with summaries of their interview responses to confirm accuracy of interpretation. Dependability was maintained through systematic documentation of the research process, while confirmability was ensured by grounding all interpretations in verifiable field data.

The researcher acknowledges explicit boundaries in data access. Behavioral patterns in CCTV-monitored areas (e.g., queuing, transitions to the mosque, classroom entry) were directly observed by the researcher and are treated as *verified, first-hand data*. In contrast, accounts of governance practices that occurred outside the researcher's presence such as night-shift footage review, patrol-route revisions, and internal disciplinary decisions were not independently witnessed and are therefore treated as *informant-reported, estimated data*, cross-checked through source and technique triangulation but not directly verified by the researcher. Raw CCTV footage itself was not made available to the researcher for independent review beyond the ethically screened excerpts described above; conclusions regarding footage content therefore rely on institutional accounts rather than direct forensic examination. This distinction between observed and reported data is maintained throughout the interpretation of findings.

This study adhered to established ethical principles in educational research (Hamilton et al., 2024). All participants received clear explanations of the study's purpose, procedures, and their right to withdraw at any stage. Verbal and written consent were

obtained prior to data collection. CCTV materials selected for analysis were carefully screened to avoid revealing identities or sensitive information. All data were stored securely and used exclusively for academic purposes. The privacy and dignity of students were fully respected, and the use of surveillance technology was framed as an educational support mechanism aimed at enhancing safety and character formation rather than as a coercive tool. In this way, the study aligns with international academic standards while maintaining coherence with Qur'anic values, Islamic educational ethics, and principles of child protection in Islamic boarding school contexts.

Result Finding

Contextualization of Quranic Surah Al-Mulk, Verse 14, as an Ethical Foundation for the Use of CCTV

The first major finding highlights how stakeholders interpret QS Al-Mulk verse 14 as an ethical and epistemic anchor for technological surveillance. Across all informant groups, CCTV is framed not merely as a tool for physical surveillance, but as a pedagogical instrument that activates an awareness of divine supervision (*muraqabah*). This shared understanding bridges the gap between Qur'anic knowledge and contemporary surveillance technology.

Table 2. *Excerpts from Interviews and Observations Related to the Contextualization of QS Al-Mulk Verse 14*

Theme	Excerpts	Frequency	Interpretation
Divine supervision as ethical grounding	<i>"CCTV is only a tool; real surveillance is from Allah, as in Al-Mulk 14." (Caregiver)</i>	12	CCTV is interpreted within the <i>muraqabah</i> paradigm.
Manners education through awareness of being observed	<i>"Children remember their manners because they feel watched, even without a teacher present." (Murobbi)</i>	15	CCTV acts as a catalyst for self-discipline.
Qur'anic legitimacy for technological use	<i>Observation during evening study: caregiver explains the verse before emphasizing dormitory rules.</i>	7	Ethical understanding is instilled prior to technical instruction.
Harmonizing values and technology	<i>"Technology is permissible as long as it serves an educational purpose." (Ustadz)</i>	9	Revelation and technology are viewed as compatible.

Source: The data were derived from interviews, observations, and institutional documentation, by the researcher

This finding demonstrates that QS Al-Mulk verse 14 is understood not only in theological terms but is actively translated into managerial and pedagogical practice, creating a coherent ethical basis for integrating CCTV into Islamic boarding school education.

The Role of CCTV in Shaping the Character, Discipline, and Behavior of Islamic Boarding School Students

The second finding highlights CCTV's pedagogical role in strengthening student character. At PPATQ Raudlatul Falah, home to children aged 6–12, CCTV functions as a supportive instrument that reinforces orderliness, adherence to schedules, and the prevention of undesirable behaviors. Observational data revealed that students behave more systematically in CCTV-monitored areas, whether queuing for meals, transitioning to the mosque, or following the morning *tahfidz* routine.

Table 3. *Excerpts from Interviews and Observations Related to Changes in Student Behavior*

Theme	Excerpts	Frequency	Interpretation
Increased discipline	"Children line up more neatly when they know there are CCTV cameras." (<i>Murobbi</i>)	18	CCTV enhances students' self-regulation.
Prevention of negative behavior	CCTV footage shows students stopping excessive joking in hallways upon noticing the camera angle.	11	CCTV prevents minor disturbances and potential conflicts.
Cultivating manners	"CCTV helps us remind students about manners, even simple things like speaking politely." (Teacher)	9	Surveillance contributes to the reinforcement of positive habits.
Responsibility in public spaces	Observation: students clean surrounding areas when aware they are being recorded.	6	Awareness of being recorded nurtures responsibility.

Source: The data were derived from interviews, observations, and institutional documentation, by Researcher

These data confirm that CCTV supports the development of a culture of order and etiquette by combining situational monitoring with the reinforcement of *muraqabah* values instilled by caregivers.

The research findings show that changes in students' behavior occur through a continuous process of habituation within the pesantren environment. Observational data indicate that disciplined behavior, adherence to rules, and environmental responsibility are

more frequently observed in areas monitored by CCTV. However, interviews with *murobbi*, *ustaz*, and students indicate that the most decisive factor is not the presence of the cameras themselves, but rather the process of internalizing the value of *muraqabah*, which is continually reinforced through the guidance and exemplary behavior of the caregivers. In other words, CCTV serves as a supporting tool that reinforces the consistency of character development. At the same time, behavioral change remains rooted in the moral and spiritual awareness cultivated through the pesantren's educational system.

Integrating the Value of Muraqabah and Technology into the Governance and Education of Islamic Boarding Schools

The third finding reveals that CCTV contributes not only to student behavior but also to value-based governance and caregiving practices. *Murobbi*, who supervise students around the clock, reported that CCTV recordings help them understand student dynamics more comprehensively identifying interaction patterns, potential behavioral concerns, and opportunities for early intervention. Recordings also facilitate fair *tabayyun* when conflicts arise.

Table 4. Interview Excerpts and Documentation Related to CCTV-Based Governance

Theme	Excerpts	Frequency	Interpretation
Evidence-based conflict resolution	"If two children fight, we check the recording to ensure fairness." (Caregiver, personal communication, [date])	14	Recordings promote impartiality and reduce bias.
Evaluation of <i>murobbi</i> responsibilities	Observation: caregivers review night-shift footage to assess staff readiness.	8	CCTV improves caregiving quality.
Strengthening security SOPs	"We revised our patrol route after seeing vulnerable points in the recordings." (Administrator, personal communication, [date])	6	Recordings enhance governance and safety.
Institutional transparency	Documentation shows CCTV use contributes to parental trust.	5	Technology reinforces institutional accountability.

Source: The data were derived from interviews, observations, and institutional documentation by the researcher

As shown in Table 4, integrating CCTV with the concept of *muraqabah* expands the technology's function from mere behavioral monitoring to becoming part of a more systematic educational governance system. CCTV recordings are used as a basis for verification when problems arise, as material for evaluating the performance of caregivers

and *murobbi*, and as a source of information for improving the pesantren's security procedures. Furthermore, institutional documentation shows that implementing CCTV increases parents' trust in the care system because every process of handling problems can be carried out more objectively, transparently, and accountably. Thus, the implementation of CCTV at PPATQ Raudlatul Falah not only supports students' character development but also strengthens the professionalism of the boarding school's management by integrating Qur'anic values, caregiving practices, and digital technology.

Synthesis of Findings

This section synthesizes the interconnections among the three major findings and demonstrates how each addresses the guiding research questions. Overall, the study shows that CCTV use at PPATQ Raudlatul Falah encompasses spiritual, pedagogical, and managerial dimensions.

Table 5. Synthesis of Research Findings

Research Question	Key Findings	Dimension
How is QS Al-Mulk 14 contextualized in CCTV use?	CCTV is framed in alignment with <i>muraqabah</i> values.	Ethical-theological
How does CCTV influence student behavior and discipline?	CCTV reinforces discipline, manners, and responsibility.	Pedagogical
How does technology-value integration strengthen management?	Recordings support verification, evaluation, and accountability.	Managerial

These three findings reveal a hierarchical and mutually reinforcing relationship. The contextual interpretation of Quranic Surah Al-Mulk, verse 14, provides ethical legitimacy for using CCTV as an educational tool rather than as a repressive surveillance instrument. This ethical foundation is then translated into pedagogical practice by cultivating discipline, etiquette, and responsibility among students in their daily lives. Furthermore, these same values serve as the foundation for developing a more objective, transparent, and accountable system of pesantren governance by using CCTV footage to evaluate, clarify, and make decisions.

Overall, this synthesis demonstrates that the effectiveness of CCTV implementation at PPATQ Raudlatul Falah is not determined by the mere presence of technology, but rather by its integration with the value of *muraqabah* as the ethical foundation of Islamic education. Within this framework, technology serves as a supporting instrument that strengthens the character-building process, improves the quality of care, and supports sustainable institutional governance.

Discussion

The Integration of the Value of Muraqabah and the Contextualization of Quranic Surah Al-Mulk, Verse 14, in the Implementation of CCTV

The first major finding shows that stakeholders caregivers, *murobbi*, *ustadz*, and students consistently interpret QS Al-Mulk verse 14 as an ethical foundation for CCTV use. This aligns with scholarship in Islamic character education, which emphasizes divine supervision as a key mechanism for nurturing integrity, moral consciousness, and internal discipline (Azizi et al., 2025; Hasibuan et al., 2025; Posangi et al., 2025). Earlier studies affirm that *muraqabah* functions as a powerful psychospiritual construct that strengthens self-regulation through the awareness of God's constant watchfulness (Ashraf et al., 2024; Harianti et al., 2022; Isgandarova, 2019, 2024).

At PPATQ Raudlatul Falah, the integration of *muraqabah* values moves beyond conceptual teaching and is actively embedded within the institution's ethical framework for CCTV use. Technology is therefore understood not as a coercive instrument but as a tool for cultivating values (Cloete, 2017; Vellonen et al., 2025). This aligns with what the literature describes as value-based surveillance—technology deployed with moral and pedagogical intent rather than for procedural control alone (Che Nordin et al., 2025; Rifai et al., 2025; Usman et al., 2025). The synthesis of spiritual and digital forms of surveillance identified in this study remains rare in prior research and represents a significant conceptual contribution.

The Role of CCTV in Shaping the Character and Discipline of Islamic Boarding School Students

The second finding confirms that CCTV has a substantial influence on improving discipline and strengthening students' positive behavior. The system fosters orderly

queuing, responsible conduct in public spaces, and reinforcement of everyday manners. Theoretically, this is consistent with situational control theory and social learning theory, both of which argue that visible symbols of surveillance can enhance behavioral compliance, particularly when coupled with value internalization (Ott, 2024; Ward & Brown, 2015; Zuboff, 2015).

Within an Islamic educational context, behavioral improvement is not merely a result of external monitoring but emerges from a heightened internal consciousness supported by *muraqabah*. Thus, CCTV functions as a facilitator of habit formation, while sustainable behavioral transformation occurs through a merger of digital surveillance and spiritual guidance. Prior research in religious values education similarly notes that consistent monitoring combined with moral instruction leads to deeper and more enduring changes in character (Maksum et al., 2025; Pangastuti et al., 2025).

This study extends existing literature by demonstrating that surveillance technology when framed within ethical and pedagogical principles can be an effective instrument for character education, especially for younger learners.

The findings of this study offer a different perspective on this criticism. Based on the results of interviews and observations, students' compliance is not fostered by the presence of cameras as a source of fear, but by gradually internalizing *muraqabah* before technology is used as a supporting medium. Caregivers and *murobbi* consistently explain the meaning of Quranic Surah Al-Mulk, verse 14, first before introducing the function of *CCTV* to the students. Thus, the cameras are understood as an external reminder, while the primary source of behavioral control remains the spiritual awareness that Allah SWT is always aware of all human actions. This approach demonstrates a clear psychological boundary between obedience resulting from external pressure and obedience arising from internal moral awareness.

From the perspective of character education theory, these findings indicate that the effectiveness of surveillance technology depends heavily on the values that underlie its implementation. When CCTV is used solely as an instrument of control, the technology can produce only temporary compliance. Conversely, when the technology is placed within an educational framework that fosters moral and spiritual reflection, its surveillance function shifts to facilitating character development. Thus, the primary contribution of this study lies not in the use of CCTV itself, but in the model of integrating the values of *muraqabah*, Qur'anic education, and digital technology as an ethical approach to children's education in Islamic boarding schools.

Strengthening Governance and Caregiving Through the Integration of Technology and Qur'anic Values

The third finding highlights that CCTV use extends beyond individual discipline and contributes significantly to institutional governance and caregiving. CCTV recordings are used for *tabayyun* during disputes, to evaluate *murobbi* performance, and to improve security protocols. This practice aligns with principles of justice in Islamic education, which emphasize transparency, fairness, and evidence-based decision-making (Hirsanudin & Martini, 2023; Lee et al., 2025; Salim & Hossain, 2021).

In modern educational management, data-driven decision-making is recognized as essential for institutional development. In this context, CCTV recordings serve as an objective source of data that enhances transparency and supports accountability among caregivers. The findings resonate with studies demonstrating that surveillance technologies can strengthen institutional integrity when implemented ethically and judiciously (Darwish, 2024; Singh & Kaur, 2024). Therefore, this study illustrates that integrating Qur'anic values with digital technologies can produce a governance model that balances spirituality, discipline, and professional management. This represents a meaningful expansion of discussions on the role of technology in Islamic education, particularly within institutions serving young children.

These findings expand the discourse on the governance of Islamic education, which has thus far placed greater emphasis on leadership, exemplary behavior, and manual supervision. Previous research generally viewed the quality of care in pesantren as heavily dependent on the close relationships between *the kiai*, *murobbi*, and *santri*. This study shows that while these relationships remain the primary foundation, they can be strengthened through the use of digital technology, which provides empirical evidence when needed. In this context, CCTV does not replace human judgment but rather enhances the quality of the verification process, ensuring that institutional decisions are not based solely on perceptions or one-sided reports.

This function is closely related to the concept of *tabayyun* in Islamic tradition, namely the obligation to seek clarification before making a decision. CCTV footage provides factual data that helps reduce subjectivity in conflict resolution, allowing the evaluation process to be conducted more fairly for all parties. Thus, digital technology serves to support the implementation of the principles of justice (*'adl*) and trustworthiness

in educational governance, rather than as a mechanism that replaces the ethical considerations or wisdom of educators.

Nevertheless, the use of digital data in the governance of educational institutions also requires caution. The literature on *digital governance* cautions that data generated by surveillance technology can strengthen accountability. However, it can also increase the concentration of power if access to, use of, and interpretation of such data are not regulated transparently. In an educational setting, this situation can create an imbalance in the relationship between institutional administrators and students if surveillance recordings are used repressively or without clear accountability mechanisms.

The findings of this study indicate that these risks are minimized through a set of ethical guidelines implemented at PPATQ Raudlatul Falah. CCTV footage is not used as a tool for continuous monitoring of every student's activities; rather, it is accessed only when necessary for guidance, clarification of incidents, or institutional evaluation. Furthermore, the final decision remains subject to deliberation among caregivers, *murobbi*, and relevant parties, so that CCTV footage is treated as one source of information, not as the sole basis for decision-making. This approach demonstrates that moral authority remains with human beings, while technology serves as a supporting instrument that helps improve the quality of governance.

Critical Synthesis and Novel Contributions

A cross-analysis of these three findings shows that this study does not merely explain the benefits of CCTV in the pesantren environment, but offers a new way of understanding the relationship between digital technology, character education, and the governance of Islamic education. Unlike most previous studies, which position surveillance technology as an instrument of security or behavioral control, this study demonstrates that the technology's effectiveness depends heavily on the ethical framework underlying its implementation. In the context of PPATQ Raudlatul Falah, CCTV gains legitimacy not because of its ability to monitor, but because it is integrated with the value of *muraqabah*, allowing the technology to function as a moral reminder that supports the educational process.

These findings reveal a hierarchical relationship. The contextualization of Quranic Surah Al-Mulk, verse 14, provides ethical legitimacy for the use of technology. This ethical foundation is then translated into pedagogical practice through the cultivation of discipline, etiquette, and responsibility among students. Furthermore, these same values serve as the basis for strengthening pesantren governance through *tabayyun*, evaluation of student care, and more objective decision-making. Thus, the contribution of this research lies not in the use of CCTV as a technical innovation, but in the integration of Qur'anic values, educational practices, and institutional governance within a single, cohesive conceptual framework.

To clarify the position of this study relative to previous studies, Table 6 presents a synthesis of its conceptual contributions.

Table 6. *Synthesis and Novelty of Research*

Dimension	Focus of Previous Studies	Present Study's Findings	Novel Contribution
Digital surveillance	Focus on security and risk mitigation (Ghimire & Rana, 2023)	Integration of surveillance with values education and <i>muraqabah</i>	Spiritual–digital synthesis
Character education	Emphasis on teachers' moral instruction (Thornberg, 2008; Weinberger & Patry, 2016).	CCTV as a facilitator of manners formation grounded in Qur'anic values	Value-based surveillance model
Pesantren governance	Focus on manual caregiving and discipline (Hanafi et al., 2021; Prasojo et al., 2025).	CCTV as an objective data source for evaluating <i>murobbi</i> roles	Data-driven Islamic education
Qur'anic perspective	Normative and theoretical discussions (Kamali, 2017; Leaman, 2020).	Application of QS Al-Mulk 14 in concrete supervisory practices	Contextualized revelation–technology framework

Integrating Technology with Islamic Education

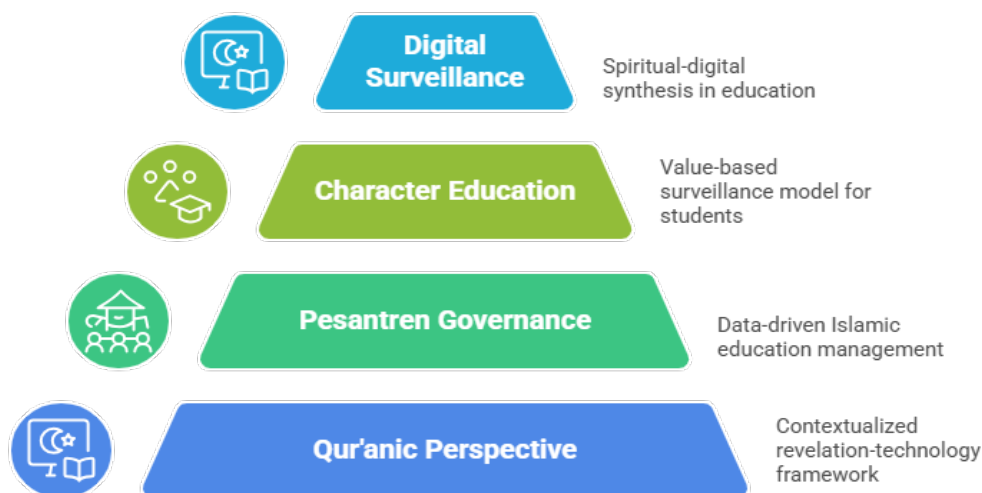


Figure 1. *Novel Contributions*

Figure 1 illustrates the conceptual relationship among the three main contributions of this study. The ethical dimension, derived from Surah Al-Mulk, verse 14, serves as the foundation for the use of digital technology, which, in turn, supports students' character

development and strengthens institutional governance. This flowchart demonstrates that the effectiveness of technology does not stem solely from its monitoring function but from its integration with Qur'anic values that guide educational practices and decision-making within the pesantren environment. Thus, the figure visualizes how the ethical, pedagogical, and managerial dimensions interact to form an integrated educational model.

Critically, this study also shows that integrating technology with religious values does not automatically eliminate the risks inherent in digital surveillance systems. Potential privacy violations, the emergence of self-censoring behavior (*the chilling effect*), and power imbalances must still be addressed through clear institutional policies, transparency in data usage, restrictions on access to CCTV footage, and the affirmation that technology serves only as a supporting tool. Therefore, the contribution of this study is not a justification for the widespread use of digital surveillance, but rather an affirmation that technology can serve as an ethical educational medium only if the principles of *muraqabah*, *tabayyun*, *amanah*, and respect for human dignity guide it.

Theoretical and Practical Implications

Theoretically, this study expands the field of Islamic education by demonstrating that the relationship between digital technology and character development is not deterministic. The findings indicate that the effectiveness of technology depends on the process of internalizing the values underlying its use. Thus, this study enriches the literature on Islamic character education by proposing that the concept of *muraqabah* is not only relevant as an individual spiritual experience but can also serve as an ethical principle in the governance of educational technology. Furthermore, this study integrates discourses on character education, *digital governance*, and Qur'anic ethics into a single analytical framework that demonstrates how technology can support educational goals without compromising the human and spiritual dimensions.

In practical terms, the research findings have several implications for administrators of Islamic boarding schools and Islamic educational institutions that are beginning to utilize surveillance technology. First, the implementation of CCTV should always be preceded by an explanation of its educational objectives and ethical foundations so that students understand the technology as a learning tool, not as an instrument of control. Second, the use of CCTV footage should be limited to purposes of guidance, verification, evaluation of care, and enhancing security, while upholding the principles of confidentiality and the protection of students' privacy. Third, educational decisions should

not be based solely on digital evidence but should continue to involve deliberation, educators' professional judgment, and a humanistic guidance approach. This approach allows technology to enhance the quality of educational services without diminishing the pedagogical relationships that are a defining characteristic of Islamic boarding schools.

More broadly, this study shows that the modernization of Islamic educational institutions need not be understood as a process of uncritical adoption of technology or a rejection of digital innovation. Rather, modernization can occur through the integration of technology, Qur'anic values, and educational practices focused on character development. This perspective opens the door to developing a model for the governance of Islamic education that can respond to digital transformation without losing its spiritual identity or the primary objectives of Islamic education.

Conclusion

This study shows that the effectiveness of CCTV use in Islamic boarding schools is not determined by the technology itself, but rather by the ethical framework underlying its implementation. By contextualizing Quranic Surah Al-Mulk, verse 14, with the concept of *muraqabah*, CCTV is positioned as an educational tool that supports character development, strengthens the caregiving system, and fosters more objective and accountable institutional governance rather than as a repressive surveillance instrument. These findings expand the field of Islamic education studies by demonstrating that integrating Qur'anic values and digital technology can shape an educational model that preserves its spiritual dimension while remaining responsive to technological advancements.

In practical terms, Islamic boarding schools planning to adopt CCTV must develop standard operating procedures (SOPs) that clearly outline educational objectives, the protection of students' privacy, restrictions on access to recordings, and the use of CCTV for *fact-finding*, evaluating care, and enhancing security—not as a means of punishment. The implementation of this technology must also always be accompanied by ongoing guidance, exemplary behavior from *the murobbi*, and the internalization of the value of *muraqabah*, so that students' discipline grows out of moral and spiritual awareness, not merely because of the presence of surveillance cameras.

This study has limitations because it was conducted at only one children's tahfiz boarding school and focused on elementary school-aged students; therefore, the findings cannot yet be generalized to other boarding school contexts. Future research is

recommended to conduct comparative studies across various types of Islamic boarding schools and different age groups, as well as to examine the longitudinal impact of CCTV implementation on moral self-regulation, psychological well-being, perceptions of privacy, and the effectiveness of technology-based Islamic educational governance.

References

- Abu Bakar, S. B., et al. (2025). Reconstructing Artificial Intelligence Ethics through Qur'anic Values of Ihsan and Amanah Using Thematic Exegesis. *Quranica*, 17(2 Special Issue), 429–446.
- Abubakari, M. S., & Kalinaki, K. (2024). Digital Competence in Islamic Education for Lifelong Learning: Preliminary Analysis Using DigComp 2.1 Framework. In M. M. Hawamdeh & F. Abdelhafid (Eds.), *Embracing Technological Advancements for Lifelong Learning*. IGI Global. <https://doi.org/10.4018/979-8-3693-1410-4.ch001>
- Achruh, et al. (2024). Challenges and Opportunities of Artificial Intelligence Adoption in Islamic Education in Indonesian Higher Education Institutions. *International Journal of Learning, Teaching and Educational Research*, 23(11), 423–443. <https://doi.org/10.26803/ijlter.23.11.22>
- Adiwisastra, M. F., et al. (2020). Implementation of the Lab Rotation Model in Blended Learning Based on Student Perspectives. *Journal of Physics: Conference Series*, 1641(1), 012038. <https://doi.org/10.1088/1742-6596/1641/1/012038>
- Alvarez-Atencio, E., et al. (2022). Use of a Digital Professional Development Tool to Improve Oral Competence in Secondary Education: Experience in Initial Teacher Education in Chile. *Revista Iberoamericana de Diagnostico y Evaluacion Psicologica*, 5(66), 207–218. <https://doi.org/10.21865/RIDEP66.5.15>
- Arim, S. N., et al. (2024). Navigating Educational Turbulence: A Systematic Literature Review on Challenges Faced by Islamic Education Amid the Pandemic. *Studies in Systems, Decision and Control*, 537, Springer. https://doi.org/10.1007/978-3-031-62106-2_50
- Ashraf, H., et al. (2024). Muraqabah: Meaningful adjuvant therapy for metabolic health. *Journal of the Pakistan Medical Association*, 74(11), 1920–1921. <https://doi.org/10.47391/JPMA.24-88>
- Azizi, M. A., et al. (2025). Transforming Sharia values through Gur'ee communication: Character formation of santri at Dayah MUDI Masjid Raya Samalanga. *El-Usrah: Jurnal Hukum Keluarga*, 8(1), 536–550. <https://doi.org/10.22373/3g9r1113>

- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/QRJ0902027>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Brinck, J., et al. (2023). Open Design Pedagogy: Revealing Openness in Early Childhood Education with Digital Technology. *International Journal of Education Through Art*, 19(2), 223–240. https://doi.org/10.1386/eta_00128_1
- Cai, L., & Lin, M. (2025). Integrating Mental Health Education with Ideological and Moral Teaching. *International Journal of Healthcare Information Systems and Informatics*, 20(1). <https://doi.org/10.4018/IJHISI.384592>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: Complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652–661. <https://doi.org/10.1177/1744987120927206>
- Che Nordin, M. K. N. B., et al. (2025). The development of the educational game “Jejak Anbiya’”: A pedagogical approach to teaching ‘Aqidah to children through the Qur’anic stories of the Prophets. *Quranica: International Journal of Quranic Research*, 17(1), 142–168.
- Cloete, A. L. (2017). Technology and education: Challenges and opportunities. *HTS Teologiese Studies / Theological Studies*, 73(4), a4589. <https://doi.org/10.4102/hts.v73i4.4589>
- Creswell, J. W., & Creswell, J. D. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications. <https://us.sagepub.com/en-us/nam/research-design/book270550>
- Darwish, D. (Ed.). (2024). *Modern advancements in surveillance systems and technologies*. IGI Global. <https://doi.org/10.4018/979-8-3693-6996-8>
- Farid, M., & Masykuri, M. (2023). Management of character education in child-friendly Islamic boarding schools. *Journal of Social Studies and Educational Research*, 14(2), 112–134.
- Firmansyah, et al. (2025). Construction of Islamic Education Based on Islamic Boarding Schools: A Case Study at Al-Manar Muhammadiyah Modern Islamic Boarding School in South Sumatra. *Jurnal Pendidikan Agama Islam*, 22(1), 195–214. <https://doi.org/10.14421/jpai.v22i1.11044>

- Ghani, A. A., Rahman, N. A., & Zulkifli, H. (2024). Integrating digital technologies in Islamic educational environments: A systematic review of ethics and pedagogy. *Computers & Education: X Reality*, 4, 100052. <https://doi.org/10.1016/j.cexr.2024.100052>
- Ghimire, S. N., & Rana, K. (2023). CCTV in schools: An examination of perceived value of surveillance. *Journal of Education for Students Placed at Risk (JESPAR)*, 28(4), 351–379. <https://doi.org/10.1080/10824669.2022.2092110>
- Gonçalves, G. S. Q., et al. (2021). Learning evaluation and digital technologies: notes for pedagogical practice. *Meta: Avaliacao*, 13(40), 491–514. <https://doi.org/10.22347/2175-2753v13i40.3437>
- Hamilton, K., et al. (2024). Ethics and care in qualitative research. In R. W. Belk & C. Otnes (Eds.), *Handbook of qualitative research methods in marketing*. Yale University Press.
- Hanafi, Y., et al. (2021). The new identity of Indonesian Islamic boarding schools in the ‘new normal’: The education leadership response to COVID-19. *Heliyon*, 7(3), e06549. <https://doi.org/10.1016/j.heliyon.2021.e06549>
- Harianti, W. S., et al. (2022). Muraqabah Intensification Therapy (MIT): An alternative Islamic therapy for social media addiction. *International Journal of Public Health Science*, 11(1), 38–46. <https://doi.org/10.11591/ijphs.v11i1.21137>
- Hasibuan, A., et al. (2025). Sufistic approach of character education in an Indonesian Islamic boarding school. *Miqot: Jurnal Ilmu-Ilmu Keislaman*, 49(1), 184–204. <https://doi.org/10.30821/miqot.v49i1.1332>
- Hefner, C.-M. (2022). Morality, Religious Authority, and the Digital Edge: Indonesian Muslim Schoolgirls Online. *American Ethnologist*, 49(3), 359–373. <https://doi.org/10.1111/amet.13088>
- Hefner, C.-M. (2023). Moral Custodianship between Friends Girlhood, Class, and Islamic Education in Indonesia. *HAU: Journal of Ethnographic Theory*, 13(3), 557–572. <https://doi.org/10.1086/727777>
- Hidayat, R. (2025). Digital Governance and Transparency: How Open Data Initiatives Enhance Government Accountability. *Journal of Governance and Regulation*, 14(3), 194–204. <https://doi.org/10.22495/jgrv14i3art18>
- Hirsanudin, H., & Martini, D. (2023). Good corporate governance principles in Islamic banking: A legal perspective on the integration of TARIF values. *Journal of Indonesian Legal Studies*, 8(2), 935–974. <https://doi.org/10.15294/jils.v8i2.70784>

- Isgandarova, N. (2019). Muraqaba as a mindfulness-based therapy in Islamic psychotherapy. *Journal of Religion and Health*, 58(4), 1146–1160.
<https://doi.org/10.1007/s10943-018-0695-y>
- Isgandarova, N. (2024). *Mindfulness techniques and practices in Islamic psychotherapy: The power of Muraqabah*. Routledge. <https://doi.org/10.4324/9781032631387>
- Johnson, O., & Jabbari, J. (2022). Infrastructure of Social Control: A Multi-Level Counterfactual Analysis of Surveillance and Black Education. *Journal of Criminal Justice*, 83. <https://doi.org/10.1016/j.jcrimjus.2022.101983>
- Kamali, M. H. (2017). Reading the signs: A Quranic perspective on thinking. In M. Iqbal (Ed.), *Studies in the Islam and science nexus* (Vol. 1). Routledge.
<https://doi.org/10.4324/9781315242187-38>
- Knott, E., et al. (2022). Interviews in the social sciences. *Nature Reviews Methods Primers*, 2(1), Article 15. <https://doi.org/10.1038/s43586-022-00150-6>
- Lall, R., et al. (2025). Higher Education Ecosystems in the Global South: Possibilities for Pedagogic Disruption towards Urban Equality. *City*, 29(3–4), 557–568.
<https://doi.org/10.1080/13604813.2024.2447686>
- Leaman, O. (2020). Modern developments in Qur’anic studies. In M. Shah & M. Abdel Haleem (Eds.), *The Oxford handbook of Qur’anic studies*. Oxford University Press.
<https://doi.org/10.1093/oxfordhb/9780199698646.013.42>
- Lee, S. P., et al. (2025). Children’s rights to participate in decision-making: Insights from Islamic teachings. *Muslim World Journal of Human Rights*. Advance online publication. <https://doi.org/10.1515/mwjhr-2025-0011>
- Maksum, G., et al. (2025). Religious values as foundations of education: Insights from teachers’ perspectives. *Research Journal in Advanced Humanities*, 6(3).
<https://doi.org/10.58256/tb06n075>
- Marlina, E., et al. (2024). Ensuring trustworthiness in qualitative research: The role of triangulation techniques. In R. Throne (Ed.), *Qualitative research methods for dissertation research*. IGI Global. <https://doi.org/10.4018/979-8-3693-3069-2.ch012>
- Massuh Villavicencio, C. M. (2025). Strategies for the Integration of Technologies in Private Educational Institutions of Guayaquil, Ecuador: A Multidimensional Analysis. *Edutec*, 207–230. <https://doi.org/10.21556/edutec.2025.91.3383>

- Nasir, K., et al. (2025). Artificial Intelligence Integration in Mobile Applications: Innovation and Challenges in Supporting Quran Memorization and Review. *Quranica*, 17(2), 612–645.
- Nurhayati, S., et al. (2025). Towards Effective Artificial Intelligence-Driven Learning in Indonesian Child Education: Understanding Parental Readiness, Challenges, and Policy Implications. *Educational Process: International Journal*.
- Ott, D. L. (2024). Social learning theory. In A. I. Mockaitis & C. L. Butler (Eds.), *Elgar encyclopedia of cross-cultural management*. Edward Elgar Publishing.
<https://doi.org/10.4337/9781803928180.ch33>
- Pangastuti, R., et al. (2025). Education management strategies for internalizing moderate religious values in learning Quran, Hadith, and Aqeedah Akhlaq in Madrasah Ibtidaiyah. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 6(1), 1–12.
<https://doi.org/10.31538/munaddhomah.v6i1.1544>
- Posangi, S. S., et al. (2025). Enhancing Islamic education quality through educational supervision and ICT. *Jurnal Ilmiah Peuradeun*, 13(2), 1209–1234.
<https://doi.org/10.26811/peuradeun.v13i2.1955>
- Prasojo, E., et al. (2025). Infusing indigenous Islamic values into western-style public administration in Indonesia: The role of pesantren institutions. In W. Drechsler et al. (Eds.), *Islamic public value: Theory, practice, and administration of indigenous cooperative institutions*. Edward Elgar Publishing.
<https://doi.org/10.4337/9781035333646.00026>
- Riedel, M. (2022). Studying While Muslim: Anti-Discrimination Law, Countering Violent Extremism, and Suspect Youth. *Griffith Law Review*, 31(2), 193–216.
<https://doi.org/10.1080/10383441.2022.2076967>
- Rifai, A., et al. (2025). An ethical framework for AI in Islamic education: Synthesizing Maqashid al-Sharia and national legal regulations in Indonesia. *Revista Electrónica de Ciencia Penal y Criminología*, 27.
- Romanenko, K., et al. (2025). The Intersection of Spirituality and Artificial Intelligence: Psychological Dimensions of Educational Leadership and Management. *International Journal on Culture, History, and Religion*, 7(SI1), 372–391.
<https://doi.org/10.63931/ijchr.v7iSI1.227>
- Salim, R., & Hossain, M. Z. (2021). Equitable distribution of wealth and resources in Islam. In M. A. Choudhury (Ed.), *God-conscious organization and the Islamic social economy*. Routledge. <https://doi.org/10.4324/9781315585321-13>

- Sheikh, S., et al. (2024). Investigating Advanced School Surveillance Practices and Disproportionality: A Systematic Review. *Urban Education*. <https://doi.org/10.1177/00420859241279446>
- Singh, S., & Kaur, J. (2024). Modern advancements in surveillance systems and technologies. In D. Darwish (Ed.), *Modern advancements in surveillance systems and technologies*. IGI Global. <https://doi.org/10.4018/979-8-3693-6996-8.ch002>
- Srinivasan, K. R., et al. (2024). AI-Driven Decision Making Enhancing Public Sector Efficiency and Effectiveness. In M. D. Lytras et al. (Eds.), *Harnessing AI, Blockchain, and Cloud Computing for Enhanced e-Government Services*. IGI Global. <https://doi.org/10.4018/979-8-3693-7678-2.ch003>
- Subiyantoro, et al. (2026). Integrating Religious Dimensions and Humanistic Education to Enhance Student Personality: A Case Study in Indonesian Madrasas. *Multidisciplinary Science Journal*, 8. <https://doi.org/10.31893/multiscience.2026208>
- Suhartono, S., Hidayat, R., & Wibowo, A. (2024). Educational management in modern Pesantren: Balancing spiritual values and digital governance. *International Journal of Educational Management*, 38(3), 741–758. <https://doi.org/10.1108/IJEM-09-2023-0451>
- Syafe'i, I., Haryanto, H., & Rahmawati, E. (2025). Smart boarding school systems: Security, surveillance, and character building in contemporary Islamic schools. *Journal of Islamic Studies and Technology*, 12(1), 45–62.
- Tanti, et al. (2025). Faith Meets Technology: Navigating Student Satisfaction in Indonesia's Islamic Higher Education Online Learning. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, 9(2), 695–708. <https://doi.org/10.22437/jiituj.v9i2.41513>
- Tantowi, A., et al. (2025). Optimizing Islamic Boarding School Management in the Digital Era: Analysis of Technology Effectiveness in Administration and Operations. *Munaddhomah*, 6(2), 295–309. <https://doi.org/10.31388/munaddhomah.v6i2.1738>
- Taufikin, et al. (2024). The Impact of AI on Teacher Roles and Pedagogy in the 21st Century Classroom. *2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS)*, 1, 1–5. <https://doi.org/10.1109/ICKECS61492.2024.10617236>
- Taufikin. (2021). Sufi Elements in Ki Hadjar Dewantara's Education Method. *Addin*, 15(1), 1. <https://doi.org/10.21043/addin.v15i1.9096>

- Thornberg, R. (2008). The lack of professional knowledge in values education. *Teaching and Teacher Education*, 24(7), 1791–1798.
<https://doi.org/10.1016/j.tate.2008.04.004>
- Usman, T., et al. (2025). Exploring Islamic-oriented cooperative learning through faith-driven collaboration among university students in Islamic education courses. *International Journal of Learning, Teaching and Educational Research*, 24(9), 922–939. <https://doi.org/10.26803/ijlter.24.9.44>
- Vellonen, V., et al. (2025). Pre-service special education teachers' perceptions of applying technologies in education. *Journal of Special Education Technology*, 40(4), 505–518. <https://doi.org/10.1177/01626434251314044>
- Walsh, K. (2020). Participant observation. In A. Kobayashi (Ed.), *International encyclopedia of human geography* (2nd ed., pp. 41–45). Elsevier.
<https://doi.org/10.1016/B978-0-08-102295-5.10205-7>
- Ward, J. T., & Brown, C. N. (2015). Social learning theory and crime. In J. D. Wright (Ed.), *International encyclopedia of the social & behavioral sciences* (2nd ed., pp. 409–414). Elsevier. <https://doi.org/10.1016/B978-0-08-097086-8.45066-X>
- Weinberger, A., & Patry, J.-L. (2016). VAKE (Values and Knowledge Education). In A. Surian (Ed.), *Open spaces for interactions and learning diversities*. SensePublishers. https://doi.org/10.1007/978-94-6300-340-7_14
- Wulan, E. R., et al. (2021). Integration of Science, Technology, and Islamic Values to Enhance Expected Learning Outcomes in French Higher Education. *Jurnal Pendidikan Islam*, 7(1), 95–108. <https://doi.org/10.15575/jpi.v7i1.12765>
- Zuboff, S. (2015). Big other: Surveillance capitalism and the prospects of an information civilization. *Journal of Information Technology*, 30(1), 75–89.
<https://doi.org/10.1057/jit.2015.5>