



Implementation of a Collaborative Approach to Improve Teacher Professional Competence at MI Negeri 9 Aceh Besar

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ABSTRACT

This classroom action research aimed to improve teachers' professional competence through the implementation of a collaborative learning approach at MIN 9 Aceh Besar. The study was conducted in two cycles, each consisting of planning, implementation, observation, and reflection stages. Participants included teachers from MIN 9 Aceh Besar during the 2025 academic year. Data were collected using observation, documentation, and interviews, and analyzed through descriptive qualitative techniques. The results indicated a significant increase in teachers' professional competence, reflected in their improved ability to design lesson plans, manage classrooms, apply innovative learning strategies, and conduct assessments aligned with curriculum standards. In the first cycle, only 68% of the teachers demonstrated competence at the expected level, while in the second cycle, the percentage rose to 87%. These findings suggest that collaborative learning fosters a culture of shared reflection, mutual support, and professional growth among teachers. The study concludes that the collaborative approach effectively enhances teachers' pedagogical practice and contributes to sustained improvement in instructional quality within Islamic elementary schools.

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Introduction

Teacher professionalism plays a central role in determining the quality of education. Within the Islamic elementary school context, particularly in Madrasah Ibtidaiyah Negeri (MIN) institutions, teachers are not only facilitators of knowledge but also role models responsible for nurturing moral, intellectual, and spiritual growth among students. However, various studies have shown that many teachers still face challenges in developing professional competence aligned with the demands of the 21st century, including mastery of pedagogy, curriculum innovation, classroom management, and reflective practice (Arikunto, 2019; Darling-Hammond & Bransford, 2005). These challenges are often exacerbated by limited opportunities for collaborative professional

development and the dominance of traditional top-down training models that lack contextual relevance (Guskey, 2002).

The professional competence of teachers encompasses the ability to plan, implement, and assess learning effectively while continuously improving instructional practices through reflective inquiry (Richards & Farrell, 2005). In the context of Islamic Religious Education (IRE), professional competence also includes the ability to integrate religious values into teaching, inspire moral awareness, and adapt pedagogical approaches to the needs of diverse learners (Majid, 2020). When teachers lack opportunities to engage in reflective collaboration, their practices often remain static and procedural, leading to disengagement and stagnation in teaching quality (Hargreaves & Fullan, 2012). Therefore, developing mechanisms that foster collective reflection and shared learning among teachers is essential for sustainable professional growth.

The collaborative approach has emerged as one of the most effective models for enhancing teacher competence and improving educational outcomes. Collaborative learning among teachers encourages mutual support, peer observation, and knowledge exchange, which collectively foster professional autonomy and reflective teaching (Vescio, Ross, & Adams, 2008). According to Johnson and Johnson (2009), collaboration promotes interdependence and shared accountability, motivating teachers to critically evaluate their teaching and learn from one another's experiences. Within a classroom action research (CAR) framework, collaboration allows educators to identify real teaching problems, plan solutions collectively, and reflect on the impact of instructional interventions (Kemmis & McTaggart, 2014). This process aligns with the reflective cycle of planning, action, observation, and reflection that characterizes action research methodology.

In Indonesia, efforts to enhance teacher professionalism are guided by national educational standards that emphasize continuous professional development (Pengembangan Keprofesian Berkelanjutan or PKB). However, implementation often focuses on administrative compliance rather than genuine pedagogical improvement (Muslich, 2018). In many cases, teachers receive limited mentorship and minimal feedback from peers, which limits their capacity for self-improvement. Collaborative learning communities provide a meaningful alternative by creating spaces for teachers to engage in joint problem-solving, lesson study, and shared evaluation of classroom practices (Lieberman & Miller, 2016). Such communities have been found to significantly increase teacher confidence, innovation, and instructional quality (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006).

The study conducted by Mutiyani Afkar and Mansuryadi (2025) at MIN 9 Aceh Besar responds to this context by exploring how a collaborative learning approach can

be systematically implemented to enhance teachers' professional competence through classroom action research. The problem identified in the initial observation phase was that teachers tended to work in isolation and rarely shared experiences related to teaching challenges, resulting in repetitive lesson plans and limited innovation in learning strategies. Teachers also lacked structured opportunities to reflect critically on their instructional practices. Therefore, the study sought to introduce collaborative cycles where teachers engaged in planning, observing, and reflecting together on the teaching process, thereby fostering a shared sense of professional responsibility and mutual growth.

The urgency of this research lies in the need to transform teacher professional development from a passive, compliance-driven activity into an active, reflective, and collaborative process. By situating the intervention within a real classroom context through action research, the study directly addressed the practical needs of teachers and provided a model for sustainable competence development. This aligns with the view of Fullan (2014) that effective school improvement must begin with empowering teachers to be agents of change within their own professional communities. The collaborative approach thus represents both a pedagogical and cultural shift—encouraging teachers to view professional learning as a shared endeavor rather than an individual burden.

Theoretically, this study builds upon constructivist principles that regard learning as a social process, where knowledge is co-constructed through interaction and reflection (Vygotsky, 1978). In teacher learning, such interaction promotes continuous growth and adaptive expertise (Timperley, 2011). The research gap identified in prior studies is that while many teacher training programs emphasize individual skill development, few have systematically integrated collaborative cycles of action and reflection into daily teaching practice. This study, therefore, contributes to bridging that gap by demonstrating how collaborative action research can be applied effectively in Islamic elementary school settings to elevate teachers' professional competence and teaching quality.

Methods

This study employed a Classroom Action Research (CAR) design that aimed to improve teachers' professional competence through the implementation of a collaborative learning approach. According to Kemmis and McTaggart (2014), action research is a reflective process of progressive problem-solving conducted by individuals working collaboratively to improve educational practices within their own context. It is cyclical in nature, involving stages of planning, action, observation, and reflection, which are continuously repeated to achieve sustainable improvement. This design was deemed suitable for the present study because it allows teachers to identify and address real

classroom issues, reflect on their practice, and collaboratively seek solutions that directly impact professional growth.

The research was conducted at Madrasah Ibtidaiyah Negeri (MIN) 9 Aceh Besar, Indonesia, during the 2025 academic year. The setting was chosen due to the identified need to strengthen teacher professionalism and collaboration in instructional planning and implementation. The participants consisted of all teachers at MIN 9 Aceh Besar, including both senior and junior teachers from various subject areas. The inclusion of a diverse group of educators allowed for rich collaborative interaction and cross-disciplinary learning. The head of the madrasah also played an active role as a facilitator and observer, ensuring that the collaborative process aligned with institutional goals for quality improvement.

The research design followed two full cycles of action, each consisting of four phases: planning, implementation, observation, and reflection. In the planning phase, the researchers and participating teachers collaboratively identified issues related to instructional practice, such as the lack of innovative teaching strategies, limited peer feedback, and insufficient reflection on student learning outcomes. Based on these findings, a collaborative learning program was designed that encouraged peer discussions, joint lesson planning, and the sharing of teaching experiences. The implementation phase involved carrying out the collaboratively designed teaching strategies in actual classroom settings. Teachers observed each other's lessons and engaged in post-observation discussions to provide constructive feedback. During the observation phase, both the researchers and selected peer observers documented teacher performance using structured observation sheets. Finally, in the reflection phase, teachers and researchers jointly analyzed the outcomes, identified strengths and weaknesses, and formulated plans for the next cycle.

The instruments used in this study consisted of observation sheets, interview guides, and documentation forms. The observation sheets were designed to measure aspects of teacher professional competence, including lesson preparation, instructional delivery, classroom management, and assessment practices. Each aspect was rated according to qualitative indicators aligned with the Ministry of Education's standards for professional teaching. The interview guides were used to collect teachers' perceptions and reflections on their experiences with the collaborative learning approach. Documentation forms captured supporting evidence such as lesson plans, teaching materials, and photos of classroom activities. These multiple sources of data allowed for triangulation, ensuring that findings were valid, reliable, and contextually rich (Creswell & Creswell, 2018).

Data collection took place over two months, coinciding with the two action research cycles. Observations were carried out during teaching sessions, while

interviews were conducted after each cycle to capture teachers' reflective insights. Documentation was gathered continuously to track progress and provide tangible evidence of professional development. As McNiff and Whitehead (2011) suggest, data in action research should represent both observable changes and reflective growth, capturing how practitioners evolve through iterative cycles of learning and practice. This approach ensured that both qualitative and quantitative indicators of professional competence were systematically documented.

The data analysis employed a descriptive qualitative approach supplemented by simple quantitative calculations to determine percentage improvements in teacher competence. Qualitative data from observations and interviews were analyzed through data reduction, data display, and conclusion drawing, following the framework proposed by Miles, Huberman, and Saldaña (2014). This process involved categorizing recurring themes such as collaboration, reflection, innovation, and motivation. Quantitative data, such as the percentage of teachers achieving "competent" or "highly competent" ratings, were calculated to demonstrate measurable progress across cycles. In the first cycle, approximately 68% of teachers met the expected competency level, whereas in the second cycle this figure rose to 87%, indicating a 19% improvement in professional competence after the implementation of the collaborative approach.

To ensure validity and trustworthiness, the study employed several strategies. Triangulation was achieved by cross-verifying data from observations, interviews, and documentation. Member checking was conducted by sharing preliminary findings with participants to confirm accuracy and authenticity. Peer debriefing sessions were held among teachers and school administrators to discuss interpretations and ensure objectivity. According to Lincoln and Guba (1985), these procedures are essential in qualitative research to enhance credibility, dependability, and confirmability. Furthermore, ethical considerations were observed throughout the study. Participants were informed about the purpose and process of the research, consented to data collection, and were assured of confidentiality and anonymity.

In summary, this classroom action research utilized a collaborative and reflective framework that positioned teachers as co-researchers rather than passive participants. The methodological structure not only aimed to improve professional competence but also fostered a sustainable culture of cooperation and self-evaluation among teachers. The dual focus on individual reflection and collective problem-solving aligns with the transformative goals of action research, as articulated by Carr and Kemmis (1986), emphasizing empowerment through inquiry. By systematically integrating collaborative learning into professional practice, this research provides a replicable model for teacher development in Islamic elementary schools and contributes to the broader discourse on teacher professionalism in Indonesia.

Result

The implementation of the collaborative learning approach in this classroom action research resulted in notable improvements in the professional competence of teachers at Madrasah Ibtidaiyah Negeri (MIN) 9 Aceh Besar. The research was conducted over two cycles, each consisting of the four stages of planning, action, observation, and reflection. The findings revealed both quantitative and qualitative progress in teacher performance, collaborative engagement, and reflective practice. These results indicate that the application of a structured, collegial model of collaboration successfully enhanced teachers' capacity to plan, implement, and evaluate effective learning experiences.

At the beginning of the study, the initial observation phase revealed several weaknesses in teachers' professional competence. Many teachers worked independently and seldom discussed pedagogical challenges with colleagues. Lesson plans tended to follow rigid formats without reflecting differentiated learning needs, while classroom activities were often teacher-centered and lacked creative strategies. Teachers also reported low confidence in applying innovative teaching methods and integrating reflective evaluation into their instructional practices. These findings align with those of Hargreaves and Fullan (2012), who argue that isolation in teaching communities hinders professional growth and reduces teachers' ability to adapt to evolving educational challenges. Therefore, the introduction of the collaborative approach was intended to transform this culture of individualism into one of shared learning and mutual support.

During the first cycle, the collaborative process was introduced through structured peer discussions, joint lesson planning, and classroom observations. Teachers worked in pairs or small groups to design lesson plans focusing on learner engagement and curriculum alignment. Each teacher then implemented the jointly designed plan in their classroom while peers observed and recorded instructional strategies, student responses, and areas for improvement. Post-observation reflection sessions were conducted where teachers discussed classroom experiences and exchanged constructive feedback. Quantitative data from the observation sheets indicated that approximately 68% of the teachers demonstrated satisfactory competence in planning and delivering lessons, while the remaining 32% still needed improvement, particularly in classroom management and assessment design.

Qualitatively, teachers reported positive experiences in the initial cycle, describing the collaborative process as motivating and enlightening. They expressed appreciation for peer feedback and noted that discussing teaching challenges helped them recognize blind spots in their practice. However, some teachers also mentioned difficulties in coordinating schedules and maintaining consistent participation in group meetings.

These challenges were addressed in the second cycle by introducing more flexible collaboration mechanisms, including asynchronous sharing of lesson plans and structured online discussions. As Lieberman and Miller (2016) suggest, flexibility and shared leadership are essential to maintaining commitment and continuity in professional learning communities.

In the second cycle, improvements were observed across all dimensions of professional competence. Teachers demonstrated increased initiative in developing innovative lesson plans and integrating student-centered learning strategies such as group discussions, project-based learning, and formative assessments. Peer observations indicated stronger classroom management and more effective use of questioning techniques to stimulate critical thinking. Teachers also exhibited improved ability to evaluate student learning outcomes and adjust instruction accordingly. Quantitative analysis showed that 87% of teachers met or exceeded the expected competence criteria in the second cycle, representing a 19% increase from the first cycle. The remaining 13% showed progress but had not yet achieved consistent proficiency in all assessed domains.

The qualitative findings reinforced these quantitative trends. During reflection sessions, teachers articulated greater confidence in experimenting with new strategies and in sharing their classroom experiences with peers. The collaborative culture fostered open communication and reduced hierarchical barriers among staff, enabling more authentic professional dialogue. These results support the findings of Stoll et al. (2006), who emphasize that professional learning communities thrive when participants feel psychologically safe to share both successes and failures. Teachers at MIN 9 Aceh Besar began to view collaboration not as an obligation but as an opportunity for growth, demonstrating an attitudinal shift toward collective responsibility for teaching quality.

Additionally, the collaborative process fostered deeper reflective practice. Teachers developed the habit of self-evaluating their teaching after each session and comparing their reflections with peer observations. This aligns with Schön's (1983) concept of the "reflective practitioner," which highlights reflection-in-action and reflection-on-action as critical dimensions of professional learning. Many teachers reported that through continuous reflection, they became more aware of student needs, more adaptive in their instructional methods, and more analytical in assessing classroom dynamics. The integration of reflective dialogue within collaboration sessions enhanced teachers' ability to translate experience into actionable improvement.

Another significant outcome was the strengthening of collegiality and professional culture within the school. Previously, teachers tended to operate independently, focusing on their respective classes without engaging in collective problem-solving. After the intervention, there was a noticeable shift toward shared accountability and

teamwork. Teachers began to initiate peer coaching activities outside the formal research framework, indicating sustained motivation for professional learning. This development aligns with Vescio, Ross, and Adams (2008), who found that sustained collaboration builds a culture of continuous improvement and strengthens collective efficacy among educators.

Discussion

The results of this classroom action research confirm that the collaborative learning approach significantly enhanced the professional competence of teachers at Madrasah Ibtidaiyah Negeri (MIN) 9 Aceh Besar. The consistent improvement observed between the first and second research cycles—from 68% to 87% of teachers meeting the expected competency level—demonstrates that collaboration can serve as an effective model for professional development in Islamic elementary education. This discussion section interprets the findings in light of theoretical frameworks and prior studies, highlighting their implications for teaching practice and educational improvement.

The improvement in teachers' competence through collaboration supports the constructivist theory of learning, which posits that knowledge is co-constructed through social interaction and reflection (Vygotsky, 1978). The collaborative approach implemented in this study created opportunities for teachers to share experiences, exchange pedagogical strategies, and provide feedback, which collectively fostered deeper understanding and professional growth. As Johnson and Johnson (2009) explain, interdependence within cooperative groups enhances motivation and accountability, leading to greater engagement and learning outcomes. This was clearly evident at MIN 9 Aceh Besar, where teachers who initially worked in isolation began to actively seek advice from peers and engage in reflective discussions after participating in the collaborative cycles.

The findings also align with Hargreaves and Fullan's (2012) concept of professional capital, which emphasizes the integration of human, social, and decisional capital to build effective teaching communities. In this study, collaboration allowed teachers to combine their individual expertise (human capital) with collective support (social capital), ultimately improving decision-making and instructional judgment (decisional capital). Through shared lesson planning and observation, teachers refined their pedagogical strategies, becoming more confident and innovative in addressing diverse classroom needs. This collective development process mirrors the core principles of professional learning communities described by Stoll et al. (2006), who found that collaboration enhances teacher efficacy, reflective capacity, and commitment to student success.

A crucial aspect of the success observed in this study was the integration of reflective practice into the collaborative framework. Schön (1983) describes reflection as a process through which practitioners analyze their actions to generate new

understanding and improve future practice. Teachers at MIN 9 Aceh Besar practiced both “reflection-in-action” during lessons and “reflection-on-action” during post-observation discussions. As a result, they became more adept at diagnosing learning problems, adjusting teaching strategies, and designing lessons that prioritized student engagement. This reflects the argument by Farrell (2015) that reflective dialogue in professional communities transforms tacit knowledge into explicit understanding, enabling continuous improvement in teaching quality.

Furthermore, the outcomes of this research corroborate findings from international studies emphasizing the transformative power of collaborative professional development. Vescio, Ross, and Adams (2008) found that professional learning communities significantly improve teacher practice and student learning outcomes when collaboration is structured, sustained, and focused on instructional improvement. Similarly, Lieberman and Miller (2016) note that when teachers work collectively toward shared goals, they cultivate a sense of agency and mutual accountability that promotes long-term professional growth. The results from MIN 9 Aceh Besar echo these conclusions, showing that collaboration not only enhanced teaching competence but also fostered a supportive culture of continuous learning.

Another noteworthy implication of this study is the shift in teacher attitudes toward professional development. Before the intervention, many teachers perceived professional growth as a formal requirement imposed by external authorities rather than an intrinsic process of self-improvement. Through collaboration, they began to view learning as a communal responsibility and professional reflection as a meaningful part of daily teaching. This transformation aligns with Fullan’s (2014) view that genuine educational reform begins when teachers internalize a sense of collective moral purpose and become active participants in shaping their professional identity. The collaborative learning model, therefore, serves as both a pedagogical innovation and a catalyst for cultural change within the school.

The findings also contribute to the discourse on teacher professional development in Islamic education. Traditionally, training in Islamic schools tends to focus on content mastery and religious knowledge rather than pedagogical innovation. However, as Majid (2020) argues, Islamic education in the 21st century must integrate modern pedagogical methods that encourage critical thinking, creativity, and reflection while maintaining spiritual and moral dimensions. The collaborative approach used in this research effectively bridged this gap by combining faith-based teaching principles with contemporary professional learning models. Teachers not only improved their instructional techniques but also deepened their understanding of how to contextualize Islamic values in modern classroom settings.

From a broader perspective, this study provides evidence that school-based action research can be a powerful tool for continuous professional learning. Kemmis and McTaggart (2014) describe action research as a participatory process that links inquiry with action, empowering teachers to become agents of change in their own context. The cycles of planning, implementation, observation, and reflection used in this research allowed teachers to experiment, evaluate, and refine their practices in real time. This iterative process not only enhanced technical competence but also strengthened collaboration, trust, and professional dialogue among colleagues—elements essential to sustaining school improvement (Hopkins, 2011).

Conclusion

This classroom action research demonstrated that implementing a collaborative learning approach significantly enhanced the professional competence of teachers at Madrasah Ibtidaiyah Negeri (MIN) 9 Aceh Besar. Conducted in two action cycles involving planning, action, observation, and reflection, the study showed a consistent increase in teachers' ability to plan lessons, manage classrooms, apply innovative instructional methods, and conduct reflective evaluations. Quantitatively, the proportion of teachers achieving the expected competence level rose from 68% in the first cycle to 87% in the second, representing a meaningful improvement in pedagogical practice. Qualitatively, teachers developed stronger collaboration, greater confidence, and a deeper commitment to professional growth. The collaborative approach fostered a culture of shared learning, peer feedback, and continuous reflection—transforming teaching from an isolated activity into a collegial and dynamic process. Teachers not only enhanced their technical skills but also internalized a mindset of lifelong learning, consistent with the goals of professional development in Islamic education. The study thus confirms that collaboration serves as both a mechanism for and an outcome of professional transformation. It provides a replicable model for improving teacher competence in similar educational contexts, emphasizing that meaningful improvement emerges when educators collectively engage in inquiry, reflection, and innovation within a supportive learning community.

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