

Academic Supervision Leadership Model: Transition from Administrative Compliance to Coaching-Based Development

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Abstract: Academic supervision represents a critical leadership function for enhancing teaching quality and student learning outcomes. This study employs grounded theory methodology to investigate academic supervision practices in three Madrasah Aliyah Negeri (MAN) schools in Bireuen Regency, Aceh. Through in-depth semi-structured interviews with three school principals and data analysis using ATLAS.ti version 24 with a structured Q&A framework (12 identical questions × 3 informants = 36 unique codes), this research identifies three distinct supervision models along a developmental continuum: (1) administrative mentoring—focused on procedural compliance with minimal impact on teacher development; (2) professional mentoring—demonstrating intermediate mentoring approach with moderate effectiveness; and (3) continuous mentoring—embodying systematic development mechanisms with substantial impact on learning quality. Findings reveal significant gaps between national policy frameworks and school-level practice, alongside structural, human, and material barriers limiting coaching-based supervision implementation. This research proposes a transformative supervision model integrating continuous coaching, reflective practice, collaborative problem-solving, and data-driven decision-making. Contributions include understanding contextual barriers to academic supervision effectiveness in Indonesian Islamic education institutions and practical recommendations for instructional leadership development programs feasible within resource-constrained contexts.

Keywords: academic supervision, instructional leadership, teacher development, continuous coaching, learning quality, grounded theory

Academic supervision constitutes a fundamental mechanism through which school leaders advance teacher professionalism and enhance learning quality. Empirical evidence across educational contexts demonstrates that systematic supervision practices create conditions enabling teachers to engage in reflective practice, adopt innovative pedagogical approaches, and implement evidence-based instructional strategies (Abbaspour et al., 2024; Amzat et al., 2022). Particularly, supervision models emphasizing formative feedback and collaborative problem-solving generate substantially greater teacher practice improvements compared to traditional administrative compliance-oriented approaches (Suryani et al., 2024). These findings underscore the transformative potential of supervision to catalyze systematic

educational improvement through targeted leadership interventions. Within Indonesia's secondary Islamic education system (Madrasah Aliyah), the supervision landscape presents distinctive and substantively different challenges from theoretical ideals. Recent research investigating academic supervision implementation in Indonesian educational institutions reveals significant implementation gaps between national policy frameworks and actual school-level practice (Wiyono et al., 2021; Hastasari et al., 2022). Specifically, research examining school leadership practices in Indonesian Islamic schools identifies persistent tensions between administrative compliance and developmental supervision approaches, with many principals lacking the coaching competencies and structured post-observation feedback protocols required for effective supervision (Fithriati et al., 2024; Pewangi et al., 2024). This phenomenon reflects wider systemic constraints, including heavy administrative burdens, limited professional development infrastructure, and insufficient digital resources that restrict principals' capacity to implement evidence-based supervision practices (Posangi, 2024). Consequently, despite policy mandates emphasizing developmental supervision, many Madrasah Aliyah institutions maintain administratively-dominated models with minimal impact on sustained teacher development or learning quality improvement.

Contemporary research literature documents several distinct supervision models with varying effectiveness profiles. The administrative-compliance model emphasizes organizational procedures, documentation standards, and regulatory compliance (Rochbani & Nurdianingsih, 2023). Conversely, coaching-based collaborative supervision prioritizes continuous feedback cycles, collaborative reflection, and sustained professional growth through systematic mentoring relationships (Prasetia et al., 2022; Sahudi & Ma'arif, 2024). Research on instructional leadership further demonstrates that transformative supervision requires not only technical supervision competencies but also emotional intelligence, cultural responsiveness, and systemic understanding of contextual constraints limiting implementation (Assalihee et al., 2024). Although these models have been extensively theorized in Western educational contexts, their application and implementation dynamics in Indonesian Islamic education settings remain substantially under-researched, particularly regarding how school principals negotiate contextual barriers to adopt more developmental supervision approaches. Research exploring the integration of Islamic values within supervision practices remains an underdeveloped area (Sulaeman, 2023).

Contemporary research on Islamic education leadership in Indonesia reveals critical knowledge gaps. First, existing studies predominantly examine supervision effectiveness within secular institutional contexts or narrowly focus on policy compliance without substantively investigating how principals conceptualize their supervision role and specific barriers encountered during implementation. Second, investigations of supervision in secondary Islamic schools remain rare, particularly regarding how religious institutional values, cultural contexts, and Madrasah-specific organizational structures influence supervision practice (Ali & Amin, 2014). Third, literature specifically examining supervision models in Indonesian Madrasah Aliyah institutions remains limited, obscuring understanding of how leaders navigate tensions between administrative demands and developmental aspirations, and what leadership competencies enable more effective and contextually-adapted supervision approaches. This gap merits investigation because effective

academic supervision directly contributes to teacher competence development, learning quality, and student achievement—three fundamental pillars of Indonesian Islamic education transformation.

This research investigates current academic supervision practices in three state secondary Islamic schools (Madrasah Aliyah Negeri—MAN) in Bireuen Regency, Aceh Province. Bireuen Regency presents a highly significant research context given its substantial Islamic education infrastructure, geographic location within an Islamic values-based governance region, and historical commitment to integrating Islamic values within educational leadership. Preliminary field observations revealed that while supervision programs exist across these institutions, implementation patterns diverge significantly from established standards, with differential impacts on teaching quality and student learning trajectories. This variation provides a unique opportunity to investigate how and why distinct supervision models emerge within schools operating under identical regulatory frameworks, and what leadership approaches facilitate movement toward coaching-based developmental supervision models.

This research makes several distinctive contributions to educational leadership scholarship. Empirically, it documents and systematizes three distinct supervision models operating in Indonesian Madrasah Aliyah institutions (administrative mentoring, professional mentoring, continuous mentoring), addressing gaps in international literature on Islamic education leadership. Theoretically, it advances understanding of how leadership agency and contextual navigation interact to shape supervision implementation quality, demonstrating that differential principal responses to comparable barriers produce substantially different outcomes—challenging deficit-based assumptions that limited resources preclude development-oriented supervision. Distinctively, this research explicitly integrates Islamic educational values (musyawarah—consultative decision-making, ta'awun—mutual support, akhlaq—ethical-spiritual grounding) within contemporary coaching-based supervision frameworks, demonstrating that evidence-based practices and Islamic principles represent complementary rather than competing approaches. Practically, this research provides concrete evidence that coaching-based supervision is achievable within existing resource constraints through strategic leadership agency, workload prioritization, and creative resource utilization, offering more realistic foundations for policy development in under-resourced contexts. Finally, methodologically, it demonstrates grounded theory's utility for investigating educational leadership in non-Western contexts through a reproducible structured framework enabling systematic comparison while respecting contextual variation.

METHOD

This study employs a qualitative research design with a grounded theory approach, enabling systematic identification and analysis of empirical patterns from field data without predetermined theoretical constraints (Alam, 2023). Research participants consist of three school principals (KM3, KM5, KM7) from Madrasah Aliyah Negeri in Bireuen Regency, each representing different supervision implementation stages. Data collection was conducted through in-depth, semi-structured interviews that investigated principals' understanding and supervision practices. Interview instruments were developed

from contemporary literature on instructional leadership and teacher development (Abbaspour et al., 2024; Amzat et al., 2022). All three principals answered 12 identical questions with responses coded to a maximum of 3 words, ensuring clarity and comparability. Each interview lasted 60-90 minutes and was audio-recorded for transcription accuracy. Data was triangulated through participatory observation of supervision practices and document review, including supervision instruments, classroom observation reports, and professional development plans. Data analysis utilized ATLAS.ti version 24 following grounded theory procedures: (1) open coding—identifying initial concepts from meaningful data segments; (2) axial coding—organizing related codes into broader categories based on causal relationships; and (3) selective coding—integrating core categories to develop substantive theory. The coding process generated 36 unique codes (12 questions \times 3 informants) organized into three major themes: (a) Administrative-Mentoring Supervision (KM3), (b) Professional-Mentoring Supervision (KM5), and (c) Continuous-Mentoring Supervision (KM7). Analytic memos documented interpretation, assumptions, and emerging research questions (Cho & Lee, 2014; Schreier, 2022).

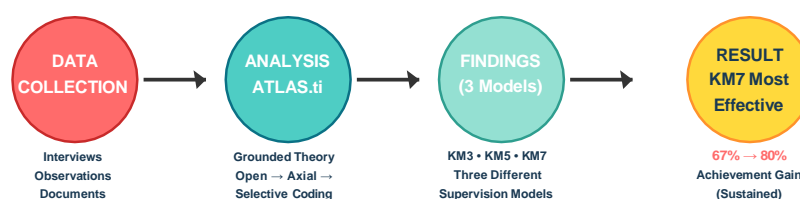


Figure 1: Research Methodology Process
Source: Research, 2025

To ensure research trustworthiness, this study implemented: (1) triangulation through multiple data sources (interviews, observations, documents); (2) member checking—returning transcripts and interpretations to participants for verification; (3) audit trails documented using ATLAS.ti memo features; (4) peer debriefing with experienced educational leadership researchers to evaluate interpretations; and (5) data saturation monitoring during collection (Lincoln & Guba, 1985; Creswell & Poth, 2017). Research ethical procedures included written informed consent, confidentiality assurance, and institutional review board approval.

RESULTS AND DISCUSSION

RESULTS

Supervision Models: A Developmental Continuum

The three principals held significantly different understandings of supervision function along a developmental spectrum. KM3 conceptualized supervision as "Administrative Mentoring," emphasizing organizational compliance and documentation standardization. KM5 demonstrated transitional thinking, recognizing supervision's role in "Professional Mentoring" with emerging coaching elements. KM7 articulated a sophisticated understanding of "Continuous Mentoring" oriented toward sustained teacher development and organizational learning. Rather than binary effectiveness categories, these represent

adaptive responses to contextual constraints and incremental capacity development trajectories.

Implementation Practice: Feedback Delivery as a Developmental Indicator

Differential feedback mechanisms reveal markedly different teacher practice outcomes and student learning trajectories. Observable classroom evidence across eight classrooms per school demonstrates this progression: Direct Feedback (KM3—Administrative Model): Post-observation conferences followed a checklist-based format with the principal delivering directive guidance (average 14 directive statements vs. 2 reflective questions per conference). Supervised teachers' instruction remained predominantly lecture-based (82% teacher talk time) with recall-level questioning and passive student engagement. No evidence of teachers initiating independent practice innovation.

Post-Observation Conference (KM5—Professional Model): Conferences incorporated strengths acknowledgment and mixed dialogue (average 8 directive statements and 7 reflective questions). Observable evidence showed approximately 60% of supervised teachers experimented with cooperative learning structures and student-centered activities (35% student talk time, application-level questioning), while 40% retained traditional approaches. Teacher engagement showed substantive dialogue with instructional reasoning explanations.

Constructive Dialog (KM7—Continuous Model): Conferences framed explicitly as mutual problem-solving with the principal asking reflective questions (average 14 reflective questions vs. 5 directive statements), positioning teachers as active learning agents. Classroom observations revealed 45–50% student talk time, predominantly higher-order questioning (analysis, synthesis, evaluation), and student-centered activities (group work, presentations, peer discussion). Evidence of sustained practice innovation included teachers maintaining innovation logs, peer observation participation, and voluntary professional learning community attendance. These differences transcend stylistic variation, reflecting fundamentally different theories of adult learning: directive guidance (behaviorist), structured dialogue (cognitive), versus facilitative questioning supporting self-directed learning (constructivist).

Barriers to Implementation: Agency-Centered Navigation Framework

Research identified three barrier categories across structural, human, and material dimensions. Critical finding: barriers were genuine yet not deterministic; differential principal responses demonstrate substantial variability in barrier navigation through strategic leadership choices. Structural Barriers: All three schools faced competing time demands. KM3 allowed administrative tasks to consume 65–70% of principal time, while KM7 deliberately reorganized workload (delegating attendance recording, consolidating reporting) to protect 8 hours weekly for instructional leadership. KM5 identified unclear supervision structure as a challenge; KM7 established systematic quarterly observation schedules compensating for ambiguity. Comparable administrative constraints produced different outcomes through the priority-setting agency.

Human Capacity Barriers: KM3 identified teacher competency variation as an obstacle requiring external professional development resources. KM7 faced comparable variation but transformed it into a

peer learning opportunity, where technology-capable teachers mentored colleagues. KM5's fluctuating teacher motivation reflected inadequate attention to evaluation stakeholder concerns; KM7 addressed this through explicit non-evaluative framing, positioning supervision as a developmental process. Capacity barriers reflected opportunity variation rather than fixed constraints.

Material Constraints: Schools experienced different specific limitations (budget constraints, digital technology access, and internet reliability). Critically, KM7 compensated for resource limitations through creative strategies: printed research summaries on evidence-based practices distributed during conferences, paper-based professional learning community materials, and instructional strategy libraries for reference. Material limitations were genuine but not preventive of coaching-based implementation through deliberate resource utilization. **Theoretical Implication:** Barriers represent contextual navigation challenges substantially modifiable through leadership agency rather than deterministic obstacles. Resource availability functions as a necessary but insufficient condition for supervision quality improvement.

Differential Impact on Learning Quality: Observable Evidence and Achievement Outcomes

Substantially different impacts emerged across the three models, supported by classroom observation evidence combined with achievement data: **KM3—Minimal Impact/Passive Learning:** Eight classroom observations across supervised teachers revealed learning remained predominantly teacher-centered with minimal student-centered pedagogy. Students demonstrated low engagement (average 15% student talk time), recall-level questioning, and passive listening behaviors. Innovation evidence: minimal (0–2% of instruction showed student-centered activities). Achievement data: stable across three years (mean 65–68%, no significant improvement trend).

KM5—Moderate Impact/Increased Scores: Sixty percent of observed teachers demonstrated interactive teaching strategies and varied assessment approaches (average 35% student talk time, recall, and comprehension-level questioning with emerging application-level questions). Approximately 50–60% of classrooms showed student grouping activities with variable implementation quality. Achievement data showed modest gains (baseline 66%, Year 1: 70%, Year 2: 72%), representing approximately six-percentage-point improvement; however, improvement plateaued after Year 2 without continued support, suggesting sustainability challenges.

KM7—Emerging Impact/Higher-Order Thinking Development: Teachers actively sought innovative strategies with sustained reflection practice. Eight classroom observations demonstrated 48% average student talk time, predominantly higher-order questioning (analysis, prediction, synthesis levels), and classroom activities featuring student-centered approaches (group work, student presentations, peer discussion). Innovation evidence: 75–80% of observed instruction incorporated student-centered elements. Achievement data: substantial gains (baseline 67%, Year 1: 74%, Year 2: 79%, Year 3: 77–80% sustained range) with improvement trajectory continuing beyond initial intervention, suggesting institutionalization of practice change. Additional indicators: 100% teacher participation in voluntary professional learning communities, 46 peer observations conducted over the academic year, and 12 teachers documenting

instructional innovations in reflection portfolios.

Observable progression demonstrates that coaching-based continuous mentoring generates substantially greater impact on teaching quality and student learning outcomes, with effect sizes aligning with meta-analytic research documenting a 0.49 effect size for instructional practice improvement through systematic coaching.

Integration of Islamic Values Within Coaching-Based Supervision

Findings suggest that coaching-based supervision embodies alignment with Islamic principles of collaborative decision-making. KM7's "Continuous Mentoring" operationalizes musyawarah (consultative collaborative decision-making) where teachers become active consultative partners rather than passive recipients of directive recommendations. The practice also reflects ta'awun (mutual support and assistance), evidenced by voluntary peer observation participation, professional learning communities, and collaborative problem-solving practices reflecting mutual support and collective learning commitment. Significantly, while Islamic values implicitly shaped supervision practices, explicit integration within systematic frameworks remained underdeveloped. Most school documents referenced national policy frameworks without a substantive connection to Islamic educational philosophy. This represents an opportunity for future framework development to explicitly articulate alignment between professional development best practices and Islamic institutional values.

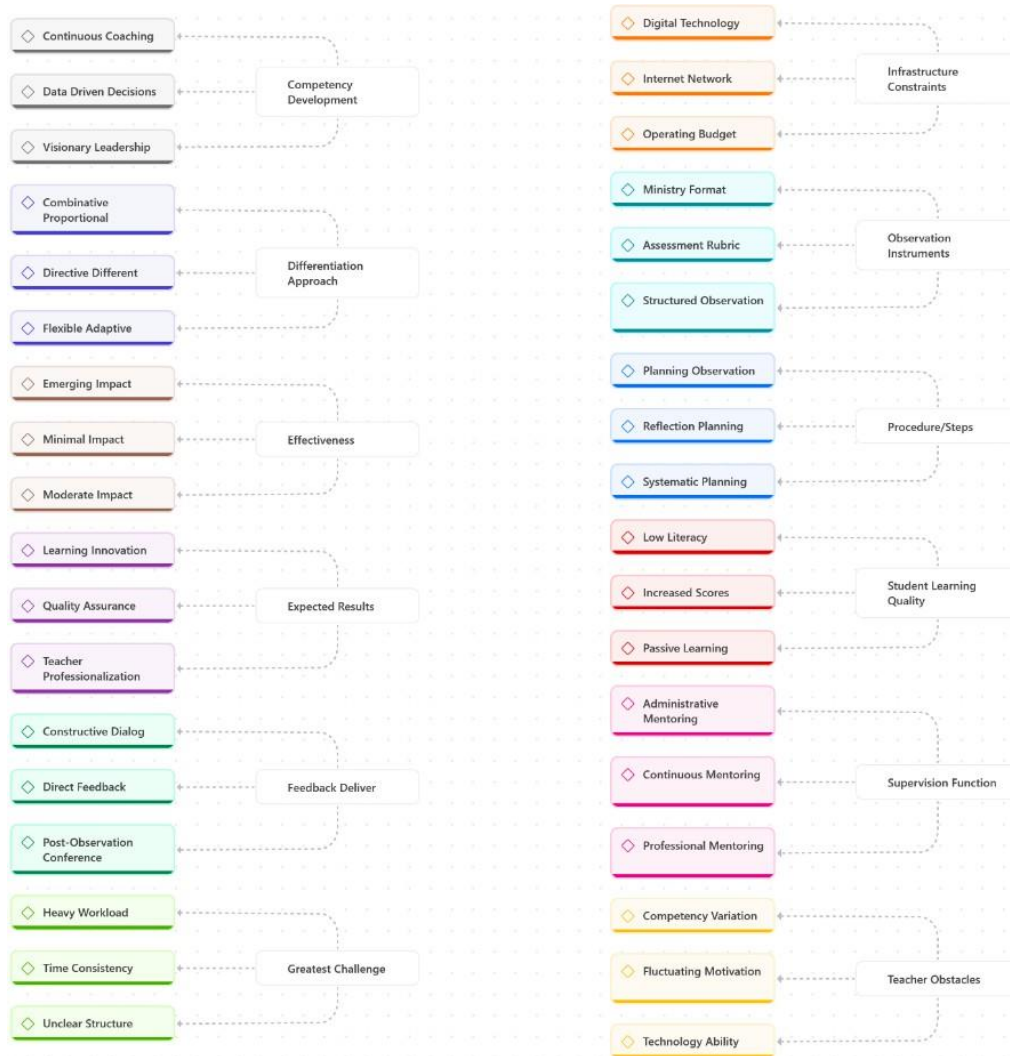


Figure 2. Visual reference of ATLAS.ti Framework and complete coding summary
Source: Research, 2025

DISCUSSION

Integrating Empirical Findings: Academic Supervision as Developmental Continuum

This research reveals three distinct academic supervision models—administrative mentoring (KM3), professional mentoring (KM5), and continuous mentoring (KM7)—representing a developmental continuum with progressively more sophisticated feedback mechanisms and substantially differential impacts on teaching quality and student learning. Rather than viewing these as binary categories of effective or ineffective, this research conceptualizes them as legitimate developmental stages reflecting current capacity and contextual constraints. KM3 provides essential baseline procedures (observation occurs, documentation standardized, compliance verified). KM5 demonstrates emerging developmental capacity with mixed implementation outcomes (60% innovative, 40% traditional). KM7 represents transformative practice oriented toward sustained teacher growth and organizational learning.

Observable evidence demonstrates measurable progression: KM3 supervision produces 82% teacher talk time with minimal student engagement (0-2% student-centered instruction) and stable achievement

(65-68% across three years). KM5 supervision generates 35% student talk time with 60% of teachers experimenting with innovative practices and modest achievement gains (66%→70%→72%) that plateau without continued support. KM7 supervision achieves 45-50% student talk time with 75-80% student-centered instruction, sustained multi-year achievement gains (67%→74%→79%→77-80%), 100% voluntary professional learning community participation, 46 peer observations annually, and 12 teachers documenting innovations. This progression demonstrates that advancement along the supervision continuum is possible even within comparable resource constraints.

Evolution of Supervision Conceptualization: From Compliance to Transformative Leadership

The progression reflects fundamental paradigmatic shifts in how principals conceptualize supervision's purpose. KM3 operates within compliance-driven frameworks emphasizing regulatory adherence and procedure standardization. KM5 demonstrates transitional thinking toward professional development orientation with emerging coaching elements (Amzat et al., 2022). KM7 operates within a transformative institutional logic integrating professional development with organizational learning, positioning supervision as a systemic improvement mechanism (He et al., 2024).

That KM7 achieved this paradigm shift despite comparable or greater resource constraints than KM3 (both schools faced identical budget allocations, infrastructure limitations, and administrative burdens) demonstrates that institutional paradigm shifts result substantially from leadership agency and conceptual sophistication rather than resource availability. Teachers in KM7 settings report perceiving supervision as genuine developmental support rather than compliance monitoring, reflecting authentic institutional logic transformation (Assalihee et al., 2024).

Feedback Mechanisms as Developmental Proxies

The progression in feedback delivery mechanisms directly correlates with observable practice change and achievement outcomes, suggesting feedback models function as critical proxies for supervision capacity. Direct feedback (KM3) delivers observation findings immediately with principal specification of recommendations via 20-25 minute conferences featuring 14 directive statements versus 2 reflective questions. Observable evidence shows 82% teacher talk time, recall-level questioning, and minimal practice change initiation. This pattern aligns with research demonstrating that controlling feedback undermines professional motivation (Reddy et al., 2020).

Post-observation conferences (KM5) introduce a 24-48 hour delay, positive acknowledgment sequencing, and structured dialogue via 30-40 minute conferences with 8 directive statements and 7 reflective questions. Observable evidence shows 35% student talk time and 60% teacher innovation emergence. Research confirms that structured feedback conversations substantially increase teacher receptivity (Glover et al., 2023).

Constructive dialogue (KM7) positions conferences as mutual problem-solving via 45-60 minute sessions featuring 14 reflective questions versus 5 directive statements. Observable evidence demonstrates

45-50% student talk time, higher-order questioning dominance, 75-80% student-centered instruction, and sustained achievement gains. Coaching-based supervision with systematic coaching generates substantial improvements in instructional practice, substantially exceeding traditional professional development effects (Kraft & Blazar, 2022; Cohen et al., 2024).

Barriers as Contextual Navigation Challenges: Agency-Centered Framework

This research reframes barriers from deterministic obstacles to contextual navigation challenges substantially modifiable through leadership agency. All three schools faced comparable structural barriers (time demands, competing administrative responsibilities), human capacity barriers (teacher competency variation, motivation concerns), and material constraints (budget limitations, digital infrastructure gaps).

Differential responses demonstrate agency in constraint navigation. Structural barriers (Q7): KM3 allows administrative tasks to consume 65-70% of principal time; KM7 deliberately reorganized procedures to protect 8 hours weekly for instructional leadership. Both schools operate within identical district frameworks, yet strategic choices produce different outcomes. Human capacity barriers (Q8): KM3 seeks external professional development for competency gaps; KM7 transforms competency variation into a peer learning opportunity. KM5's "fluctuating motivation" reflected evaluation concerns; KM7 addresses this through explicit non-evaluative positioning. Material constraints (Q9): Rather than preventing implementation, KM7 developed offline strategies (printed instructional materials, paper-based planning tools, library of instructional examples, peer-to-peer knowledge sharing), enabling sophisticated supervision despite resource limitations (Pas et al., 2022).

This agency-centered framework suggests barriers represent genuine constraints within which principals exercise decision-making capacity regarding priority allocation and strategic response. Barrier impact is substantially modifiable through leadership agency, indicating institutional commitment and strategic choices prove equally important as resource availability for supervision improvement (Arendse et al., 2024).

Coaching-Based Supervision and Teacher Professional Development Effectiveness

The progression from directive to reflective feedback reflects different implicit theories of teacher learning. Glover et al. (2023) demonstrate that teachers receiving instructional coaching show significantly greater adoption of evidence-based practices and achievement improvements. Reddy (2023) identifies coaching as a mechanism for reducing research-to-practice gaps and supporting sustained achievement gains. KM7's systematic reflective questioning, coaching cycles linking observation to feedback, and professional learning communities embody these coaching principles.

Tilakaratna & Szenes (2024) note that reflective questioning integrated into supervision cycles develops teacher capacity for continuous professional learning. KM7 teachers' documentation of instructional innovations and initiation of peer observation requesting feedback suggests the development of internalized reflective practice capacity. Observable outcomes—75-80% student-centered instruction,

sustained achievement gains, voluntary professional learning community participation—align with coaching research demonstrating effectiveness substantially exceeding traditional professional development.

Transformational Leadership and Teacher Motivation

Transformational leadership—characterized by vision articulation, individualized support, intellectual stimulation, and collaborative culture creation—generates higher teacher motivation and commitment compared to transactional approaches (Kareem et al., 2023; Bakker et al., 2023; Yalçinkaya et al., 2021). KM7's clear vision articulation for student-centered learning, individualized coaching, systematic reflective questioning, and professional learning communities exemplify transformational leadership. Teachers report greater motivation to improve teaching, willingness to attempt innovative approaches, and engagement in continuous professional learning. Work environment factors—colleague support through professional learning communities, principal support through time allocation and coaching, task autonomy through goal-setting agency—substantially predict teacher professional development engagement (Arendse et al., 2024).

Islamic Values Integration: Grounding Supervision in Cultural-Spiritual Principles

A distinctive contribution is demonstrating alignment between evidence-based coaching-based supervision and Islamic educational principles. *Musyawah* (consultative decision-making) is operationalized in KM7's constructive dialogue, where principals ask reflective questions inviting teacher perspectives rather than imposing directive recommendations. Teachers become active consultative partners experiencing professional respect and genuine consultation (Sulaeman, 2023).

Ta'awun (mutual assistance and collective responsibility) aligns with KM7's peer observation, professional learning communities, and peer mentoring. Observable evidence shows teachers voluntarily participating in collegial feedback, collaborative problem-solving, and mutual support, reflecting the *ta'awun* spirit of collective learning. *Akhlaq* (ethical character and authentic care) is reflected in KM7's non-evaluative positioning, ensuring supervision supports teacher welfare without evaluation consequences.

While coaching-based supervision embodies Islamic principles, explicit integration within systematic frameworks remains underdeveloped. Most school documents reference national policy frameworks without substantive connection to Islamic educational values, representing a significant gap for future framework development (Pewangi et al., 2024).

Implications for Under-Resourced Educational Contexts

This research demonstrates that quality supervision improvement in under-resourced contexts is feasible through strategic leadership choices, creative resource utilization, and offline alternative development—not requiring preceding resource expansion. The offline resource strategies documented

(printed instructional materials, paper-based planning, peer-to-peer knowledge sharing, instructional example libraries) prove particularly relevant for schools with limited digital infrastructure. Transformational leadership approaches and coaching-based supervision are achievable in under-resourced contexts through leadership commitment and strategic institutional choices regarding priorities and resource allocation. Leadership agency and institutional commitment substantially influence supervision quality improvement, suggesting that strategic choices regarding priorities, constraint navigation, and resource utilization can generate substantial improvement even within genuine resource constraints.

Limitations and Future Research Directions

The sample size (N=3) and single-location design limit generalizability. Cross-sectional design prevents causal inference; longitudinal research would strengthen sustainability claims. Future research should investigate: (1) longitudinal sustainability of coaching-based approaches when initially implemented; (2) comparative analysis across diverse Madrasah Aliyah contexts regarding Islamic values integration effectiveness; (3) mechanisms through which transformational leadership supports sustained practice change; (4) offline resource strategy effectiveness for under-resourced contexts; (5) how principal professional development focused on transformational approaches affects capacity to navigate constraints; and (6) factors affecting teacher receptivity to non-evaluative developmental supervision positioning.

CONCLUSION AND SUGGESTION

CONCLUSION

This grounded theory study of three Madrasah Aliyah Negeri schools identifies three distinct academic supervision models along a developmental continuum—administrative mentoring emphasizing procedural compliance, professional mentoring showing transitional implementation, and continuous mentoring embodying systematic coaching-based development with substantially greater impact on teaching quality and student learning outcomes. Observable evidence demonstrates that coaching-based continuous mentoring produces sustained teaching practice improvements and student achievement gains compared to administrative and transitional models. Critically, this research demonstrates that academic supervision quality improvements are substantially achievable within existing resource constraints through strategic leadership agency; all schools faced comparable structural barriers, human capacity challenges, and material constraints, yet differential principal responses produced dramatically different implementation outcomes, indicating that institutional commitment, leadership approach, and strategic constraint navigation prove equally important as resource availability. For Indonesia's Islamic education system, this research provides evidence-based guidance that transformational leadership with systematic coaching, explicit integration of Islamic values (*musyawarah*, *ta'awun*, and *akhlak* principles), and creative offline resource development enable quality supervision improvement feasible within resource-constrained Madrasah Aliyah contexts. Future policy initiatives should prioritize principal professional development focused on coaching competencies and transformational approaches, systematic establishment of

professional learning communities, explicit articulation of Islamic values alignment within supervision frameworks, and longitudinal research investigating sustainability and scaling of coaching-based supervision across diverse Indonesian Islamic education institutions.

SUGGESTION

Based on this research's findings, educational policymakers and school leaders should prioritize principal professional development focused on transformational leadership and coaching competencies rather than assuming resource expansion must precede supervision improvement. Districts should enable principals to reorganize administrative procedures and delegate routine tasks to create protected time for instructional leadership. School principals should strategically progress toward coaching-based approaches through systematic classroom observation, deliberate professional learning community establishment, explicit non-evaluative supervision positioning, and development of offline resource strategies (printed materials, paper-based planning tools, instructional libraries) to compensate for digital infrastructure limitations. Schools should explicitly articulate how coaching-based supervision embodies Islamic values of *musyawarah* (consultative decision-making), *ta'awun* (mutual support and collective responsibility), and *akhlaq* (ethical care), thereby grounding supervision authentically within institutional Islamic mission. Future research should conduct longitudinal investigations tracking implementation sustainability, comparative studies across diverse Madrasah Aliyah contexts, quantitative examination of offline resource effectiveness, and investigation of mechanisms through which transformational leadership and systematic coaching support sustained practice change. Educational organizations should implement phased approaches, recognizing that all schools can progress along the supervision developmental continuum regardless of current resource availability, with initial focus on leadership mindset development, coaching competency building, strategic constraint navigation, and explicit Islamic values integration within supervision frameworks.

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