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Enhancing PGMI Students' Pedagogical Competence Through Deep Learning-Based Lesson Plan Design

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Abstract. *This community service program aims to enhance the pedagogical skills of students in the Primary School Teacher Education (PGMI) Study Program in designing Deep Learning–based lesson plans (RPP). The program was implemented to address the urgent need for prospective teachers to meet the demands of the Merdeka Curriculum, which requires meaningful, student-centered, and competency-based learning. Many PGMI students still struggle to integrate Deep Learning principles into lesson planning, especially in formulating measurable objectives, selecting active strategies, and designing higher-order thinking assessments. The program involved 15 PGMI students as primary participants. Using a Participatory Action Research (PAR) approach, the program consisted of three stages: needs analysis, training, and mentoring. The needs analysis identified gaps in students' understanding of lesson plan components. The training introduced theoretical foundations and practical models of Deep Learning–oriented lesson planning, while the mentoring phase provided guided practice in developing complete RPPs. Students contributed actively through reflective discussions, prototype development, and peer feedback. The results show a notable improvement in students' pedagogical competence, reflected in an increase from an average pretest score of 31.5% to a posttest score of 43.2%, indicating an 11.7% gain. Deep Learning in this program refers to a pedagogical approach emphasizing conceptual depth, problem-solving, reflection, and higher-order thinking. Overall, the program strengthened students' readiness to become professional and adaptive teachers capable of designing learning aligned with the Merdeka Curriculum.*

Katakunci:
Kompetensi Pedagogik; Kurikulum Merdeka; Pembelajaran Mendalam; PGMI; Rencana Pelaksanaan Pembelajaran.

Abstrak. Program pengabdian kepada masyarakat ini berfokus pada penguatan kompetensi pedagogik mahasiswa Program Studi Pendidikan Guru Madrasah Ibtidaiyah (PGMI) melalui perancangan Rencana Pelaksanaan Pembelajaran (RPP) berbasis Deep Learning. Kompetensi pedagogik merupakan keterampilan penting yang harus dimiliki calon guru agar mampu menciptakan proses pembelajaran yang bermakna dan efektif sesuai dengan tuntutan Kurikulum Merdeka. Namun, masih banyak mahasiswa PGMI yang mengalami kesulitan dalam merancang RPP yang mengintegrasikan

prinsip-prinsip Deep Learning, terutama dalam merumuskan tujuan pembelajaran yang terukur, memilih strategi yang berpusat pada peserta didik, serta menyusun penilaian yang menekankan keterampilan berpikir tingkat tinggi. Program ini dilaksanakan melalui tiga tahapan, yaitu analisis kebutuhan, pelatihan, dan pendampingan. Tahap analisis kebutuhan bertujuan mengidentifikasi kelemahan mahasiswa dalam penyusunan RPP. Tahap pelatihan memperkenalkan konsep dan model teoritis RPP berorientasi Deep Learning, sedangkan tahap pendampingan memberikan bimbingan praktik dalam menyusun RPP sesuai dengan standar Kurikulum Merdeka. Hasil kegiatan menunjukkan adanya peningkatan pemahaman mahasiswa terhadap prinsip Deep Learning serta kemampuan mereka dalam merancang RPP yang lebih sistematis, komunikatif, dan berbasis kompetensi. Secara keseluruhan, kegiatan ini berhasil memperkuat kompetensi pedagogik mahasiswa PGMI dan mempersiapkan mereka menjadi guru profesional yang adaptif terhadap transformasi kurikulum.

1 Introduction

Pedagogical competence, in essence, refers to the comprehensive ability of teachers to understand student characteristics, design learning strategies, implement effective teaching, and evaluate learning outcomes meaningfully. It integrates theoretical understanding, practical skill, and reflective judgment in managing learning processes effectively. According to Shulman (1987), pedagogical competence represents the combination of content knowledge and pedagogical knowledge—known as Pedagogical Content Knowledge (PCK)—that allows teachers to transform subject matter into comprehensible and engaging learning experiences for students (Angeli & Valanides, 2014).

In the context of Islamic higher education, particularly within the Primary School Teacher Education (PGMI) program, strengthening pedagogical competence is an urgent necessity given the dual role of future teachers as educators and ethical role models in madrasah ibtidaiyah. The challenges students face in designing learning aligned with Deep Learning principles and the Merdeka Curriculum cannot be understood solely as student-related limitations. Several structural and instructional factors also contribute to this gap. Previous evaluations of PGMI programs indicate that curriculum content often emphasizes theoretical mastery rather than practical skills, resulting in limited

opportunities for students to apply pedagogical concepts in lesson-plan development scenarios. In addition, variations in lecturers' pedagogical practices—such as the continued dominance of lecture-based methods—affect students' exposure to innovative, student-centered approaches. The alignment between learning outcomes, instructional strategies, and assessment practices is also inconsistent, which hinders the development of students' competence in formulating measurable learning objectives, selecting active learning methods, and designing assessments oriented toward Higher Order Thinking Skills (HOTS) (Meilina, 2025; Merdekawaty & Suryani, 2024). These interrelated factors collectively account for the persistent gap between theoretical understanding and practical implementation among PGMI students.

The need for this community service program emerged from the real challenges faced by students of the Primary School Teacher Education (PGMI) Program at Universitas Hasyim Asy'ari (UNHASY). Initial observations and interviews revealed that students struggled to design lesson plans (RPP) aligned with the requirements of the Merdeka Curriculum, particularly in formulating measurable learning objectives, integrating student-centered strategies, and developing assessments that promote higher-order thinking skills. These difficulties have direct implications for their readiness to undertake teaching internships (PPL) and their future roles as professional elementary school educators. The urgency of strengthening pedagogical competence lies in the need to bridge the persistent gap between theoretical knowledge taught in coursework and its practical application in classroom planning. Without structured mentoring and reflective guidance, pre-service teachers risk continuing to design lesson plans that rely on surface learning and fail to foster critical thinking, meaningful engagement, and deep conceptual understanding. This issue becomes even more critical in Indonesian language teaching, a core subject responsible for building students' literacy, communication, and reasoning skills (Simbolon, 2023).. PGMI UNHASY was selected as the service location because students are entering their teaching practicum phase yet have not received systematic support in developing Deep Learning–based lesson plans. The distinctiveness of this program lies in its participatory approach, where students serve not only as trainees but also as co-developers of lesson

plans through collaborative reflection and peer feedback, ensuring that the training is directly connected to real classroom needs.

To address this issue, the community service program titled Enhancing PGMI Students' Pedagogical Competence through Deep Learning-Based Lesson Plan Design was implemented. The program integrates training, workshops, and participatory mentoring to help PGMI students master the principles of deep learning and apply them in lesson plan (Rencana Pelaksanaan Pembelajaran, or RPP) development. Drawing on the framework of Participatory Action Research (PAR) (McTaggart et al., 2016). the program involves a cyclical process of planning, action, observation, and reflection, positioning students as active collaborators in their professional development. This approach not only enhances their cognitive and technical competence but also cultivates reflective and adaptive professionalism.

Ultimately, strengthening pedagogical competence among PGMI students through deep learning-based lesson plan design contributes to the formation of adaptive, creative, and reflective educators who embody the spirit of Merdeka Belajar and the values of Islamic education. By bridging the gap between theory and practice, this initiative supports the transformation of teacher education in Indonesia toward a model that emphasizes meaningful learning, professional integrity, and the development of 21st-century teaching competencies.

2 Method

This community service program employed a Participatory Action Research (PAR) approach to address the pedagogical challenges faced by PGMI students in designing Deep Learning–based lesson plans (RPP). PAR served as a collaborative framework involving students, lecturers, and school partners in a continuous improvement process (Kemmis et al., 2013). It was chosen because lesson-planning difficulties required not only theoretical instruction but also iterative, hands-on practice supported by reflection and joint problem solving—features central to PAR and essential for building practical pedagogical competence.

Through the PAR cycle of planning, action, observation, and reflection, participants identified key difficulties such as formulating measurable learning objectives, selecting student-centered strategies, and designing HOTS-oriented assessments (Anderson & Krathwohl, 2001; Brookhart, 2010). Each cycle produced revised lesson plans tested in microteaching sessions at Universitas Hasyim Asy'ari (UNHASY) Jombang, allowing students to evaluate and refine their instructional designs based on feedback from peers and practitioners (Cornish et al., 2023; Lawson et al., 2015; Rofi'ah et al., 2024).

The PAR process consisted of four concise stages: (1) needs-based planning; (2) action through training on Deep Learning–based RPP for Indonesian language teaching; (3) observation of students' performance during lesson development; and (4) reflection to assess program effectiveness and formulate improvements. This participatory structure strengthened students' conceptual understanding and enhanced their ability to produce systematic, communicative, and competency-oriented lesson plans emphasizing higher-order thinking.

3 Results

This community service program was conducted within the Primary School Teacher Education (PGMI) Study Program at Universitas Hasyim Asy'ari (UNHASY), Jombang, as part of the faculty's initiative to strengthen pre-service teachers' pedagogical competence through field-oriented and reflective learning. The program involved 15 fifth-semester PGMI students as the primary participants, who were mentored intensively in developing Indonesian language lesson plans (RPP) grounded in deep learning principles. The mentoring activities were collaboratively guided by lecturers from the PGMI and Indonesian Language Education programs, as well as two partner teachers from Madrasah Ibtidaiyah Negeri (MIN) 1 and 2 Jombang. This interprofessional collaboration ensured that the mentoring process combined theoretical academic perspectives with practical classroom experience, thereby bridging the gap between university-based learning and real-world school practice.

The planning stage served as the foundation for the mentoring program aimed at guiding PGMI students in developing Indonesian language lesson plans (RPP) based on deep learning. During this stage, the implementation team conducted a series of preliminary activities, including problem identification and needs analysis through surveys, interviews, observations, and questionnaires distributed to fourth-semester students.

Several fundamental weaknesses were identified: (1) learning objectives were dominated by lower-order cognitive levels; (2) the learning syntax relied heavily on lectures and drill exercises; (3) the use of digital media was minimal, indicating low digital pedagogical literacy; and (4) lesson plans lacked contextual connections linking Indonesian language materials to students' real-life experiences in madrasah ibtidaiyah. These findings align with Nurnaifah, who noted that many teachers' learning tools fail to accommodate 21st-century skills and contextual learning, emphasizing the need for practice-based training (Nurnaifah, 2024).

Figure 2. Workshop on Deep Learning and Lesson Plan (RPP) Materials

Subsequently, students engaged in group-based simulations to collaboratively design deep learning-oriented lesson plans that promote student-centered learning and contextual engagement with real-life experiences of madrasah ibtidaiyah students. This process included formulating HOTS-based learning objectives, designing contextual learning activities, and developing authentic assessment instruments. Mentoring was conducted in a dialogical and reflective manner, allowing students to receive feedback on the clarity of objectives,

appropriateness of methods, and alignment between activities and assessments. This approach reinforced learning by doing while cultivating collaborative skills among students, similarly found that hands-on teaching mentorship significantly enhances pre-service teachers' pedagogical competence (Saftari & Yulianti, 2025).

Figure 3. Lesson Plan (RPP) Development Process Assisted by the Mentoring Team

Furthermore, students were facilitated to use digital tools such as Google Docs for collaborative, real-time editing and the integration of interactive visual elements into lesson designs. This approach not only increased efficiency but also strengthened students' digital pedagogical literacy (Ghavifekr & Rosdy, 2015).

The implementation results showed a positive change in strengthening students' pedagogical competence, beginning with their understanding of the differences between surface learning and deep learning and their ability to apply deep learning principles in lesson plan (RPP) development. Partner teachers and Indonesian language lecturers assessed that the resulting lesson plans were more contextual, applicable, and successfully linked the material to students' real-life experiences. The use of digital media also enhanced students' interest and creativity in developing interactive and student-centered Indonesian language learning. The improvement in pedagogical competence was reflected in the increase from an average pretest score of 31.5% to an average posttest score of 43.2%, indicating an 11.7% improvement. These findings are consistent with Fahrieyah, who found that the integration of contextual learning and digital media increases student

motivation and classroom participation (Fahrieyah, 2024). Overall, this process supports Santoso's findings that intensive, participatory mentoring improves the quality of instructional tools developed by pre-service teachers.enhances the quality of pre-service teachers' learning designs (Santoso, 2024).

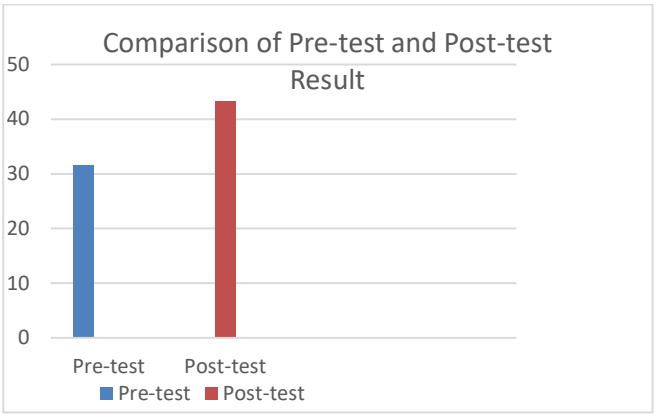

Figure 4. Bar Chart Showing the Pre-Test and Post-Test Results of PGMI Students' Pedagogical Competence Enhancement

Figure 5. Workshop Activities Involving Students, Colleagues, and Parner Teachers

The observation stage was conducted to monitor, document, and analyze the entire mentoring process with the aim of evaluating the achievement of planned objectives and identifying changes in students' knowledge, attitudes, and pedagogical skills. Observation records revealed significant improvement in students' understanding of deep learning concepts. Students who initially formulated learning objectives

at low cognitive levels (such as recalling and identifying) began to design objectives that emphasized critical, reflective, and creative thinking. For example, an observation note documented that a student revised a learning objective from "identifying the main idea of a text" to "analyzing the relationship between text content and students' real-life experiences and presenting reflective conclusions." In terms of learning syntax, instructional approaches shifted from predominantly lecture-based methods to more active and exploratory learning strategies. Observers noted that students began incorporating contextual text analysis activities, such as guiding pupils to interpret narrative texts related to daily life in madrasah ibtidaiyah and encouraging group discussion and reflection. One observation record stated, "Students no longer rely on teacher explanations; instead, they design learning sequences that invite learners to explore texts, discuss meanings collaboratively, and draw conclusions based on contextual evidence." These findings provide concrete evidence that the mentoring process effectively transformed students' pedagogical thinking from procedural instruction toward deep, student-centered learning practices.

Additionally, students demonstrated stronger collaboration and academic communication. Group discussions were dynamic, and students exchanged feedback on peers' lesson plan drafts under the guidance of mentors, reflecting improved 21st-century communication and collaboration skills. Students also showed progress in using digital platforms like Google Docs to create digital RPPs. However, some challenges remained—particularly in integrating authentic assessments and determining appropriate HOTS indicators for the elementary level.

The reflection stage served as the evaluative phase conducted after the completion of all action and observation activities. At this stage, the implementation team, supervising lecturers, partner teachers, and students collaboratively conducted a comprehensive review of both the process and the outcomes of the mentoring program. The main goal of this stage was to evaluate the effectiveness of the activities, identify the achievements obtained, and formulate improvements for the next implementation cycle.

Reflection was carried out through focused group discussions (FGD) and interviews with students and partner teachers. Students were asked to share their experiences throughout the program, including the changes in their understanding, skills, and attitudes related to the design of deep learning-based lesson plans. Lecturers and partner teachers provided constructive feedback on the quality of the students' lesson plan products, their group work process, and the level of student engagement during the mentoring sessions.

.The results of the reflection indicate that students developed a more comprehensive understanding of deep learning concepts and their application in Indonesian language instruction at madrasah ibtidaiyah. This finding is consistent with Fullan et al. (2018), who emphasize that deep learning emerges when learners actively connect conceptual understanding with authentic practice. Data from reflective questionnaires and observation notes show that approximately 80% of the participating students were able to clearly distinguish between surface learning and deep learning, particularly in designing learning activities that promote inquiry, collaboration, and critical thinking. Students acknowledged that the workshops, FGDs, and hands-on mentoring provided meaningful learning experiences by integrating theory with real teaching practice, aligning with Darling-Hammond et al. (2017), who highlight the effectiveness of practice-based teacher education in strengthening pedagogical competence. Furthermore, students demonstrated a shift in perspective by recognizing that lesson plan development is not merely an administrative task but a pedagogical process that requires the integration of Higher Order Thinking Skills (HOTS), 21st-century skills, and contextual relevance to students' daily lives. This growing pedagogical awareness is also supported by Saftari and Yulianti (2025), who argue that well-designed lesson plans serve as a critical foundation for meaningful and student-centered learning. Qualitative evidence from reflection sessions and FGDs reinforces these findings. One student stated, "Before this program, I thought a lesson plan was only a formal requirement. Now I understand that it must guide students to think critically and relate the lesson to their real experiences." Another participant noted, "Through direct practice and feedback from lecturers and teachers, I learned how deep learning can

be applied, not just discussed in theory." Observation records further revealed increased pedagogical awareness, as reflected in a student's remark, "Designing HOTS-based activities helped me realize that teaching Indonesian is not only about language skills but also about shaping students' thinking." Overall, these reflections confirm that the mentoring process fostered deeper conceptual understanding, strengthened pedagogical reflection, and enhanced students' readiness to apply deep learning principles in real classroom contexts.

Partner teachers observed that the students' RPPs showed noticeable improvement compared to the initial drafts. Lesson plans that were previously teacher-centered became more student-centered, incorporating active learning strategies and authentic assessments aligned with learning objectives. However, the teachers and co-supervising lecturers noted that the authentic assessment component still required further refinement. They emphasized that although the overall quality of the RPPs had improved, more focus should be placed on developing authentic, performance-based assessment instruments.

From a process perspective, the reflection also revealed several challenges that need to be addressed in future cycles. These include the need for deeper exploration of deep learning concepts, clearer formulation of HOTS indicators, strengthening of project-based authentic assessment design, and optimizing individual mentoring for students who still struggle to understand the syntax of deep learning instruction. The implementation team followed up on these findings by planning a new cycle that includes microteaching sessions and performance-based assessment training to further enhance students' applied pedagogical competence.

Overall, the reflection stage demonstrated that the application of the Participatory Action Research (PAR) approach effectively enhanced the pedagogical, reflective, and collaborative competencies of PGMI students in designing meaningful Indonesian language learning. The mentoring program not only resulted in the creation of innovative lesson plan products but also fostered professional awareness among students as future teachers who are adaptive to shifting learning paradigms under the Merdeka Curriculum. Furthermore, the process cultivated students'

understanding that the implementation of a lesson plan in real classrooms requires a high degree of flexibility, as not all instructional scenarios proceed as planned. This awareness reinforces Darling-Hammond's assertion that professional teachers must be able to adapt to real classroom dynamics in order to facilitate meaningful learning (Hernández et al., 2019).

In addition to cognitive and technical improvements, the mentoring process also contributed to positive changes in students' attitudes and readiness to teach. Students demonstrated increased confidence in designing and presenting lesson plans, greater openness to feedback, and a stronger sense of professional responsibility as future teachers. Engagement in collaborative simulations and direct interaction with partner teachers fostered reflective thinking and enhanced students' awareness of real classroom dynamics. These affective developments indicate that the program supported not only pedagogical skill acquisition but also the formation of teaching readiness and professional identity among pre-service teachers.

4 Discussion

The mentoring program revealed that a participatory and reflective approach can substantially enhance the pedagogical competence of PGMI students, particularly in designing deep learning-based lesson plans. The integration of workshops, simulations, and peer review sessions within the mentoring process demonstrated the principles of practice-based learning as emphasized by Darling-Hammond (2021), who asserts that teacher competencies develop optimally through authentic experience, iterative reflection, and feedback-driven improvement. Within this framework, the mentoring sessions did not merely provide theoretical reinforcement but also served as authentic pedagogical laboratories where students experienced the full cycle of instructional design—planning, implementation, evaluation, and revision—based on real classroom needs. This alignment between theory and practice cultivated experiential understanding, which is essential for the professional growth of pre-service teachers.

A key finding from the program was the transformation in students' ability to formulate learning objectives aligned with higher-order thinking skills (HOTS), select appropriate active learning strategies, and utilize digital media effectively to enhance student engagement. These changes signify a pedagogical shift from surface learning—characterized by rote memorization and content transmission—toward deep learning that emphasizes conceptual understanding, reasoning, and contextual application. This outcome confirms the compatibility of deep learning principles with the Merdeka Curriculum, which envisions learning as a process of competency and character development through student-centered and contextualized instruction. Through this mentoring, students learned to embed the four pillars of 21st-century education—the 4Cs: critical thinking, creativity, collaboration, and communication—into their RPPs. This integration ensures that classroom learning moves beyond cognitive mastery toward holistic character formation, in line with the Profil Pelajar Pancasila framework.

From a pedagogical perspective, the mentoring process became a space for transformative learning. Through guided reflection and collaborative dialogue, students began to see lesson plan design not as a bureaucratic or administrative task, but as an intellectual and ethical act of pedagogical decision-making. This shift represents a movement from being passive "document producers" to active designers of learning experiences who intentionally construct opportunities for meaningful engagement. The reflective peer discussions facilitated critical self-examination of teaching beliefs and practices, encouraging students to question assumptions, consider learner diversity, and design learning that is socially and culturally relevant. This transformation aligns closely with Mezirow's Transformative Learning Theory (1991, 2015), which posits that reflection on experience enables learners to reconstruct their frames of reference, resulting in a more inclusive, critical, and autonomous perspective on practice. Within teacher education, such transformative engagement develops the reflective disposition that distinguishes professional educators from mere instructors (Cranton, 2023; Kusmoro, 2025; Sugiarto, 2025).

Viewed through the lens of Participatory Action Research (PAR), this mentoring initiative exemplified a cyclical and empowering process of planning, action, observation, and reflection. Students were positioned as co-researchers rather than passive recipients of instruction. They actively identified learning challenges, co-designed solutions, implemented instructional interventions, and collaboratively evaluated outcomes. This participatory engagement embodies the democratization of knowledge central to PAR, where learning emerges through dialogue, praxis, and collective reflection. In this process, students not only developed practical pedagogical skills but also cultivated agency and ownership of their professional learning. They began to recognize themselves as contributors to educational improvement rather than subjects of external training.

The iterative cycles of reflection and action in the PAR framework fostered metacognitive awareness—the ability of students to evaluate their pedagogical reasoning, assess the impact of their teaching decisions, and refine their instructional approaches. This cycle of praxis (action informed by reflection) led to a deeper internalization of deep learning principles, transforming them from abstract theory into embodied professional values. The students' increased curiosity, adaptability, and commitment to continuous improvement illustrate the formation of reflective practitioner identities. Freire's (1970) assertion that authentic education occurs when learners critically engage with their reality and act to transform it resonates strongly with this outcome (Hidayatullah & Soemantri, 2020). Through the mentoring process, PGMI students critically examined their instructional contexts and designed lesson plans that connected academic content with learners' lived experiences, social values, and cultural narratives.

Additionally, the program established a community of practice that united students, lecturers, and partner teachers in a dialogic space for collaborative inquiry and mutual learning. This community functioned as a professional learning network where pedagogical knowledge was shared, negotiated, and refined collectively. The dynamics of this collaboration align with Vygotsky's (1978) social constructivist theory, which emphasizes that knowledge construction is mediated through

interaction and co-regulation within a social context. Peer feedback sessions, group discussions, and cross-evaluation activities allowed students to develop the skills of pedagogical reasoning—articulating their instructional decisions, defending their rationale, and integrating constructive criticism to enhance their RPP designs. The collective inquiry process thus contributed to building both competence and confidence, reinforcing the belief that professional growth thrives in communities that value openness, reflection, and collegial support.

Empirical evidence from pre-test and post-test assessments supports the qualitative findings. The recorded increase from an average pre-test score of 31.5% to a post-test score of 43.2%, representing an 11.7% improvement, reflects measurable progress in pedagogical competence. Though modest in percentage, this improvement demonstrates significant conceptual and procedural gains—particularly in students' ability to align learning objectives with the Merdeka Curriculum, integrate HOTS and 4C skills, and utilize digital tools to create interactive learning environments. More importantly, these quantitative results mirror qualitative observations of increased confidence, engagement, and pedagogical awareness among participants.

Overall, the mentoring program based on Participatory Action Research and deep learning orientation did not merely develop technical lesson-planning skills; it nurtured a transformative shift in students' professional identity. The process cultivated reflective, adaptive, and value-driven educators—individuals capable of linking theory with practice, using technology meaningfully, and designing learning that empowers students to think, question, and create. This aligns with the broader vision of Islamic education and the Merdeka Belajar philosophy, which seeks to produce learners who are not only intelligent but also ethical, independent, and socially responsible.

Thus, strengthening pedagogical competence through reflective and participatory learning ecosystems must be viewed as a strategic pathway toward preparing future educators who can design deep learning experiences in alignment with the Profil Pelajar Pancasila. Such efforts contribute not only to improving the quality of PGMI graduates but also to transforming teacher education into a space of innovation,

collaboration, and moral-intellectual growth. The success of this program demonstrates that when pre-service teachers are given opportunities for authentic practice, critical reflection, and collective inquiry, they evolve into educators who are capable of fostering meaningful, contextual, and transformative education for future generations.

5 Conclusion

Based on the results of the program on strengthening pedagogical competence through mentoring PGMI students in designing Indonesian language lesson plans (RPP) based on deep learning, it can be concluded that this initiative effectively enhanced students' ability to design meaningful, contextual, and adaptive learning experiences oriented toward deep understanding, critical thinking, and the development of 21st-century competencies (HOTS and 4C). Through collaborative mentoring involving lecturers and partner teachers within a Participatory Action Research (PAR) framework, students not only gained a strong conceptual understanding of lesson planning under the Merdeka Curriculum but also developed reflective habits, professional confidence, and a clear pedagogical identity as future madrasah ibtidaiyah teachers. Therefore, it is recommended that similar mentoring-based programs be implemented sustainably and expanded to other subjects and teacher education programs, with greater integration of school-based practice and reflective cycles, in order to further strengthen the alignment between theoretical preparation and real classroom demands, as well as to support the formation of critical, innovative, and adaptive educators in line with the Profil Pelajar Pancasila and the challenges of 21st-century education.

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