

DEVELOPMENT OF TEACHERS' HUMAN RESOURCES BASED ON PROFESSIONAL COMPETENCIES TO STRENGTHEN TEACHING PRACTICES AT MAN 1 JEPARA

Ainul Izzah Ar Rofiq¹, Sukarman², Diah Hestina Pratiwi³, Siti Lia Wafiroh⁴, Mustaqim⁵

¹Manajemen Pendidikan Islam, Universitas Islam Nahdlatul Ulama Jepara, Jepara, Indonesia, 211310004615@unisnu.ac.id

²Manajemen Pendidikan Islam, Universitas Islam Nahdlatul Ulama Jepara, Jepara, Indonesia, pakar@unisnu.ac.id

³Manajemen Pendidikan Islam, Universitas Islam Nahdlatul Ulama Jepara, Jepara, Indonesia, diahhestina.2561@student.unisnu.ac.id

⁴Manajemen Pendidikan Islam, Universitas Islam Nahdlatul Ulama Jepara, Jepara, Indonesia, sitilia.2561@student.unisnu.ac.id

⁵Manajemen Pendidikan Islam, Universitas Islam Nahdlatul Ulama Jepara, Jepara, Indonesia, psdm@unisnu.ac.id

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ABSTRACT

This study aims to analyze teacher human resource development strategies based on professional competencies to strengthen teaching practices at MAN 1 Jepara. Previous studies have predominantly focused on formal teacher training, workshops, and certification programs, while limited attention has been given to participatory and school-based professional learning communities that continuously foster teachers' professional growth. This research addresses this gap by examining how collaborative discussion forums function as a sustainable teacher development mechanism within an Islamic senior high school context. Employing a descriptive qualitative approach, data were collected through in-depth interviews, observations, and document analysis, and analyzed using an interactive model involving data reduction, data display, coding, and conclusion verification. The findings reveal that regular teacher discussion forums, organized through subject-based professional clusters, successfully promote collaborative reflection, instructional innovation, digital competence, and integrated lesson planning. These strategies contribute to improved teaching quality, increased student engagement, and higher academic achievement. The novelty of this study lies in proposing a participatory teacher development model that integrates Professional Learning Community (PLC), Technological Pedagogical Content Knowledge (TPACK), and participatory management principles into a structured discussion-forum mechanism within an Islamic educational institution. The study contributes theoretically by extending participatory management perspectives in teacher professional development and provides practical implications for school leaders seeking sustainable and collaborative human resource development models to improve educational quality.

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Corresponding Author:

Ainul Izzah Ar Rofiq¹

Manajemen Pendidikan Islam, Universitas Islam Nahdlatul Ulama Jepara, Jepara, Indonesia, ainulizzah.2561@student.unisnu.ac.id

INTRODUCTION

Educational institutions are central to the development of human resources, where the quality of learning is largely determined by the competence and effectiveness of teachers. As

key actors in the learning process, teachers not only deliver instructional content but also function as facilitators, mentors, and motivators who shape students' cognitive, affective, and psychomotor development (Rohmah, 2019). In this regard, Indonesian education policy emphasizes four core teacher competencies pedagogical, professional, social, and personal as regulated in Law No. 14 of 2005 on Teachers and Lecturers. These competencies form the foundation for teachers to perform their professional roles in ensuring meaningful and effective learning (Febriana, 2019).

In the context of rapid social, technological, and educational change, teachers are required to continuously adapt their competencies to meet 21st-century learning demands (Dewi et al., 2024). Teacher development is no longer optional but becomes a strategic necessity to ensure the relevance and quality of education (Juma, 2024; Zeng, 2023). Various studies indicate that systematic professional development through training, workshops, and collaborative learning forums has a significant impact on improving teaching quality and student learning outcomes (Hidayatulloh & Rindaningsih, 2024).

However, despite the widespread implementation of teacher professional development programs, empirical studies show that their effectiveness varies across institutions (Rifka Alkhilyatul Ma'rifat, I Made Suraharta, 2024). In many cases, development activities are still formalistic, not fully aligned with teachers' real needs, and lack sustained collaborative mechanisms that support reflective practice. As a result, the improvement of instructional quality and student learning outcomes remains suboptimal (Tengku Darmansah et al., 2024). This indicates a gap between policy expectations and implementation practices in teacher human resource development at the school level (Yulia, 2021).

In response to these challenges, participative management theory provides a relevant conceptual foundation. This theory emphasizes shared decision-making, collaboration, and active involvement of organizational members in improving institutional performance (Usman, 2026). In the educational context, it positions teachers not merely as implementers of policies, but as active contributors in planning, executing, and evaluating professional development programs (Grace et al., 2020; Harianto, 2024). This participatory approach is increasingly relevant in 21st-century educational management, where collaboration and shared ownership are key to institutional improvement (Jaya & Halik, 2023; Kusnadi, 2019; Nellitawati et al., 2022; Tengku Darmansah et al., 2024).

At MAN 1 Jepara, teacher professional development is implemented through various collaborative mechanisms, including discussion forums, training activities, and subject-based working groups. These practices are designed not only to enhance pedagogical and professional competencies but also to foster reflective and contextual teaching practices aligned with the madrasah's vision. Nevertheless, there is still limited empirical evidence that systematically explains how these participatory development strategies are implemented and how they contribute to improving learning quality in this specific context (Abdillah, 2021; Hulkan et al., 2024).

Therefore, this study aims to analyze teacher human resource development strategies based on professional competencies at MAN 1 Jepara, with a particular focus on participatory mechanisms such as discussion forums. The study seeks to examine how these strategies are designed and implemented, the extent of teacher involvement, and their impact on improving learning outcomes.

METHOD

This study employs a descriptive qualitative research design to examine and analyze human resource (HR) development strategies for teachers aimed at improving the quality of learning at MAN 1 Jepara. A descriptive qualitative approach was chosen because it allows researchers to gain an in-depth understanding of social phenomena through the interpretation of empirical data in their natural context (Sugiyono, 2019). This approach is particularly well-

suited for exploring institutional strategies related to teachers' professional development and their contribution to improving the quality of education.

The study was conducted at MAN 1 Jepara over a four-month period, from January to April 2026. This timeframe provided the researcher with ample opportunity to observe the implementation of the teacher professional development program, collect comprehensive data, and gain a contextual understanding of the implementation of teacher human resource development strategies within the madrasah setting.

The study was conducted using a naturalistic approach, in which data collection took place under natural conditions without any manipulation of the research situation (Moleong, 2021). Research participants were selected using purposive sampling because they played a direct role in the planning, coordination, and implementation of the teacher professional development program at MAN 1 Jepara, thereby enabling them to provide relevant and in-depth information in line with the research objectives. The main informants in this study were Mrs. Hj. Yati Susanah, M.Pfis., as the Teacher Professional Development Coordinator, and Mr. Hamidun Nafi' Syifaiddin, S.Pd., as the DCT Coordinator of the Software Division at MAN 1 Jepara.

Primary data were collected through in-depth interviews with both informants using a semi-structured interview guide. This technique was chosen because it allowed the researcher to explore in greater depth information regarding teacher human resource development strategies, the implementation of professional development programs, and their impact on improving the quality of learning. The interviews were conducted in stages throughout the research period, depending on each informant's availability.

In addition to interviews, this study employed direct observation to examine teachers' participation in professional development activities and the implementation of acquired competencies in classroom teaching. Observations were conducted on six occasions between February and April 2026, with each session lasting approximately 90-120 minutes. The observations focused on teachers' interactions during professional learning forums, collaborative knowledge-sharing practices, the development of innovative instructional strategies, the integration of digital technologies into teaching, and the application of professional development outcomes in classroom instruction. Furthermore, the researcher observed students' academic and non-academic achievements as one of the indicators of the impact of teacher professional development on the quality of learning.

In addition to primary data, this study utilized secondary data collected through document analysis. The documents reviewed included school performance reports, curriculum documents, institutional policies on teacher human resource development, student achievement records, teacher attendance records, minutes of professional development meetings, and instructional innovation documents produced during teachers' professional learning forums. These instructional innovation documents consisted of lesson designs, learning media, and assessment strategies developed by teachers for classroom implementation as outcomes of professional development activities.

To ensure the trustworthiness of the findings, this study employed both source triangulation and methodological triangulation. Source triangulation was conducted by comparing information obtained from different participants, while methodological triangulation involved comparing data collected through interviews, observations, and document analysis. These procedures were undertaken to enhance the credibility and validity of the research findings.

Data were analyzed using the interactive analysis model consisting of data reduction, data display, and conclusion drawing and verification (Sugiyono, 2019). During the data reduction stage, information obtained from interviews and documents was selected, organized, and simplified in accordance with the research focus. Next, the reduced data is presented in narrative form to make it easier to understand and analyze. The final stage drawing conclusions

is conducted iteratively by verifying the findings and linking them to the theoretical framework underpinning the research. Prior to analysis, all interview recordings were transcribed verbatim to preserve the accuracy and authenticity of participants' responses. The interview transcripts, observation field notes, and documentary evidence were subsequently analyzed through a systematic coding process. The first stage involved open coding, in which meaningful units of information related to teacher human resource development strategies were identified. The second stage, axial coding, focused on organizing and linking similar codes into broader categories, such as participation in professional training, collaborative learning, digital competence, and instructional innovation. The final stage, selective coding, integrated these categories into overarching themes representing the patterns of teacher human resource development implemented at MAN 1 Jepara.

Following the coding process, the data were reduced by selecting and focusing on information that was most relevant to the research objectives. The refined data were then presented in a narrative form to facilitate interpretation. Finally, conclusions were drawn and continuously verified through an iterative analytical process to ensure consistency between the emerging findings and the overall dataset. This iterative procedure enhanced the credibility, dependability, and scientific rigor of the study's conclusions.

RESULTS AND DISCUSSION

Strategies and Mechanisms for Implementing Teacher Professional Development Based on Discussion Forums and Professional Collaboration

In the context of modern education, the quality of learning and the effectiveness of the educational process are greatly influenced by the quality of teachers' competencies. These competencies are not only related to mastery of technical and pedagogical aspects but also encompass the ability to manage and lead human resources effectively and innovatively (Suharmadi, 2021). With the rapid advancement of technology and constantly changing social dynamics, the challenges in human resource management in the field of education have become increasingly diverse and complex.

In the context of education, human resource management does not only involve the management of teaching staff, but also involves the development of professionalism, continuous training, the use of technology, and the implementation of effective feedback systems (Munip et al., 2024). Therefore, efforts to develop teachers' competencies are a crucial factor in ensuring educational success and the maximum achievement of academic goals. This development can be carried out through various strategies and methods designed to enhance teachers' professional performance while strengthening their capacity in teaching practice (Aida Raihani Subandi et al., 2025).

The latest development strategy implemented at MAN 1 Jepara is the establishment of a discussion room that serves as a space for all teachers to gather, exchange ideas, and share experiences. This activity is held regularly every Saturday with the aim of strengthening collaboration among teachers. The discussion room is not merely a formal forum, but a place to generate new ideas for teaching. Based on an interview with Mrs. Hj. Yati Susanah, M.Pf, the Teacher Professional Development Coordinator, this activity was designed as a response to the challenges of modern education, which require teachers to continuously adapt. She stated, "We observed that communication among teachers was not sufficiently frequent, so we established a discussion space every Saturday so that teachers can share experiences and learn together."

Through this discussion practice, teachers are encouraged to remain open to the dynamic developments in education. They also find it easier to understand the challenges they face collectively at school. This is what makes the discussion forum one of the key strategies for improving the quality of learning.



Figure 1. A Teachers' Meeting Led by The Principal and Vice Principal

Teacher discussions, facilitated by the professional development team, take place regularly every Saturday from 1:00 PM to 3:00 PM WIB in the school hall. These activities foster a dynamic, open, and participatory atmosphere. Teachers are not merely present as listeners but also actively share experiences, learning challenges, and provide feedback to colleagues.

These discussions serve as a space for professional reflection that encourages continuous improvement in teaching practices. Beyond the academic aspect, these activities also have a socio-emotional dimension, fostering empathy, solidarity, and collaboration among teachers. One topic discussed is the use of the Quizizz app, which aims to enhance digital-based learning and create more interactive and enjoyable learning activities for students.

Tabel 1. Summary of the Results of the Teacher Professional Development Discussion Activities

Aspect	Observation Findings	Interview Data	Implications
Activity atmosphere	The discussion was warm, dynamic, and open	Teachers felt comfortable sharing their experiences	Increases active teacher participation
Teacher participation	Teachers actively shared experiences and solutions	Teachers helped each other solve classroom problems	Builds professional collaboration
Function of the activity	A means of reflecting on teaching practices	The discussion served as an informal, open forum without rigid formality	Encourages continuous critical reflection
Socio-emotional impact	Positive interaction among teachers was observed	Increased empathy and solidarity	Strengthens the professional community
Learning innovation	Discussion on the use of the Quizizz application	Teachers were encouraged to make learning more creative	Enhances technology-based instructional innovation
Activity schedule	Saturday, 1:00–3:00 PM WIB	Consistent and regularly scheduled	Ensures program sustainability



Figure 2. Conducting Teacher Discussions in the Teachers' Lounge as Part of Teacher Professional Development

The qualitative insights gained from the professional development team at MAN 1 Jepara go beyond mechanical training, they reveal a profound shift in pedagogical approach. Mr. Hamidun Nafi' Syifaiddin, S.Pd. (Coordinator of the DCT Software Division) emphasized that digital literacy is no longer optional, stating that the forum explicitly guides teachers on how to apply applications like *Quizizz*, *Wordwall*, or *Google Forms* effectively to make students more active. From a scientific perspective, this initiative directly addresses the TPACK Framework (Routledge, 2016). Teachers often fail to integrate technology because they treat it as an isolated tool. By discussing digital apps within a peer forum, teachers learn the intersection of technology and pedagogy understanding *why* a certain app stimulates student cognitive engagement and *how* to structurally design interactive, non monotonous formative assessments. This explains the rise in teacher creativity; their cognitive burden is reduced because technical anxiety is resolved collectively, freeing mental bandwidth for creative instructional design.

The structural division of educators into specific subject clusters (Science, Religion, Language, and Social Studies) serves as an organizational catalyst for a Community of Practice (Lave & Wenger, 1991). Rather than planning lessons in isolation, teachers use these hubs to design cross-disciplinary, integrated thematic lessons. For example, observations showed a religion teacher introducing moral values through storytelling, which was immediately integrated by humanities peers into history and language modules. Theoretically, this clustering eliminates "pedagogical balkanization" a common issue where departments compete rather than collaborate. When teachers collectively brainstorm practical activities (such as science cluster teachers designing real-world experiments), they enhance their collective self-efficacy. This collaboration fosters a supportive environment and teamwork, shifting the school culture so that lesson design is a well-developed product of collaboration rather than an isolated, repetitive effort.

To sustain this high-quality learning ecosystem, MAN 1 Jepara establishes a dual quality control system targeting both the student intake and classroom instruction standards. The specialized academic programs use a rigorous screening process to ensure participant readiness. The written test evaluates advanced cognitive capabilities and material mastery, filtering the top five candidates. This is followed by semi-structured interviews and psychological assessments to evaluate communication skills, motivation, and emotional resilience. Ultimately, only the top two students are chosen. From an educational sociology viewpoint, this process does not just maintain quality control; it creates a positive peer effect. These selected students serve as peer role models and academic motivators, prompting a healthy competitive drive throughout the student body.

On the instructional side, the analysis of internal documents (meeting minutes and reflection sheets) revealed that the Saturday forum produces concrete, actionable classroom recommendations. A key initiative is the institutionalized peer-teaching system, where teachers observe their colleagues' live lessons to provide constructive feedback. This mechanism is highly supported by Transformational Leadership Theory. Field data notes that the madrasah principal consistently attends the beginning of these meetings to provide motivation and support. This administrative backing, paired with an average weekly attendance rate of 95%, establishes high psychological safety. Young teachers actively present classroom experiments while senior educators offer constructive feedback. This interaction creates a two-way knowledge transfer across generations of educators, successfully operationalizing a sustainable Professional Learning Community (PLC) (Hargreaves & Fullan, 2020).

Impact on Improving the Quality of Learning

The findings indicate that the teachers' professional discussion forum at MAN 1 Jepara has contributed significantly to improving the quality of learning. Data from interviews, observations, and documentation consistently show that the forum functions as a collaborative

learning community where teachers exchange teaching experiences, reflect on classroom challenges, and develop innovative instructional strategies. As a result, teachers demonstrated improved pedagogical competence, stronger digital literacy, and greater confidence in implementing student-centered learning approaches. These improvements were reflected in more interactive classroom practices, higher student engagement, and gradual improvements in students' academic achievement.

Table 2. Summary of Findings on the Impact of Teachers' Discussion Forum on Learning Quality

Aspect	Observation Findings	Interview Findings	Documentation Evidence	Impact on Learning Quality
Professional collaboration	Teachers actively exchanged experiences and teaching strategies	Discussion forum promoted sharing of best practices	Weekly discussion reports	Increased collaborative learning culture
Reflective practice	Teachers reflected on classroom challenges and evaluated teaching methods	Reflection encouraged continuous improvement	Reflection reports	Improved pedagogical competence
Learning innovation	Teachers designed project-based and contextual learning activities	Teachers implemented new instructional ideas	Innovation sheets produced after each meeting	More creative and student-centered learning
Digital competence	Teachers practiced using digital learning applications	Technology integration became a regular discussion topic	Documentation of Quizizz and digital media implementation	Improved digital literacy
Student engagement	Students participated more actively during classroom activities	Teachers reported higher student enthusiasm	Classroom observation reports	More interactive learning environment
Student achievement	Learning innovations were consistently implemented	Teachers perceived improvements in learning outcomes	School academic reports (2023–2025) showing an 8–12% increase in average examination scores	Improved academic performance

The findings demonstrate that the discussion forum functions as a Professional Learning Community (PLC), where teachers collaboratively construct knowledge through continuous reflection and peer learning (Routledge, 2022). Professional learning communities improve instructional quality because teachers collectively identify classroom problems, share successful practices, and implement instructional innovations. Similarly, the improvement in teachers' creativity can be explained through teori Stoll & Louis, (2007). Teachers acquire new instructional strategies by observing colleagues, discussing successful teaching experiences, and applying these practices in their own classrooms. This social interaction enhances teachers' self-efficacy, making them more confident in adopting innovative teaching methods.

The increased integration of digital technology also supports the TPACK framework (Routledge, 2016). Regular discussions enabled teachers to combine technological knowledge with pedagogical and content knowledge, resulting in more engaging and interactive learning experiences. Furthermore, the findings support Vygotsky's social constructivist theory, which argues that knowledge is constructed through social interaction. The collaborative discussions among teachers created opportunities for collective reflection and co-construction of instructional knowledge, ultimately improving classroom practices (Mariyono, 2024).

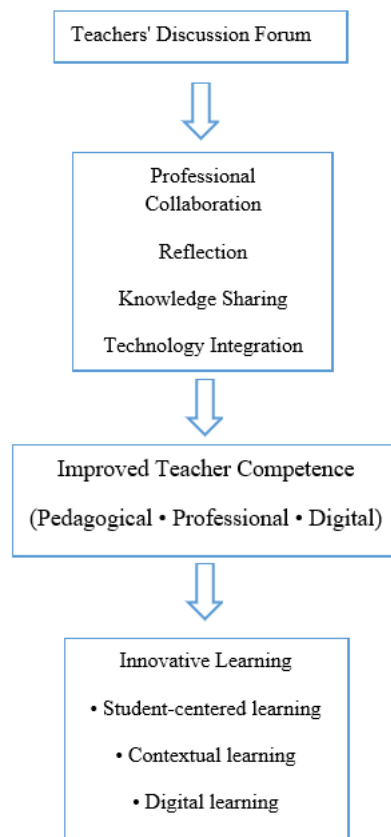


Figure 3. Conceptual Model of the Impact of Teachers' Discussion Forum on Learning Quality

The model indicates that the teachers' discussion forum operates as a collaborative professional development mechanism that progressively enhances the quality of learning. At the initial stage, the forum facilitates professional collaboration among teachers, enabling the sharing of pedagogical experiences, reflective dialogue on classroom practices, knowledge exchange, and discussion of instructional strategies, including the integration of digital technologies. This collaborative interaction serves as a foundation for sustained professional learning.

At the subsequent stage, these collaborative processes contribute to the enhancement of teachers' professional competencies, particularly in pedagogical, professional, and digital domains. This development occurs through active engagement in collective reflection and the application of shared insights in classroom practice. These improved competencies then foster instructional innovation, characterized by the implementation of student-centered learning, contextual learning approaches, and the integration of digital learning tools. Teachers become more adaptive in designing learning activities that are responsive to students' needs and contemporary educational demands.

Ultimately, these innovations lead to the improvement of learning quality, as evidenced by increased student engagement, higher learning motivation, and improved academic achievement. Therefore, the model demonstrates that the teachers' discussion forum functions not merely as a routine professional activity, but as a transformative platform for continuous teacher development and sustainable improvement of instructional quality.

CONCLUSION

The findings demonstrate that teacher professional development at MAN 1 Jepara is implemented through structured and continuous discussion forums that function as collaborative professional learning communities. These forums facilitate reflective dialogue, peer learning, knowledge sharing, and subject-based lesson planning, enabling teachers to

strengthen their pedagogical, professional, and digital competencies. Supported by systematic student selection and institutional commitment, this strategy creates an educational environment that encourages instructional innovation, collaborative culture, and continuous professional improvement. As a result, teachers become more creative and adaptive in designing student-centered learning, while students demonstrate increased engagement and improved academic achievement.

From a scientific perspective, this study contributes to the development of educational management literature by proposing an integrated model of teacher human resource development that combines participatory management, Professional Learning Community (PLC), and TPACK within the context of Islamic educational institutions. This model enriches existing theories by demonstrating that sustainable professional discussion forums can function not only as a medium for knowledge sharing but also as an organizational mechanism for strengthening institutional learning culture and instructional quality. Practically, the findings suggest that school principals and educational policymakers should institutionalize regular collaborative discussion forums as part of teacher professional development programs. Such forums can become cost-effective and sustainable strategies for improving teacher competence, promoting digital innovation, and strengthening collaborative school culture.

Future research is recommended to examine the effectiveness of this collaborative professional development model across different educational settings and employ mixed-method or longitudinal approaches to measure its long-term impact on teacher performance, organizational learning, and student learning outcomes. Comparative studies involving various Islamic educational institutions would also provide broader evidence regarding the transferability and sustainability of the proposed model.

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