

## Collaborative Mentoring to Strengthen Pedagogical Competence at SMP Negeri 11 Ambon

Paul Arjanto<sup>1\*</sup>, Rudolf Kempa<sup>2</sup>, Patrisius Rahabav<sup>3</sup>, Lambertus Johannes Lokollo<sup>4</sup>, Beatrix Tomasila<sup>5</sup>, Vando Kristi Makaruku<sup>6</sup>, Estin Indria Maahury<sup>7</sup>, Nandalita Nunuela<sup>8</sup>, Adha Marche Lino Untajana<sup>9</sup>

<sup>1,2,3,4,5,6,7,8,9</sup> Universitas Pattimura, Indonesia

\*Corresponding Author: [paul.arjanto@lecturer.unpatti.ac.id](mailto:paul.arjanto@lecturer.unpatti.ac.id)

### ABSTRACT

*Teachers' pedagogical competence was a strategic determinant of instructional quality, especially in schools adapting to flexible, student-centered curriculum reform. This community service article reported the initial implementation of a collaborative mentoring program for teachers at SMP Negeri 11 Ambon, Amahusu, Ambon City. The activity aimed to strengthen teachers' understanding of pedagogical competence, active learning, participatory classroom management, and the use of simple and digital learning media. A community-based service design was applied through preparation, implementation, and evaluation stages. Data were collected through coordination notes, participatory observation, teaching document review, reflective discussion, and a simple participant response questionnaire. The implementation consisted of a mini-seminar, interactive group discussion, case analysis of teaching documents, and collective reflection. The results showed that the mentoring process helped teachers identify the gap between administrative lesson planning and meaningful instructional design. Teachers became more aware of the need to align learning objectives, student characteristics, learning activities, learning media, and formative assessment. The collaborative forum also encouraged peer exchange and produced an initial classroom follow-up plan. The main outputs included a pedagogical competence strengthening module, an implementation flow model, and a descriptive monitoring framework for school-based reflection. The program concluded that collaborative mentoring was feasible as an entry strategy for teacher professional development in an island-based school context. Future activities should include longer workshops, classroom coaching, microteaching, and measurable evaluation of competence improvement.*

*Keywords: Assessment, Collaboration, Curriculum, Mentoring, Pedagogy*

### INTRODUCTION

Educational quality is strongly shaped by teachers' capacity to design, facilitate, assess, and reflect on learning. Pedagogical competence is a core professional domain because it enables teachers to understand learner characteristics, translate curriculum expectations into meaningful activities, manage classroom interaction, select appropriate learning media, and use assessment evidence to improve instruction. In Indonesia, pedagogical competence is also a formal professional requirement for teachers under the Law of the Republic of Indonesia Number 14 of 2005 concerning Teachers and Lecturers (Republic of Indonesia, 2005). Therefore, strengthening pedagogical competence is not merely a technical training agenda; it is part of a broader professional and institutional responsibility to ensure that learning is meaningful, inclusive, and oriented toward students' holistic development.

The need to strengthen pedagogical competence has become more urgent with the implementation of the Independent Curriculum. The curriculum emphasizes flexibility, essential competencies, student-centered learning, differentiated instruction, character development, and formative assessment as a basis for instructional decision-making (Ministry of Education, Culture, Research, and Technology, 2022; Rahayu et al., 2022). Teachers are expected to move beyond routine administrative lesson planning and toward instructional designs that respond to students' needs, classroom realities, and local contexts. Studies on curriculum implementation indicate that curricular change requires teacher readiness, principal support, professional learning communities,

and relevant opportunities for professional development (Admiraal et al., 2021; OECD, 2019; Sancar et al., 2021).

International literature consistently indicates that teacher professional development is more likely to influence practice when it is sustained, practice-based, collaborative, reflective, and accompanied by feedback. Kennedy (2016) argued that professional development should be understood through the mechanisms by which it changes teachers' thinking and instructional action. Darling-Hammond et al. (2017) emphasized content focus, active learning, collaboration, modeling, coaching, expert support, feedback, and sustained duration as important features of effective professional development. Similarly, Kraft et al. (2018) found that coaching had positive effects on teachers' instructional practice and student achievement, while Sims and Fletcher-Wood (2021) highlighted the value of concrete examples, practice opportunities, reinforcement, and reflection. These findings support collaborative mentoring as a relevant model for community service because it positions teachers as active participants who analyze their own instructional problems and formulate feasible improvements.

School-based collaboration is particularly important for building professional learning culture. Teacher communities can support professional growth when they have clear goals, productive interaction, structural support, and activities focused on improving classroom practice (Vangrieken et al., 2017). Professional learning communities in schools can also strengthen shared vision, inquiry, peer support, and collective responsibility for instructional improvement (Admiraal et al., 2021). In the digital era, collaborative professional learning must also include pedagogically meaningful technology use. Digital competence is not limited to operating devices; it includes selecting resources, designing interactive tasks, managing digital documentation, and aligning technology with content, pedagogy, and context (Fernández-Batanero et al., 2022; Mishra, 2019; Revuelta-Domínguez et al., 2022; Smestad et al., 2023).

SMP Negeri 11 Ambon, located in Amahusu, Ambon City, became the partner school in this community service program. Initial observation and coordination with the school indicated four major needs: strengthening innovative teaching document design, improving participatory classroom management, increasing the use of simple and digital learning media, and developing a habit of teacher reflection and collaboration. These needs are understandable in an island-based educational context where access to intensive professional development is often limited by geography, cost, time, and available facilitation. At the same time, teachers must adapt to curriculum reform, diverse student characteristics, and the growing expectation to integrate technology into classroom practice.

Based on these conditions, the community service team designed a program entitled collaborative mentoring to strengthen teachers' pedagogical competence. The program was developed as an initial intervention that emphasized conceptual briefing, interactive discussion, case analysis, and collective reflection. The objectives were to improve teachers' understanding of pedagogical competence, strengthen awareness of active learning and participatory classroom management, encourage the use of learning media, and initiate a collaborative culture as a foundation for continuous school-based professional development. This article presents the implementation method, outputs, results, advantages, limitations, implementation difficulties, and development opportunities of the program.

## **METHOD**

This activity used a community-based service design with a collaborative mentoring approach. The design was selected because the partner school's needs were not limited to information gaps but also involved awareness building, reflective practice, and the formulation of follow-up actions that were realistic for the school context. The partner was SMP Negeri 11 Ambon in Amahusu, Ambon City. The implementation team consisted of lecturers from the Postgraduate Program of Universitas Pattimura, lecturers in Educational Administration, and a graduate student who supported coordination, facilitation, observation, documentation, and evaluation.

The activity was implemented through three major stages: preparation, implementation, and evaluation. During the preparation stage, the team coordinated with the school principal and teachers to agree on the theme, schedule, participant needs, and material focus. The team identified teacher needs through initial discussion and prepared materials on pedagogical competence, the Independent

Curriculum, active learning strategies, participatory classroom management, simple and digital learning media, and reflective teaching practice.

During the implementation stage, the program was delivered through a mini-seminar, group discussion, teaching document analysis, and collective reflection. The mini-seminar provided conceptual reinforcement about pedagogical competence and the direction of contemporary learning. Group discussion allowed teachers to share classroom experiences, difficulties, and existing practices. Teaching document analysis was used to examine examples of lesson plans or teaching modules, especially the alignment among objectives, student needs, learning activities, media, and assessment. Collective reflection helped participants formulate simple follow-up actions that could be applied in their own classes.

The evaluation stage used descriptive monitoring. The team observed teachers' participation, recorded discussion patterns, reviewed the quality of responses during document analysis, and gathered simple questionnaire responses at the end of the activity. Because this program served as an initial stage of a longer professional development agenda, the evaluation focused on process quality, teacher engagement, awareness of pedagogical problems, and readiness for subsequent practical workshops. The next stage is expected to include classroom coaching, microteaching, and more systematic pretest-posttest measurement.

## **RESULTS AND DISCUSSION**

The main result of the community service activity was the establishment of an initial collaborative mentoring forum for strengthening teachers' pedagogical competence at SMP Negeri 11 Ambon. The forum was structured to help teachers move from individual, administrative, and routine planning toward reflective, collaborative, and student-centered instructional thinking. This result is important because curriculum reform often fails to reach classroom practice when teachers only receive policy information without structured opportunities to interpret, discuss, and test the implications in their own context. The collaborative forum created a safe learning space where teachers could express difficulties, compare practices, and identify feasible improvements.

The first output was a pedagogical competence strengthening module. The module contained brief conceptual explanations, guiding questions, examples of active learning strategies, prompts for classroom management reflection, and a simple checklist for reviewing teaching documents. The module was not designed as a rigid manual; rather, it functioned as a practical companion that could guide teachers during discussion and future follow-up. Its major advantage was simplicity. Teachers could use it without specialized equipment and could adapt the guiding questions to different subjects. Its limitation was that the module still required additional examples of subject-specific teaching modules and differentiated assessment instruments. For that reason, the module should be expanded in the next activity through teacher-produced examples and peer review.

The second output was an implementation flow model that described the sequence of collaborative mentoring. The model began with school coordination and need mapping, continued with pedagogical competence briefing, teaching document analysis, collective reflection, and classroom follow-up planning. The model helped participants understand that professional development should not stop at one-way presentation. Instead, each stage must generate evidence for the next stage. Need mapping informs the material focus; briefing provides conceptual language; document analysis connects concepts with practice; reflection identifies strengths and weaknesses; and follow-up planning translates learning into classroom action.

### Collaborative Mentoring Model

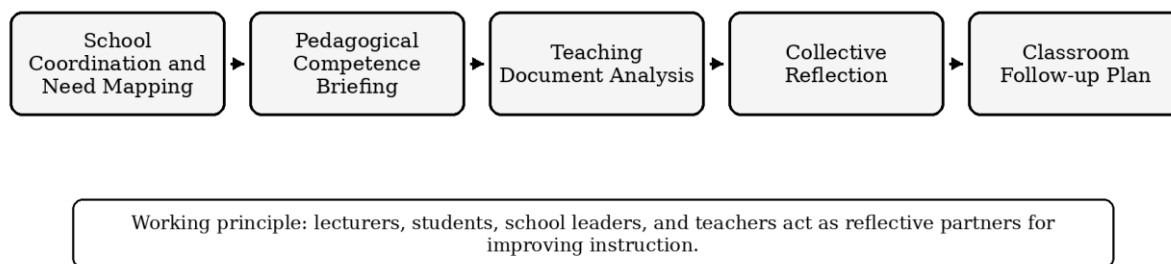


Figure 1. Collaborative mentoring model

Table 1. Implementation Stages, Activities, and Outputs

| No | Stage          | Main Activities  | Outputs  |
|----|----------------|--|--|
| 1  | Preparation    | School coordination, need identification, and material preparation       | Teacher need map and activity material design      |
| 2  | Implementation | Mini-seminar, group discussion, document analysis, and reflection        | Pedagogical understanding and good practice notes  |
| 3  | Evaluation     | Participation observation, response questionnaire, and reflection review | Participant feedback and follow-up recommendations |
| 4  | Sustainability | Agenda setting for workshops and teacher learning community meetings     | Framework for school-based mentoring continuation  |

Remarks: The table summarizes the operational sequence of the community service activity at SMP Negeri 11 Ambon.

The activity also produced a descriptive table of implementation stages, activities, and outputs. This table is useful for replication because it provides a concise operational description of how the program can be implemented in another school. The preparation stage generated a map of teacher needs and activity materials. The implementation stage generated teacher participation, discussion notes, and initial pedagogical insight. The evaluation stage generated participant responses and recommendations for follow-up. The sustainability stage generated a framework for school-based professional learning. In practical terms, the table can be used by the school leadership team to schedule future mentoring activities, assign teacher groups, and monitor progress.

The third output was a monitoring and reflection framework. This framework connected four components: a learning module, visual learning media, digital documentation, and monitoring-reflection activities. The learning module provided conceptual and practical guidance. Visual learning media supported communication of key ideas during sessions. Digital documentation helped record activities, participant responses, and evidence for reporting. Monitoring and reflection ensured that the activity was not treated as a ceremonial program but as the beginning of continuous improvement. This framework is consistent with the view that professional development must be embedded in teacher learning cycles rather than isolated training events (Darling-Hammond et al., 2017; Kennedy, 2016; Sancar et al., 2021).

Teacher responses during the activity showed that several participants were familiar with administrative lesson planning but needed further support in translating lesson plans into active

learning experiences. In the document analysis session, teachers discussed the importance of aligning learning objectives with student characteristics, learning activities, media, and assessment. This reflection indicated that pedagogical competence includes a design logic, not only the completion of teaching documents. When teachers analyzed documents collaboratively, they began to identify whether learning activities truly required students to think, discuss, practice, and receive feedback. This finding supports the idea that professional learning becomes meaningful when teachers work with concrete artifacts from their own practice rather than abstract principles alone (Korthagen, 2017; Sims & Fletcher-Wood, 2021).

The discussion also revealed that participatory classroom management was a key concern. Some teachers reported that student engagement varied across classes and subjects, especially when learning activities relied heavily on explanation and note-taking. Through group discussion, teachers identified several practical strategies, such as using short questioning cycles, student grouping, peer explanation, local examples, visual prompts, and simple formative assessment. These strategies are important because classroom management is not merely about discipline; it also involves the organization of learning interaction. A classroom becomes participatory when students are given meaningful roles, clear instructions, opportunities to collaborate, and feedback on their progress.

Another important result concerned learning media. Teachers recognized that digital media could support learning, but they also noted limitations in infrastructure, time, and digital confidence. The mentoring session therefore emphasized a balanced approach: teachers could begin with simple visual media and gradually integrate accessible digital tools for documentation, presentation, or formative assessment. This approach was considered more feasible than demanding immediate adoption of complex technologies. The discussion aligned with TPACK-oriented thinking, which emphasizes that technology use must be connected with content, pedagogy, and context (Mishra, 2019). It also reflected findings in the digital competence literature that teachers need gradual, contextual, and pedagogically grounded support to use technology effectively (Fernández-Batanero et al., 2022; Revuelta-Domínguez et al., 2022; Smestad et al., 2023).

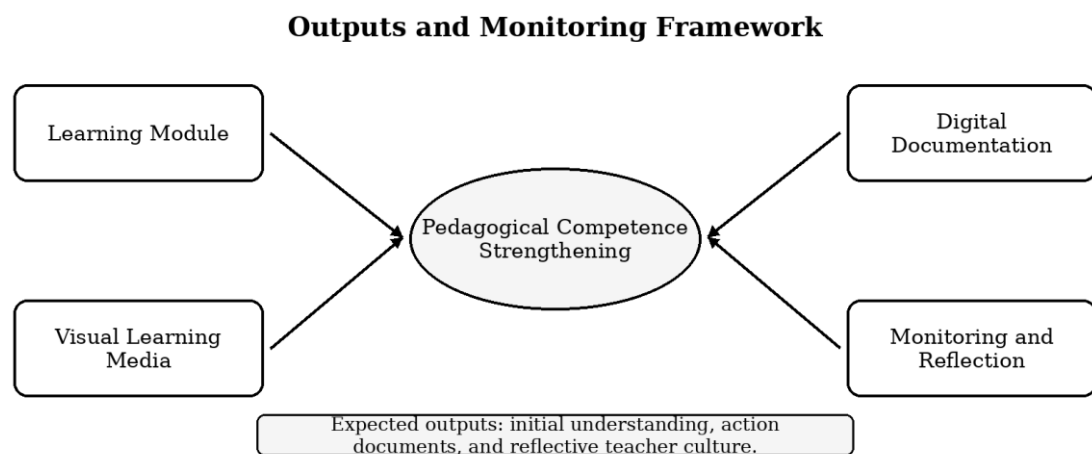


Figure 2. Outputs and monitoring framework

Table 2. Evaluation Indicators, Descriptive Findings, and Program Implications

| No | Indicator                | Evaluation Technique                 | Descriptive Finding   | Implication   |
|----|--------------------------|--------------------------------------|---|---|
| 1  | Conceptual understanding | Discussion and participant responses | Teachers could explain the link between pedagogical competence and learning design. | Materials should be continued into teaching module development. |

| No | Indicator             | Evaluation Technique                   | Descriptive Finding   | Implication  |
|----|-----------------------|--|---|--|
| 2  | Document analysis     | Review of lesson plans or modules      | Teachers identified strengths and weaknesses in instructional planning. | A simple rubric is needed for reviewing teaching documents.        |
| 3  | Teacher collaboration | Process observation                    | Teachers actively exchanged classroom experiences and constraints.      | Teacher learning communities should be scheduled regularly.        |
| 4  | Learning media use    | Reflection and question-answer session | Teachers needed accessible examples of simple and digital media.        | Digital mentoring should be introduced gradually.                  |
| 5  | Follow-up planning    | Reflection notes                       | Teachers formulated initial plans for classroom improvement.            | Future programs should include coaching and classroom observation. |

Remarks: The evaluation was descriptive and served as a basis for planning a follow-up mentoring program.

The advantages of the program can be viewed from three perspectives. First, the activity was context-sensitive because it was designed after coordination with the partner school. Second, the mentoring model was participatory because teachers were invited to analyze, discuss, and reflect rather than only listen to presentations. Third, the outputs were practical because they consisted of a module, flow model, monitoring framework, and follow-up plan that could be used by the school. These advantages are relevant for schools in island-based regions because professional development must be efficient, adaptable, and capable of continuing even when external facilitation is limited.

The program also had several limitations. The duration was relatively short, so the activity could only function as an initial strengthening stage. The evaluation was descriptive and did not yet measure changes in pedagogical competence through standardized instruments or classroom observation rubrics. The activity also did not yet include microteaching or direct classroom coaching, even though these components are important for translating conceptual understanding into instructional performance. Consequently, the results should be understood as early outcomes related to awareness, reflection, and readiness for follow-up, not as definitive evidence of competence improvement.



Figure 3. Group photo in front of the school signboard.



Figure 4. Delivery of the material by Mrs. Beatrix Tomasila, S.Pd., M.Pd.



Figure 5. Delivery of the material by Dr. Paul Arjanto, M.Pd.



Figure 6. Group photo after the closing session of the activity.

The level of implementation difficulty was moderate. The conceptual briefing was relatively easy to deliver because teachers were already familiar with the language of curriculum and teaching documents. However, deeper discussion about differentiated instruction, formative assessment, and technology integration required careful facilitation because teachers had different levels of experience and confidence. Another difficulty was time management. Interactive discussion, document analysis, and reflection required more time than a conventional seminar. This confirms that meaningful professional development cannot rely only on short information sessions. It requires

structured cycles of practice, feedback, and reflection (Kraft et al., 2018; Sims & Fletcher-Wood, 2021).

Despite these limitations, the opportunity for development is substantial. The school can transform the initial forum into a teacher learning community that meets periodically to review teaching documents, share classroom problems, develop simple media, and document changes in practice. The university team can support this process through follow-up workshops, coaching, and action research collaboration. Future activities can also include pretest-posttest assessment, classroom observation, student engagement indicators, and the development of subject-based teaching modules. In this way, community service can become a sustainable partnership that connects university expertise with school improvement needs.

## **CONCLUSION**

The community service activity at SMP Negeri 11 Ambon demonstrated that collaborative mentoring was feasible as an initial strategy for strengthening teachers' pedagogical competence. Through preparation, mini-seminar delivery, interactive discussion, teaching document analysis, and collective reflection, the program helped teachers recognize the importance of aligning objectives, student characteristics, learning activities, media, and assessment. The activity produced practical outputs in the form of a strengthening module, a collaborative mentoring flow model, and a monitoring-reflection framework. The main contribution of the activity was the development of teacher awareness, peer exchange, and an initial classroom follow-up plan. However, the program remained limited in duration and evaluation depth; therefore, future activities should include longer workshops, microteaching, classroom coaching, standardized competence measurement, and continuous school-based professional learning communities.

## **ACKNOWLEDGMENTS**

The authors express sincere appreciation to the Postgraduate Program of Universitas Pattimura, the community service implementation team, and SMP Negeri 11 Ambon as the partner school. Special thanks are addressed to the principal and teachers of SMP Negeri 11 Ambon for their participation, openness, and collaborative commitment during the activity.

## **REFERENCES**

- Admiraal, W., Schenke, W., De Jong, L., Emmelot, Y., & Sligte, H. (2021). Schools as professional learning communities: What can schools do to support professional development of their teachers? *Professional Development in Education*, 47(4), 684-698. <https://doi.org/10.1080/19415257.2019.1665573>
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.
- Fernandez-Batanero, J. M., Montenegro-Rueda, M., Fernandez-Cerero, J., & Garcia-Martinez, I. (2022). Digital competences for teacher professional development: Systematic review. *European Journal of Teacher Education*, 45(4), 513-531. <https://doi.org/10.1080/02619768.2020.1827389>
- Kennedy, M. M. (2016). How does professional development improve teaching? *Review of Educational Research*, 86(4), 945-980. <https://doi.org/10.3102/0034654315626800>
- Korthagen, F. (2017). Inconvenient truths about teacher learning: Towards professional development 3.0. *Teachers and Teaching*, 23(4), 387-405. <https://doi.org/10.1080/13540602.2016.1211523>
- Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, 88(4), 547-588. <https://doi.org/10.3102/0034654318759268>

- Ministry of Education, Culture, Research, and Technology. (2022). Guidelines for implementing the Independent Curriculum. Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia.
- Mishra, P. (2019). Considering contextual knowledge: The TPACK diagram gets an upgrade. *Journal of Digital Learning in Teacher Education*, 35(2), 76-78. <https://doi.org/10.1080/21532974.2019.1588611>
- OECD. (2019). TALIS 2018 results (Volume I): Teachers and school leaders as lifelong learners. OECD Publishing. <https://doi.org/10.1787/1d0bc92a-en>
- Rahayu, R., Rosita, R., Rahayuningsih, Y. S., Hernawan, A. H., & Prihantini, P. (2022). Implementation of the Independent Learning Curriculum in driving schools. *Jurnal Basicedu*, 6(4), 6313-6319. <https://doi.org/10.31004/basicedu.v6i4.3237>
- Republic of Indonesia. (2005). Law of the Republic of Indonesia Number 14 of 2005 concerning Teachers and Lecturers.
- Revuelta-Dominguez, F. I., Guerra-Antequera, J., Gonzalez-Perez, A., Pedrera-Rodriguez, M. I., & Gonzalez-Fernandez, A. (2022). Digital teaching competence: A systematic review. *Sustainability*, 14(11), 6428. <https://doi.org/10.3390/su14116428>
- Sancar, R., Atal, D., & Deryakulu, D. (2021). A new framework for teachers' professional development. *Teaching and Teacher Education*, 101, 103305. <https://doi.org/10.1016/j.tate.2021.103305>
- Sims, S., & Fletcher-Wood, H. (2021). Identifying the characteristics of effective teacher professional development: A critical review. *School Effectiveness and School Improvement*, 32(1), 47-63. <https://doi.org/10.1080/09243453.2020.1772841>
- Smestad, B., Hatlevik, O. E., Johannesen, M., & Ogrim, L. (2023). Examining dimensions of teachers' digital competence: A systematic review pre- and during COVID-19. *Heliyon*, 9(6), e16677. <https://doi.org/10.1016/j.heliyon.2023.e16677>
- Vangrieken, K., Meredith, C., Packer, T., & Kyndt, E. (2017). Teacher communities as a context for professional development: A systematic review. *Teaching and Teacher Education*, 61, 47-59. <https://doi.org/10.1016/j.tate.2016.10.001>