

Implementation of Coaching Techniques to Enhance School Principals' Managerial Competence Through the TIRTA Framework

Ai Aisyah* and H Hidayat

Nusantara Islamic University, Bandung, Indonesia

Corresponding Author: aiaisyah@uninus.ac.id

Abstract. This study examines the implementation of coaching techniques based on the TIRTA Framework (Action, Reflection, Follow-Up, and Execution) as a strategic approach to enhancing the managerial competence of primary school principals. Using a qualitative case study approach, the research was conducted at SDN Talagasari and involved the principal, senior teachers, and school supervisors as key informants. Data were collected through in-depth interviews, participatory observation, and document analysis, then analyzed using the interactive model of Miles, Huberman, and Saldaña. The findings indicate that coaching through the TIRTA Framework gradually facilitates a transformation in the principal's mindset—from administrative leadership to reflective and collaborative leadership. The Action phase enables the identification of real, context-based problems within the school; Reflection promotes self-evaluation and awareness of one's role; Follow-Up guides the formulation of strategic plans based on reflective insights; and Execution showcases the internalization of new leadership values into the school's work culture. These findings affirm that reflective coaching is not merely a technical intervention, but a transformative learning process that can foster adaptive and sustainable leadership. The TIRTA-based coaching technique has the potential to serve as a professional development model for school principals, one that could be integrated into national education supervision policies in a more contextual and human-centered manner.

Keywords: Managerial Competence, Primary Education Leadership, Reflective Coaching, School Principal, TIRTA Framework.

1 Introduction

In facing the dynamics and complexities of 21st-century education, school principals are required to possess strong managerial competencies to ensure the quality of educational services within their institutions. Managerial competence includes the ability to design a strategic vision, manage resources, build collaboration, and foster a work culture that supports learning innovation [1]. In the context of Indonesia's educational reform, efforts to strengthen school principals' capacities have been

implemented through various national programs such as *Guru Penggerak*, which emphasizes transformative leadership and continuous learning[2].

However, realities in the field still reveal significant gaps between principals who have participated in the *Guru Penggerak* program and those who have not. As identified at SDN Talagasari, the principal has not yet participated in the program and still shows several managerial weaknesses, such as suboptimal strategic planning, low teacher involvement in decision-making, and weak monitoring and evaluation of school programs. These issues result in stagnant innovation, low teacher motivation, and less-than-optimal student learning outcomes.

This situation highlights the need for systematic, targeted, and contextual managerial capacity development interventions, especially for principals not yet reached by national programs. One relevant strategic approach is reflection-based coaching using the TIRTA flow (Action–Reflection–Follow-Up–Action) [3]. This approach emphasizes mindset transformation, reflective awareness, and principal autonomy in carrying out managerial functions adaptively and effectively. Coaching through the TIRTA flow offers a practice- and partnership-based solution, positioning the coach and coachee as equals and focusing on the achievement of meaningful goals[4].

Previous research has shown the potential of coaching in supporting professional development in education. Nurhikmah studied coaching for teachers but did not specifically target principals [5]. The GROW model applied by Korthagen successfully improved clarity of principals' work goals but did not address deeper reflective aspects [6]. Meanwhile, the mentoring approach used by Hastuti (2022) was more one-directional and less conducive to developing principals' independence in making strategic decisions[7].

This gap reinforces the urgency of research focusing on developing school principals' managerial competencies through the TIRTA-based coaching model, which specifically emphasizes self-awareness, personal responsibility, and leadership transformation grounded in local context. This model not only aims to improve technical skills but also shapes principals into learning leaders capable of adapting to change, promoting collaboration, and building an innovative school culture.

The urgency of this research lies in the need to develop a more contextual and applicable coaching approach that can serve as an intervention model for schools not yet touched by national principal development programs. Given that the quality of leadership greatly determines the direction and success of school programs, strengthening managerial competence through TIRTA-based coaching can be a relevant strategy with a direct impact on improving education quality.

This study offers a new contribution to educational coaching development, emphasizing reflective processes, mindset transformation, and managerial actions focused on continuous improvement. This approach is expected to bridge the gap between principals who have received national training and those who have not, and to strengthen the role of school principals as key drivers in realizing quality education at the basic education level.

2 Method

This study employs a qualitative approach with a case study design. This approach was chosen because it allows the researcher to deeply understand and explain phenomena within their natural context, and to explore the subjective meanings of school principals' experiences in implementing coaching techniques based on the TIRTA framework (Action, Reflection, Follow-Up, Execution). The case study design is considered appropriate for capturing the complexity of coaching practices that involve interaction, reflection, and the transformation of managerial behavior directly within the school organization[8]–[10].

The research was conducted in two primary schools, SDN Talagasari and SDN Jatisari, which were purposively selected because they represent educational institutions facing managerial challenges and context-specific leadership development needs. The research subjects included the school principals as the main coachees, as well as teachers, supervisors, and coaches who were directly involved in the implementation of coaching based on the TIRTA framework.

Data collection techniques involved method triangulation, namely in-depth interviews, participatory observation, and document analysis. Interviews were used to explore the principals' reflective experiences in the coaching process, as well as the perceptions of teachers and supervisors regarding changes in managerial behavior. Participatory observation was conducted during coaching sessions and while the principals carried out managerial functions at school. Meanwhile, document analysis was conducted on school work plans, coaching notes, reflection journals, and follow-up reports of coaching results [11], [12].

The researcher acted as the main instrument (human instrument) in the data collection process. The researcher's direct involvement in the social context of the school organization was a crucial part of gaining deep insights into the dynamics of coaching. Supporting instruments such as interview guides, observation sheets, and documentation formats were prepared to maintain systematic procedures and consistency throughout the research process.

Data validity was tested using Lincoln and Guba's four criteria[13]: *Credibility*, achieved through source and technique triangulation and member checking with informants; *Transferability*, maintained through detailed contextual descriptions (*thick description*); *Dependability* and *Confirmability*, ensured through transparent documentation of the analysis process via audit trails and systematic recording of all reflection activities and findings[14].

Data analysis followed the interactive model of Miles, Huberman, and Saldaña[15], which includes three stages: *Data reduction* the process of filtering, categorizing, and simplifying raw data; *Data display* in the form of thematic narratives, tables, and simple visualizations to reveal patterns and interrelationships; and *Conclusion drawing/verification* conducted iteratively during and after data collection to ensure accuracy and consistency of the findings.

The research was carried out from February to April 2025, covering the preparation phase, implementation of coaching based on the TIRTA framework, field data collection, and the final analysis and reporting phase. With this approach, the study

aims to provide an in-depth overview of how reflective coaching through the TIRTA framework can shape principals into more reflective, independent, and adaptive leaders in effectively and sustainably carrying out their managerial functions.

3 Results

3.1 Reflective Action in Enhancing School Principals' Managerial Competence through the TIRTA Framework

Based on the research findings at SDN Talagasari, the *Action* stage in the TIRTA framework serves as a crucial entry point in the coaching process for improving school principals' managerial competence. This stage acts as the foundation for building self-awareness regarding the challenges, weaknesses, and potential of principals in carrying out their managerial duties. The process is carried out through coaching conversations that focus on reflective questioning, issue mapping, and the exploration of leadership values.

Principals are encouraged to independently identify core problems that hinder the effectiveness of their managerial performance, such as limited teacher involvement in program planning, reliance on administrative approaches, and lack of performance monitoring. One interview excerpt reveals:

"I just realized that I spend more time on reports and rarely discuss the direction of the program. Through this coaching, I'm starting to learn how to set priorities."
(Principal, interview excerpt, March 14, 2025)

The reflective action process is conducted in a safe and equal coaching environment. The coach does not provide instructions but guides the principal through open-ended questions that encourage meaning-making and internal discovery. This approach nurtures awareness of outdated mindsets and opens space for designing contextual solutions.

Documentation from this stage of coaching shows a shift in the principal's thinking structure. Initially positioning themselves as administrative controllers, the principal began to map challenges based on strategic school issues, such as low teacher motivation, stagnant quality programs, and weak collaboration. This was followed by the formulation of an initial action plan, including mapping teacher potential, reviewing work programs, and planning to form an internal reflection team.

These findings indicate that the "Action" stage is not merely a technical starting point but a strategic awareness process that enables principals to view school situations through a reflective leadership lens. This process supports Aguilar's theory of transformative coaching, which states that sustainable change begins with deep awareness of oneself and the system in which one operates [16][17].

One strength of implementing the "Action" stage in TIRTA-based coaching is its integration with the *Plan* principle in the PDCA cycle. Principals not only identify problems but also begin to formulate data-based goals for change and involve teachers as discussion partners[18]. This demonstrates that coaching has succeeded in shifting

managerial planning from an instructive pattern to a more collaborative and reflective model[19].

Furthermore, analysis of the principal's reflection journal shows positive progress in understanding their role as a learning leader. The principal began recording insights about the importance of two-way communication, active listening, and building a culture of mutual trust in the workplace. These findings reinforce Whitmore's theory that effective coaching encourages individuals not only to act but also to grow in awareness, responsibility, and deeper leadership values[20].

However, implementing the "Action" stage also faced challenges, particularly in fostering openness among principals who were previously accustomed to top-down approaches. Coaches need to be sensitive in creating a non-judgmental communication space to enable honest reflection. In some initial cases, principals' engagement remained formal. Yet over time, consistent coaching sessions were able to reduce this resistance and build a more authentic partnership.

Thus, this research affirms that the "Action" stage in the TIRTA Framework serves as a pivotal point in transforming managerial awareness, forming the basis for the subsequent stages of reflection, follow-up, and execution. Coaching is no longer seen merely as a training tool, but as a leadership development process grounded in awareness, partnership, and sustainability.

3.2 Reflection in the Coaching Process for Strengthening School Principals' Managerial Competence

The implementation of school committee strategies to improve learning quality at SDN 170 Dian in Bandung City and SDN Menger 02 in Bandung Regency indicates that although practices are in place, they have not yet been fully optimized. Based on interview and observation results, programs jointly designed by the school and committee are often not followed through with consistent execution. Several teacher training initiatives and collaborative activities with parents, planned in the school's annual work plan (RKT) and budget (RKAS), were not fully realized as intended.

The *Reflection* stage in the TIRTA framework becomes a critical moment in the transformation process from an administrative actor to a context-aware, open, and improvement-oriented leader. Based on observations and in-depth interviews, this stage encourages school principals to critically review their experiences, decisions, and leadership patterns.

Reflection is carried out after principals engage in initial actions or respond to identified managerial challenges. In coaching sessions, principals are invited to consider reflective questions such as: What impact did my decisions have on the school team? How did I respond to conflict or resistance? What can I learn from situations that didn't go as planned?

This approach fosters higher order thinking processes that not only seek solutions but also build new understandings of the principal's role as an agent of change. One principal wrote in their reflection journal:

"I've started to realize that it's not just the programs that need evaluation, but also my way of thinking. I often take over without first listening to teachers' opinions."
(Principal's reflection journal, March 22, 2025)

Reflective sessions take place in an open, non-judgmental coaching environment. The coach employs techniques such as powerful questioning, empathetic listening, and mirroring to help principals view themselves from a more objective perspective. Coaches do not provide solutions but act as reflective mirrors, enabling principals to evaluate the patterns, values, and assumptions that influence their leadership style.

Documentation shows that during the reflection process, principals began restructuring how they lead meetings, provide feedback to teachers, and plan programs based on evaluation results rather than routine practices. This marks a shift from control-based leadership to leadership grounded in collaboration and awareness. One teacher supported this finding:

"After several coaching sessions, our principal started inviting more discussions and became more open to feedback. The working atmosphere has become more relaxed."
(Senior teacher, interview, March 25, 2025)

The reflection stage aligns theoretically with Schön's (1983) concepts of "reflection-in-action" and "reflection-on-action," which highlight reflection as a key process in professional learning. Reflection enables principals not only to improve past actions but also to build new mental frameworks for future actions.

Furthermore, the *Reflection* stage in the TIRTA framework mirrors the "Do" phase of Deming's PDCA cycle [21]. At this stage, principals not only act but also internalize the meaning of their actions as new awareness[22]. Findings indicate that principals began adjusting their approach to leading teachers shifting communication from top-down instructions to open-ended dialogues and started using educational report cards and teacher reflections as a basis for decision-making[23].

However, reflection is not an instant process. Challenges include principals' tendencies to remain in their comfort zones or to perceive reflection as a waste of time. To address this, coaches apply the "trust before truth" strategy building mutual trust before encouraging deeper exploration of meaning.

Overall, research findings show that the *Reflection* stage in the TIRTA framework successfully activates principals' critical awareness of themselves and their organizations. This process becomes a bridge to more visionary, accountable, and human-centered leadership. With reflection as a foundation, school principals evolve from mere program executors into lifelong learners who continually evaluate and refine their leadership approaches

3.3 Follow-Up in Coaching as Strengthening School Principals' Managerial Competence

The *Follow-Up* stage in the TIRTA Framework is a continuation of the reflection process that focuses on strategic action. Based on findings from SDN Talagasari, this stage illustrates how school principals begin to develop concrete steps based on prior reflections, moving beyond routine administrative tasks. The follow-up acts as a bridge between self-awareness and systemic change in leadership and school management.

In practice, post-reflection coaching sessions always conclude with the development of a follow-up plan that is specific, measurable, and contextual. The principal, together with the coach, designs small changes that can be immediately implemented in the school environment. Examples include restructuring work teams, redesigning meeting agendas to be more participatory, and establishing more realistic success indicators for programs.

"I've started including reflection sessions as part of weekly teacher meetings. It's no longer just reporting, but also a time to hear their challenges and ideas. That came from last week's coaching session." – (Principal, interview excerpt, April 1, 2025)

Documentation of the follow-up plans shows both short-term and long-term orientations. Short-term plans include revising internal work procedures and strengthening coordination with teacher teams. Long-term plans focus on building a new organizational culture that emphasizes reflective evaluation, collaboration, and data-driven decision-making. Follow-up actions also involve engaging teachers and staff in improving ongoing programs. One teacher shared:

"We feel more valued because we're asked to evaluate what needs to be improved in the school ourselves—not from the top, but together." (Senior teacher, interview excerpt, April 3, 2025)

This process reflects the value of *shared leadership*, where the principal begins to facilitate spaces for cross-role collaboration, no longer acting as the sole control center. The follow-up strategies implemented are based on reflection outcomes and needs analysis, prioritizing programs that directly impact learning and staff well-being.

Within the PDCA (Plan-Do-Check-Act) framework, this stage aligns with the *Check* phase, which emphasizes the importance of evaluating actions and their results. However, in the context of coaching through the TIRTA Framework, evaluation is not merely assessment but a learning dialogue for planning the next measurable and adaptive steps[24].

Follow-up also occurs on a personal level for the principal. Through reflection journals, they document changes in attitude and mindset in leadership. For example, principals begin to allocate specific weekly time for personal reflection and feedback from staff as part of their regular work schedule.

Nonetheless, the implementation of the follow-up stage also encounters obstacles, such as misalignment between plans and available time, or uncertainty about external support. To address this, coaches assist principals in setting action priorities and adjusting improvement steps to suit dynamic contexts. The follow-up strategies remain flexible, yet grounded in prior reflections rather than reactive responses to situational pressures.

Overall, the research findings indicate that the *Follow-Up* stage in TIRTA-based coaching successfully transforms reflection outcomes into strategic actions that strengthen principals' managerial capacity. Coaching no longer stops at awareness but drives genuine commitment to manage change in a sustainable and contextual manner.

3.4 Action in Coaching as a Manifestation of School Leadership Transformation

The Action stage in the TIRTA framework is the culmination of the coaching process, where the school principal not only formulates plans and reflections but begins to internalize new leadership into behavior and the school's work culture. Based on findings at SDN Talagasari, this phase reveals tangible changes in the principal's managerial practices from more participatory decision-making and open communication patterns to a more human-centered and solution-oriented leadership approach.

Action is not merely understood as program implementation, but as the transformation of mindset into practice. Principals begin to demonstrate maturity in conflict management, coaching-based mentoring of teachers, and forming strategic partnerships with school stakeholders. One school supervisor noted:

"The principal has started guiding teachers by asking questions rather than giving direct orders. This is a significant change I've observed in the past two months." (School Supervisor, interview excerpt, April 15, 2025)

In this context, action is also reflected in the principal's courage to implement internal policy innovations, such as: Establishing a teacher reflection team to evaluate learning programs monthly, Developing a more dialogic coaching format for academic supervision, Delegating tasks based on staff members' personal strengths rather than just administrative workload distribution.

These changes were documented through action journals, meeting minutes, and revisions to the school's work plans. Principals began shifting from a routine-based approach to one grounded in values and goals. They no longer simply perform duties but lead with awareness, empathy, and a clear direction.

Within the PDCA (Plan-Do-Check-Act) framework, the Action phase corresponds closely with the Act phase—acting upon evaluation results and ensuring that improvements are systemic. Here, action is not a one-off event but becomes part of a continuous learning cycle that strengthens the school's organizational culture. This is evident in the principal's initiative to integrate coaching into the school's teacher professional development mechanism. One teacher shared:

"Our principal has started encouraging us to coach each other too—not just giving us directions. Now we often have discussions before making class decisions." (Grade 6 teacher, interview excerpt, April 18, 2025)

These findings reinforce that coaching impacts not only the principal individually but also begins to shape a reflective and collaborative ecosystem within the school. Coaching evolves into a culture—not merely a capacity-building method. This transformation aligns with Senge's (1990) concept of organizational learning, in which changes in individual leadership spark collective change within the organization.

However, implementing actions also comes with challenges, such as instant expectations from the education office, administrative pressures, and inconsistent external support. Therefore, the success of this stage heavily depends on the principal's long-term commitment and the consistency of coaching sessions that allow for ongoing reflection and reinforcement of future actions.

In summary, the research affirms that the Action stage in TIRTA-based coaching serves as tangible evidence of the principal's managerial transformation. It's not just about improved technical skills but also changes in thinking, interaction, and leadership style. By building structured, value-driven actions, the principal of SDN Talagasari demonstrates that coaching is not a one-time intervention but a long-term learning process that nurtures reflective, collaborative leadership with a real impact on educational quality.

4 Discussion

The findings indicate that the implementation of coaching techniques through the TIRTA Framework significantly promotes the enhancement of school principals' managerial competence—particularly in reflective awareness, strategic planning, and collaborative decision-making. The coaching process, initiated through the Action and Reflection stages, successfully revealed hidden managerial challenges embedded in principals' administrative work patterns. These findings align with the principles of Total Quality Management (TQM), which emphasize the importance of continuous improvement cycles, as reflected in Deming's (PDCA (Plan–Do–Check–Act) framework and reinforced by Sallis [25], [26].

In the context of educational management, the repeated implementation of TIRTA-based coaching helps principals realize that improving school quality must begin with transforming mindsets and leadership patterns. This change is evident in how principals formulate follow-up plans based on reflection, rather than merely responding to administrative directives from superiors. Thus, coaching through TIRTA functions not only as a training strategy but also as an organizational learning mechanism.

Initial resistance to reflective coaching suggests that the managerial culture in primary schools is still dominated by technocratic leadership models. This aligns with findings by Biesta[27], [28] and Abonyi[29], who highlighted the low readiness of local capacities to embrace decentralized approaches rooted in reflection and innovation. Therefore, strengthening principals' capacity through context-sensitive coaching becomes a vital strategy for building a learning organization.

In terms of implementation, the coaching process at SDN Talagasari aligns with the principles of School-Based Management (SBM), promoting teacher involvement in decision-making, staff collaboration, and the use of education report cards as a foundation for internal policy decisions. This supports Caldwell's [30] view that transformative leadership at the school level requires space for dialogue, not merely formal structures. Coaching serves as that dialogic medium, as well as a reflective space for fostering adaptive and sustainable leadership.

However, as observed during implementation, key challenges include time constraints, the emotional readiness of principals, and the limited capacity of facilitators who fully understand reflective coaching principles. This reflects that the theory of Empowerment has not yet been fully operationalized at the school level. This theory emphasizes that every individual has the potential to be an agent of change when provided with access, training, and sufficient autonomy[31].

Moreover, coaching practice also reveals that reflective and evaluative documentation has yet to become a strong culture in schools. Yet, as stated by Mukred[32], systematic documentation is foundational to accountability and a key indicator for building a transparent and sustainable education system. In the context of coaching, documentation is not just for reporting but serves as a learning tool and the basis for structuring the next strategic actions.

From a policy perspective, the coaching program implemented at SDN Talagasari is not yet integrated into the national school principal development system. However, given its urgency and impact, the TIRTA-based coaching model has great potential to be adopted as part of a principal development strategy that is responsive to local contexts and real challenges faced by schools. Glewwe & Muralidharan [33] emphasize that the effectiveness of education policy depends not only on its design but also on how it is adaptively implemented by local actors.

Thus, this study affirms that reflective and contextual coaching is a strategic approach to building transformative managerial leadership at the primary school level. However, its successful implementation requires a supportive ecosystem encompassing facilitator training, reflective time allocation in principals' work agendas, and flexible policies oriented toward local capacity development.

5 Conclusion

This study analyzes the implementation of coaching techniques based on the TIRTA Framework (Action, Reflection, Follow-Up, and Execution) to enhance the managerial competence of the principal at SDN Talagasari. The findings show that this reflective coaching approach significantly promotes a transformation in the principal's mindset and leadership practices—from initially administrative and reactive, to more strategic, collaborative, and focused on continuous learning. The *Action* stage helps the principal identify managerial challenges based on real needs within the school. *Reflection* enables the principal to critically evaluate their leadership patterns, build self-awareness, and develop a change-oriented mindset. The *Follow-Up* stage indicates a shift toward strategic planning grounded in reflection and involving the participation of teachers and staff. Meanwhile, in the *Execution* stage, the principal begins to internalize new mindsets into managerial practices, demonstrating more adaptive, open, and empowering leadership. Coaching through the TIRTA Framework not only results in improved technical skills for the principal but also fosters a more reflective and participatory organizational culture. Despite challenges such as time constraints, resistance to change, and a shortage of competent facilitators, the strategies applied show that with a contextual and human-centered coaching design, managerial transformation can be built gradually and sustainably. This study confirms that the reflective coaching technique based on the TIRTA Framework is an effective approach to bridging the managerial competence gap among school principals, especially in schools not yet reached by formal programs such as *Guru Penggerak*. With policy

support, facilitator training, and integration into school management systems, this coaching model can be widely adopted as a strategy for improving leadership quality in primary education across Indonesia.

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