

IMPROVING LESSON PLANS AND TEAMWORK THROUGH PEER COLLABORATION AT WAHIDIYAH UNIVERSITY

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ABSTRACT

This classroom action research aimed to enhance the pedagogical competence of pre-service English teachers by implementing a Peer-Collaborative Lesson Design (PCLD) strategy in the Learning and Teaching course. The study sought to: (1) analyze the improvement in the quality of Lesson Plans (RPP) developed by students, and (2) investigate the development of students' collaborative skills. Conducted over two cycles at FKIP Universitas Wahidiyah with 30 participants, the study employed a convergent parallel mixed-methods design. Quantitative data were derived from pre-test and post-test RPP scores assessed via a validated analytic rubric, while qualitative data were collected through participatory observation, student reflection journals, and focus group discussions. Findings revealed a statistically significant increase in RPP quality, accompanied by notable improvements in learning activity design and assessment alignment. Qualitative analysis revealed a significant shift in collaborative dynamics, from initial task division to sophisticated co-creation and constructive peer feedback. The study concludes that the structured PCLD strategy effectively bridges the theory-practice gap in lesson planning pedagogy and fosters essential collaborative competencies, offering a replicable model for similar educational contexts.

Keywords: classroom action research, collaborative learning, lesson plan design, pedagogical competence, peer feedback

INTRODUCTION

The ability to design effective learning is a core competency that must be mastered by prospective English teachers. The Learning Implementation Plan (RPP) is not just an administrative document, but an intellectual blueprint that represents a teacher's pedagogical understanding, creativity, and contextual considerations (Gemmink et al., 2021). In the Learning and Learning course, students are taught learning theories and are expected to be able to translate them into applicable instructional designs. However, mastery of theory is often not directly proportional to the ability to design quality lesson plans, indicating a gap between declarative knowledge and procedural knowledge.

Theoretically, Song & Chai (2018) said that collaborative approaches are recognized as catalysts for deep learning. Theory of Social Constructivism emphasizes that knowledge is built through social interaction. In the context of the preparation of the lesson plan, collaboration should allow students to contribute ideas

to each other, test concepts, and build a collective understanding that is richer than individual work. Learning models such as Project-Based Learning (PjBL) have also been shown to increase student engagement and learning outcomes (Pratiwi et al., 2025; Viswambaran & Shafeek, 2019). However, the implementation of "collaboration" in lesson plan design tasks in many LPTKs is often only procedural—clustered without an interaction structure that encourages systematic co-creation and critical feedback (Yan, 2024).

Facts in the field, especially at FKIP Wahidiyah University based on initial observations, show that the task of designing RPPs is still often completed individually or with a non-optimal pattern of collaboration. A common pattern is the *division of labor* where each member works on the part of the lesson plan separately and then combined, without an in-depth discussion process about the entire logical flow of learning. As a result, the resulting lesson plans tend to be mechanistic, less coherent, and lack of pedagogical innovation. In addition, students miss out on opportunities to develop collaboration skills such as negotiation, constructive feedback, and joint decision-making which are crucial in the collegial world of teacher work (Ibrahim, 2022).

The gap between the theoretical potential of collaborative learning and the reality of practice in the classroom is exacerbated by the demands of the Merdeka Learning curriculum that emphasizes differentiated and student-centered learning. A good lesson plan must be able to respond to this diversity, a challenge that is difficult for a single designer to face. Therefore, a structured strategy is needed that not only unites students in groups, but also guides them through an authentic *collaborative design* process, where ideas are sharpened, critiqued, and revised collectively.

As an alternative solution, a number of previous studies have begun to lead to the effectiveness of *peer collaboration* and *co-design* in teacher education. For example, Chen et al. (2022) found that *lesson study* activities in small groups significantly improved teachers' ability to critically reflect on their learning design. A study by Adha et al. (2023) in the Indonesian context also shows that a structured *peer review* scheme can improve the quality of learning tools. These findings indicate that the added value is not only in the final product (RPP), but rather in the dialogical and reflective process that students go through. This process is believed to bridge the gap between theory and practice.

In essence, the novelty is not in discovering that collaboration is useful, but in creating and empirically validating a specific, structured protocol (PCLD) that guarantees collaborative learning occurs effectively in the context of lesson planning coursework, thereby producing measurable improvements in both pedagogical design skills and essential teacher collaboration competencies.

Based on this framework, this study proposes and tests the application of the Peer-Collaborative Lesson Design (PCLD) strategy. This strategy is a synthesis of the principles of collaborative learning, project-based learning, and formative peer assessment (Sa'diyah et al., 2023). The PCLD is designed with structured stages: (1) cooperative initial draft design, (2) feedback exchange between groups using a feedback *carousel*, and (3) revision based on peer input. Through this cycle, students not only produce lesson plans, but also experience firsthand the process of "community of practice" that reflects the working conditions of professional teachers.



Thus, this study aims to investigate the extent to which the implementation of the PCLD strategy can improve the quality of the lesson plans produced and at the same time develop student collaboration competencies. The research questions focused on: (1) How to improve the quality of pedagogical aspects in the RPP after the implementation of PCLD? (2) What are the dynamics and development of student collaboration skills during the PCLD process? The answer to this question is expected to make a practical contribution to the development of pedagogy in the Learning and Learning course and a theoretical contribution to the model of effective collaboration in pre-term teacher education.

METHOD

This study uses a Classroom Action Research design integrated with a parallel converged mixed-methods approach (Mertler, 2024). Action research was carried out in two repeated cycles (planning, implementation, observation, reflection) in the Learning Teaching class, English Education Study Program, FKIP Wahidiyah University, with the participation of 30 fourth-semester students. A mixed approach was chosen to simultaneously collect and analyze quantitative (measuring products) and qualitative (understanding processes) data, in order to gain a holistic understanding of the impact of the intervention.

The intervention procedure applied the Peer-Collaborative Lesson Design (PCLD) strategy which was structured in three main phases of each cycle (Meadows et al., 2024). First, students in heterogeneous groups collaborate to design an initial draft of the lesson plan based on the learning outcomes of the national curriculum. Second, a *Feedback Carousel* session was held where each group assessed the other group's draft using a structured feedback form that focused on alignment of goals, activities, and assessments. Third, the group collaboratively revises the RPP based on the input received before producing the final product.

Data is collected through triangulation of techniques and sources. Quantitative data was obtained from the *pre-test* and *post-test* assessment of the quality of the RPP using an analytical rubric that has been validated by experts (Meydan & Akkaş, 2024). Qualitative data were extracted from participants' observation records of group dynamics, student reflection journals, and transcripts of Pumped Group Discussions (FGD). Quantitative data analysis used descriptive statistics and *paired sample t-test*, while qualitative data was analyzed thematically. The integration of the two findings was carried out at the interpretation stage to provide comprehensive answers to the research questions. The validity of the data is maintained through *member checking*, *inter-rater reliability* in RPP scoring, and trial audits.

FINDINGS AND DISCUSSION

A. Quantitative Data: Improving the Quality of Learning Implementation Plans (RPP)

Quantitative data was obtained from pre-test and post-test assessments using analytical rubrics. Descriptive statistical analysis and paired sample t-test showed the following results:



Table 1
Statistical Analysis and Paired sample t-test

Cycles	Pre-test Mean (SD)	Post-test Mean (SD)	Main Gain	Effect Size (Cohen's d)	Paired T-test (Significance)
Cycle 1	68.5 (3.8)	76.2 (4.1)	+7.7 points	1.95	t (29) =15.32, p < 0.001
Cycle 2	76.2 (4.1)	85.4 (3.5)	+9.2 points	2.40	t (29) =18.47, p < 0.001

Note: Cycle 2 pre-test scores are identical to Cycle 1 post-test scores.

The analysis of improvement by rubric aspect revealed a shift in focus between cycles. In Cycle 1, the highest average percentage gain (15%) was in the Media Fit aspect. In Cycle 2, following intervention refinement, the most substantial gains were observed in core pedagogical aspects: Learning Activity Design (22%) and Assessment Suitability (18%).

B. Qualitative Findings: The Evolution of Collaboration Dynamics

Qualitative data from observations, reflection journals, and FGDs were analyzed thematically. The findings for each cycle are presented under key themes aligned with the research questions. Findings are broken down by cycle:

Cycle 1 Description: Superficial Collaboration and Generic Feedback

- **Theme 1: Mechanistic Task Division.** Collaboration was predominantly administrative. Observational notes consistently recorded patterns where groups divided RPP sections for parallel, independent work (e.g., "You do the objectives, I'll do the activities"). One journal entry stated, "*Our group worked more like combining individual tasks into one file.*"
- **Theme 2: Non-Critical Peer Feedback.** The Feedback Carousel yielded superficial input. Written feedback forms were filled with generic comments such as "Good" and "Complete." An FGD participant noted, "*We found it difficult to give criticism... we were afraid of being considered rude.*"

Cycle 2: Integrative Co-Creation and Analytical Feedback

After scaffolding was introduced, qualitative data showed a marked shift in the depth and quality of interaction.

- **Theme 1: Pedagogical Dialogue and Co-Creation.** Group discussions evolved to focus on the integration and rationale of RPP components. Observations captured dialogues questioning pedagogical choices (e.g., "*Is this activity aligned with our HOTS objective?*"). A student reflected, "*We argued about methods, but it helped us build a stronger lesson plan together.*"
- **Theme 2: Specific, Constructive Peer Feedback.** The quality of feedback during the carousel session became analytical and theory-based. Examples from feedback forms include: "*The rubric assesses the product but not the collaborative process mentioned in your goal,*" and "*Consider adding a scaffolding step before this main activity.*"



C. Data Integration and Triangulation of Findings

The convergence of quantitative and qualitative data streams provides a comprehensive understanding of the PCLD's impact. The significant quantitative improvement in Learning Activity Design and Assessment Suitability scores in Cycle 2 is directly contextualized by the qualitative shift towards Pedagogical Dialogue and Specific, Constructive Feedback. Thematic analysis confirms that the refined intervention in Cycle 2 facilitated deeper engagement with core design principles, which correspondingly manifested as higher scores in those specific rubric aspects.

Discussions

This study demonstrates that the structured Peer-Collaborative Lesson Design (PCLD) strategy effectively enhanced both the quality of pedagogical design and collaborative competencies among pre-service English teachers. The findings provide clear, evidence-based answers to the research questions and offer significant implications for teacher education.

1. Enhancing Pedagogical Design: Bridging Theory and Practice

The significant quantitative improvement in RPP scores, particularly in the core aspects of Learning Activity Design and Assessment Suitability in Cycle 2, directly addresses the first research question. This progression from initial gains in technical compliance (Media Fit in Cycle 1) to later gains in pedagogical coherence suggests that PCLD facilitates a deeper, more applied understanding of instructional design principles. This outcome aligns with and extends the Social Constructivist tenet that knowledge is co-constructed through dialogue and shared problem-solving (Vygotsky & Cole, 2018). The PCLD process, especially the Feedback Carousel, functioned as a scaffolded "community of practice" (Indriati et al. 2024; Quinn et al. 2019), where students were compelled to externalize and defend their pedagogical choices, thereby transforming abstract theory into justifiable practice. This finding corroborates prior research on lesson study (Alkhabra et al., 2023) but advances it by showing how a structured peer-review cycle within a single course can systematically build design competency.

2. Fostering Collaborative Competencies: From Division to Co-Creation

The qualitative data reveal a critical shift in group dynamics, answering the second research question. The evolution from mechanistic task division to integrative co-creation underscores that collaboration is a skill developed through structured guidance. The provision of explicit feedback scaffolding in Cycle 2 was pivotal. It transformed peer interaction from a superficial exchange of praise into a process of social scaffolding, where students provided specific, theory-based critiques that helped peers operate within their Zone of Proximal Development (Adha et al., 2023). This development of professional collegiality—encompassing negotiation, constructive criticism, and shared ownership—is a crucial yet often overlooked outcome in teacher training, directly preparing students for the collaborative nature of modern educational environments (England et al., 2020; Harianto et al., 2020).



3. Synthesis and Interpretation: Why the Intervention Worked

The convergence of quantitative and qualitative data provides a compelling explanation for the success of PCLD. The quantitative gains in RPP quality are not isolated outcomes but are directly explained by the qualitative evolution in collaborative process. The highest score improvements in Activity Design and Assessment occurred in Cycle 2, precisely when qualitative data showed feedback had become specific and analytical (e.g., critiquing rubric alignment). This indicates that the intervention's efficacy stems from its integrated design: the collaborative task (designing an RPP) creates a genuine need for dialogue, while the structured feedback mechanism (the carousel with scaffolding) provides the tools to make that dialogue pedagogically meaningful.

4. Limitations and Alternative Explanations

While the results are positive, several limitations must be acknowledged. First, the study's design does not rule out the potential influence of the Hawthorne Effect; students may have improved simply due to increased attention from researchers. Second, the success of PCLD is highly dependent on quality facilitation and time. The refined outcomes in Cycle 2 were contingent on the lecturer's timely provision of feedback models, a resource-intensive step that may be challenging to replicate universally. Alternative explanations for improved scores could include simple task familiarity in Cycle 2, though the thematic shift in collaboration suggests a deeper change.

5. Implications and Future Directions

The pedagogical implications are twofold. For practice, PCLD offers a replicable model for closing the theory-practice gap in methodology courses. Its successful implementation requires: (a) carefully designed guiding instruments (rubrics, feedback forms), (b) explicit training in giving and receiving constructive feedback, and (c) adequate time allocation for iterative cycles. For research, this study highlights the need to investigate the long-term retention of both design skills and collaborative habits. Future studies should also explore differentiated scaffolding for varied student ability levels and test the model's adaptability in other teacher practicum contexts, such as micro-teaching or material development courses.

CONCLUSION

This study demonstrates that the structured Peer-Collaborative Lesson Design (PCLD) strategy effectively addresses the critical gap between theoretical knowledge and practical design skills in teacher education. In direct answer to the research questions, the findings indicate that: (1) PCLD significantly enhances the pedagogical quality of lesson plans, particularly in designing student-centered activities and aligned assessments; and (2) it fosters the development of higher-order collaborative competencies, transforming group work from simple task division into authentic co-creation and critical peer dialogue.

The primary theoretical contribution of this research lies in its empirical validation of a structured model that operationalizes Social Constructivist and Community of Practice principles within a lesson planning course. It demonstrates that collaborative skill development is not an automatic byproduct of group



assignments but requires a carefully scaffolded process of co-creation, guided peer critique, and iterative revision.

Practical implications for teacher education are twofold. For curriculum designers, integrating models like PCLD into pedagogy courses is recommended to bridge theory and practice. Successful implementation requires providing explicit feedback scaffolds, allocating sufficient time for iterative cycles, and training facilitators in guiding pedagogical dialogue. For educators, this strategy offers a replicable framework to cultivate both instructional design expertise and the collaborative disposition essential for modern, collegial school environments.

Limitations of this study include its relatively small sample size within a single institution, which may affect generalizability. The short-term, two-cycle design also limits insights into the long-term retention of skills and dispositions. Furthermore, the success of the model was partly dependent on the researcher's facilitative role, pointing to potential challenges in scalability.

For future research, we recommend: (1) longitudinal studies to assess the sustainability of these skills during teaching practicums (PPL) and in early-career teaching; (2) experimental or quasi-experimental designs with control groups across different institutions to strengthen causal claims; and (3) investigations into adapting the PCLD framework for online or hybrid learning environments.

In summary, this study contributes to the international discourse on collaborative pedagogy by providing an evidence-based, structured approach that simultaneously enhances the technical and social dimensions of pre-service teacher preparation. The PCLD model presents a viable pathway for developing the integrated competencies required for 21st-century teaching.

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