

Elementary School Teacher's Reflection Activities and Feedback in the Context of Lesson Study

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Abstract: *This study aims to explore and analyse reflections in the context of Lesson Study, focusing on teacher teaching practices in primary schools. This research uses a qualitative approach with a case study method. Learning activities are still in the form of an assignment system and are not centered on students. Thus, students have not been able to be active in the learning process. In addition, there are still many students who are not disciplined in doing assignments. This study aims to provide insight into effective and efficient reflection and feedback activities on good and correct Lesson Study activities. Therefore, this research is important to be carried out because it can improve learning practices by adjusting appropriate learning strategies for learning activities that need to be improved, improving student learning outcomes by developing teaching strategies and adjusting to students, Lesson Study can help improve the quality of learning better, and can increase student participation in learning through more interactive, innovative, and student-centered learning. The team of teachers can find the best solution by drawing on the experiences experienced by fellow teachers. The teacher team analyzed the problems of grade 4 students, to find the right solution for learning. The collaboration of the teacher team in lesson study can observe and analyze each other's teaching practices. This allows them to give each other constructive feedback and suggestions to improve each other's teaching skills. Reflection in lesson study plays an important role in improving teaching practices and student learning achievement. By doing deep reflection, teachers can identify problems, evaluate their practices, and find appropriate solutions. Reflection also involves critical, logical, and analytical thinking to produce structured and weighty thinking*

Keywords: *Lesson study, reflection, teacher, collaboration, teaching*

Abstrak: Penelitian ini bertujuan untuk mengeksplorasi dan menganalisis refleksi dalam konteks Lesson Study, dengan fokus pada praktik pengajaran guru di sekolah dasar. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi kasus. Kegiatan pembelajaran masih berupa sistem penugasan dan belum berpusat pada peserta didik. Sehingga, peserta didik belum dapat aktif dalam proses pembelajaran. Selain itu, peserta didik juga masih banyak yang belum disiplin dalam mengerjakan tugas. Oleh karena itu, penelitian ini penting untuk dilaksanakan karena dapat meningkatkan praktik pembelajaran dengan menyesuaikan strategi pembelajaran yang sesuai untuk kegiatan pembelajaran yang perlu diperbaiki, meningkatkan hasil belajar peserta didik dengan cara mengembangkan strategi mengajar dan menyesuaikan dengan peserta didik, selain itu Lesson Study dapat membantu meningkatkan kualitas pembelajaran yang lebih baik, serta dapat meningkatkan partisipasi peserta didik dalam pembelajaran melalui pembelajaran yang lebih interaktif, inovatif, dan berpusat pada peserta didik. Penelitian ini bertujuan untuk memberikan wawasan tentang kegiatan refleksi dan umpan balik yang efektif dan efisien pada kegiatan Lesson Study yang baik dan benar. Tim guru dapat menemukan solusi terbaik dengan menarik pengalaman yang dialami oleh teman sejawat guru. Tim guru menganalisis permasalahan siswa kelas 4, untuk menemukan solusi yang tepat untuk pembelajaran.

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Kolaborasi tim guru dalam lesson study dapat mengamati dan menganalisis praktik pengajaran satu sama lain. Ini memungkinkan mereka untuk saling memberikan umpan balik dan saran konstruktif untuk meningkatkan keterampilan pengajaran masing-masing. Refleksi dalam lesson study memainkan peran penting dalam meningkatkan praktik pengajaran dan pencapaian belajar siswa. Dengan melakukan refleksi yang mendalam, guru dapat mengidentifikasi permasalahan, mengevaluasi praktik mereka, dan mencari solusi yang tepat. Refleksi juga melibatkan pemikiran kritis, logis, dan analitis untuk menghasilkan pemikiran yang terstruktur dan berbobot.

Kata Kunci: Lesson study, refleksi, guru, kolaborasi, pengajaran

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INTRODUCTION

Primary school teachers have a critical role in shaping the educational experiences of young learners. As educators, they continually seek ways to improve their teaching practices and improve student learning outcomes. Several previous studies (Amin et al., 2021; Van Acker et al., 2013) an approach that has received the most attention is lesson study, a collaborative professional development model that encourages reflection and feedback among teachers. In the context of lesson study, teachers engage in various reflection activities to critically analyze lessons and student learning, with the aim of improving their teaching strategies (Sahal, 2019; Arfandi & Shaleh, 2016).

It is hoped that lesson study can help teachers to facilitate learning activities to be more centered and make students active. However, in reality, based on observations and interviews conducted at SD Negeri 04 Sukoharjo, learning activities are still in the form of an assignment system and are not student-centred. So, students cannot be active in the learning process. Apart from that, there are still many students who are not disciplined in doing their assignments. Therefore, this research is important to carry out because it can improve learning practices by adjusting learning strategies that are appropriate for learning activities that need to be improved, improve student learning outcomes by developing teaching strategies and adapting them to students, besides that lesson study can help improve better quality of learning, and can increase student participation in learning through more interactive, innovative and student-centered learning.

In several countries, teachers from Portugal, Brazil, Mozambique are involved (Hoesni et al., 2020; Budiastuti et al., 2018; Hussain, 2018), and china in reflection activities provide a means for teachers to evaluate and improve their teaching practices, while feedback provided by colleagues or colleagues provides valuable new insights. By reflecting on teaching experiences, teachers can develop better skills in managing the classroom, designing learning plans that suit students' needs, and adopting innovative teaching approaches. By engaging in structured reflection and receiving constructive feedback, teachers can continue to develop their professionalism, improve the quality of teaching, and provide better learning experiences for students (Aditya Dharma, 2019).

Based on previous research conducted by Muhammad Nursa'ban, (2010) with the title Lesson Study; One of the Efforts to Improve Learning Processes and Outcomes reveals that learning plays an important role in achieving systemic change. Through lesson study, teachers make collaborative efforts to translate teaching goals and standards into the real world in the classroom and try to design learning activities in such a way that students can be helped to know the basic skills needed. In addition, they try to design learning scenarios that pay attention to basic skills and develop scientific thinking habits, where students are asked to control variables and acquire a certain amount of knowledge related to the subjects studied. After that the learning plan will be implemented, observed, discussed, revised and if

necessary repeated in other classes (Nursa'ban, 2010). Additionally, according to Mulyo Wiharto, (2018) Apart from that, according to the title Lesson Study Activities in Learning, it is revealed that the involvement of school principals as lesson study participants is intended so that any problems that arise during the learning process can be raised and used as valuable input for educational management development purposes. Academic managers who previously handled more administrative issues will have direct contact with the learning process so they can better understand what teachers and students actually experience during the learning process, so they will focus more on managing facilities (Wiharto, 2018). The implementation of lesson study in PAI subjects went well with the participation of the school starting from teachers and principals. Each stage of lesson study, starting from planning, implementing (doing) to reflecting (seeing), has the meaning of helping teachers to become more proficient in carrying out their profession as educators (Wiharto, 2018). By increasing skills, the quality of student learning in PAI subjects can be improved (Sahal, 2019).

Based on previous relevant research that has been carried out. So, what can be obtained from the novelty of this research is that this research focuses on reflection activities and feedback provided by teachers. Meanwhile, previous research discussed lesson study as a whole. Therefore, it is interesting for researchers to study the experiences of teachers involved in lesson study. So, it can be obtained that this research aims to provide insight into effective and efficient reflection and feedback activities in lesson study activities that are good and correct.

RESEARCH METHODS

The case study method is a research approach used to understand in depth a phenomenon that occurs in a real context. A case study is a series of scientific activities carried out in depth, detailed and in-depth information about a program, an event and an activity, or more at the individual, group, institutional or organizational level (Mujiono, 2021). Generally, the event selected is then called a case which is a real case (real event), ongoing and not something that happened in the past (Rahardjo, 2017). In this research, the case study method can be used to study the reflection and feedback process carried out by elementary school teachers in the context of implementing lesson study.

Several methods may be applied to the reflection and feedback process carried out by elementary school teachers in the context of implementing lesson study. Observation techniques can observe teachers in elementary schools who are involved in lesson study activities (Juwita et al., 2018). In this case, researchers can see how they reflect on the teaching they do and how they provide feedback to their colleagues. This observation can be done directly in the classroom or via video recording. In addition, interviews were conducted with teachers involved in lesson study activities to gain a deeper understanding of the reflection activities they carried out and the type of feedback they provided to fellow teachers. Documents related to lesson study that have been implemented in elementary schools can be studied further by researchers. These documents can be in the form of teacher reflection journals, meeting notes, or notes on lesson study implementation. By analyzing these documents, researchers can see how reflection and feedback are integrated in the lesson study context.

The flow of implementing study lessons is in 3 stages, namely Plan-Do-See. Reflection and feedback are carried out at the see lesson study stage. At the end of the lesson study stage, feedback can be carried out, interviews can be carried out with the teacher team, model teachers and fellow teachers. The feedback in this research is Congruent feedback. Congruent feedback is feedback that is

focused on the learning activities that students are studying. Meanwhile, reflection through the template shown in the following table;

Table 1. Reflection template

Critical incident	issues or incidents that cause problems or have a positive impact on your learning or practice. Report what happened or what was involved in the issue or incident. Why is this relevant? Respond by observing, stating your opinion, or asking questions.
Process relationships	Connect or make connections between the incident or issue and your own skills, professional experience, or disciplinary knowledge. Have I experienced this before? Are the conditions the same or different? Do I have the skills and knowledge to deal with this?
Thinking	Highlight in detail the important factors underlying the incident or issue. Explain and show why these factors are important to the understanding of the incident or issue. Refer to relevant theory and literature to support your thinking. Consider different perspectives. How would a knowledgeable person perceive/deal with this? What are the ethics involved?
Reconstruction	Change or reconstruct professional practice or understanding in the future. How will I handle this in the future? What might work and why? Are there different options? What might happen if [...]? Are my ideas supported by theory? Can I make changes for the benefit of others?

This research involved 5 teachers at SD Negeri 04 Sukoharjo as participants in the Ministry of Education and Culture's partnership program. In this program, LPTK lecturers at Veteran Bangun Nusantara University carry out lesson study at elementary schools in Sukoharjo District. The researcher's role in this research is as a collaborator and observer. In collaboration, research can explore how elementary school teachers work together in planning lessons in lesson study. Focuses on the planning process which involves discussion and division of tasks, as well as how teachers pay attention to aspects of the curriculum in designing lessons. Meanwhile observers, researchers and teachers at SD Negeri 04 Sukoharjo observed the implementation of lessons in Lesson Study. This includes choosing learning methods, using teaching materials that are appropriate to the curriculum, teacher interactions with students, and learning strategies used to achieve learning goals.

The lesson study research context in the elementary school curriculum focuses on the application and development of the lesson study method as a collaborative learning approach at the elementary school level. Lesson Study is closely related to curriculum standards set by the local government (Fernandez, C., Cannon, J., & Chokshi, S, 2003). Teachers can use lesson study to understand and apply curriculum standards in their lessons, as well as to develop appropriate teaching strategies. Lesson Study emphasizes collaboration between teachers. Teachers work together to plan and observe lessons, provide feedback to each other, and share experiences and knowledge.

Data analysis in the case study method involves collecting and compiling relevant information from various sources. Identify common themes in reflection and feedback activities, as well as the relationships between them. Use a qualitative analysis approach, such as thematic analysis, to deeply understand the patterns that emerge from the data collected.

RESULTS AND DISCUSSION

Reflection is a process that involves observing and assessing one's thoughts, feelings and experiences. In the context of lesson study, reflection is carried out through a discussion group forum (FGD) system after carrying out the lesson. The model teacher is given the opportunity first to reflect on the learning that has been carried out. After that, the teacher as observer was given the opportunity to express the findings according to the reflection questions in the prompts. Reflection prompts for reflection, this means taking time to actively consider questions or statements designed to encourage introspective thinking. Reflection prompts provide a framework or direction to guide a person in looking into themselves more deeply. The goal is to help individuals understand themselves, gain insight into their beliefs and values, explore underlying emotions, and evaluate the experiences they have had.

This involves searching your mind, remembering past experiences, and identifying patterns or trends that may be emerging. The reflection process may also involve considering how the experience may have influenced personal growth, identifying lessons learned, and formulating possible desired actions or changes.

Critical incident

Reflection has a particular focus on identifying critical incidents or issues, so that students can reflect concisely at a higher level, rather than simply repeating all (irrelevant) actions, ideas, or contextual variables. Problems highlighted by learning carried out during the pandemic. 90% of learning at SD Negeri 04 Sukoharjo during the pandemic used the assignment model. Learning activities at SD Negeri Sukoharjo 04 mostly use an assignment system by inviting students' parents/guardians to take assignments on Monday and students do the assignments at home. This causes difficulties for teachers in controlling learning. Many students are not disciplined in learning because there are no meeting sessions, even via Zoom or Meet.

Ayu as a model teacher provides a reflection on the learning experienced during the pandemic. As Ayu said:

“Selama masa pandemic ini, saya mengalami kesulitan melaksanakan pembelajaran daring yang efektif. Siswa saya banyak yang tidak disiplin mengerjakan tugas individu dan kelompok. Siswa juga tidak pernah ada pertanyaan tentang kesulitan yang dialami. Mereka cenderung malu bertanya baik dengan orangtua dan guru. Mereka mengaku tugas-tugasnya banyak yang dikerjakan oleh orangtua mereka karena orangtua takut kalau nilai mereka turun. Hal ini salah satu factor siswa tidak percaya diri dalam mengungkapkan kesulitan mereka”

Ayu reflected that the biggest problems experienced were activeness, discipline and self-confidence in students. A specific incident in reflection that Ayu experienced was the difficulty in implementing effective online learning. Students experience a lack of discipline in carrying out individual and group assignments. They also never asked questions about the difficulties they were experiencing. This may be caused by embarrassment or reluctance to ask parents and teachers. As a result, these students lose confidence in expressing the difficulties they face. In this context, Ayu still does not mention the reasons for not implementing learning effectively. So it is necessary to provide a solution to strengthen Ayu to design effective learning for these problems.

In planning activities in the context of lesson study, the teacher team designs learning based on the problems to be solved. The team of teachers must collaborate to find a solution that will be resolved. As Menik pointed out as a 3rd grade teacher mentioned.

“tidak adanya pertemuan pembelajaran, seorang guru tidak bisa mengukur keaktifan siswa. Biasanya guru memberikan tugas via whatapps dan mengambil di sekolah. Siswa hanya mengumpulkan tugas, dan permasalahannya guru tidak tahu kesulitan siswa karena tidak ada feedback sama sekali. Pembelajaran daring juga terdapat kelemahan, seperti yang saya alami selama pembelajaran daring. Siswa penasaran pada fitur-fitur dalam g-meet. Siswa mencoba menekan tombol yang ada di fitur gmeet. Dan siswa saling sapa dalam pembelajaran tersebut. Jadi diperlukan aplikasi selain gmeet untuk menunjang keaktifan siswa.”

Menik initially explained the problems experienced during learning during the pandemic. In essence, it suggests that he will discuss everything that happens during the practicum in his class, including 'existing structures', 'practices', 'beliefs', 'implementation', and 'personal experiences'. He did not specify whose structures, practices, or beliefs he referred to, but subsequent descriptions indicated that they were the supervising teacher's, not those he implemented in the classroom. Menik compares or analyzes his learning practices.

Apart from that, Siti as a class 1 teacher said

“kelemahan dari penugasan, siswa kelas 1 kurang percaya diri dalam mengerjakan soal. Siswa mengejakan dibantu orang tuanya. Hal ini salah satu yang menyebabkan kurang percaya diri siswa saat memahami pembelajaran. Saya kurang yakin, kelas 1 bisa diajak untuk melaksanakan pembelajaran daring. Saya pernah pada saat mengampu kelas atas, mencoba menggunakan model PBL dalam pembelajara. Siswa lebih aktif dan percaya diri untuk menyelesaikan masalah kehidupan sehari-hari. Masalah yang harus diselesaikan adalah masalah yang sederhana dan mudah dijumpai oleh siswa itu sendiri”

Siti revealed that she had never done online learning for class 1. Class 1 students still need parental guidance and help. The solution that Siti gave to Ayu was the use of the PBL model. This is based on Siti's personal experience, who has implemented the PBL model in offline learning. Siti still does not describe the obstacles experienced in using the PBL model in the classroom.

Based on the learning problems at SD Negeri 04 Sukoharjo, the focus of the problem to be solved is designing online learning to increase activeness and self-confidence for elementary school students. In the activity plan, it was agreed that the learning model would be to use the problem based learning (PBL) model through the breakout room feature. This agreement is based on the experience of teachers who have used PBL as a learning model. Meanwhile, the breakout room is one of the features that Gmeet can use to increase student activity. Several studies say that breakout rooms can provide students with the opportunity to collaborate online. Students can communicate with other friends to discuss problems without any intervention from the teacher.

Based on the results of the reflection above, the teacher team can find the best solution by drawing on the experiences of fellow teachers. The team of teachers analyzed the problems of grade 4 students, to find the right solution for learning. Teacher team collaboration in lesson study can observe and analyze each other's teaching practices. This allows them to provide each other with constructive feedback and suggestions to improve each other's teaching skills. The ultimate goal is to increase teaching effectiveness and maximize student learning achievement. In addition, teacher team collaboration in lesson study creates an environment that supports experimentation and innovation in

teaching. They can plan, implement, and evaluate lessons together, trying new approaches, learning strategies, or different learning tools. This helps create a learning atmosphere that is dynamic and responsive to student needs.

Process relationships

Reflection plays an important role in the context of lesson study. Lesson study is a collaborative approach in which a team of teachers works together to plan, implement, and evaluate lessons on an ongoing basis. In this context, reflection provides an opportunity for teacher teams to examine their teaching practices, analyze student learning outcomes, and make necessary improvements. Lesson study involves a process of in-depth reflection on the lessons that have been carried out. Reflection should be related to one's position in the professional field, current knowledge, resources, and their worldview, so that key issues/cases identified in level 1 reporting/responses can be considered through these personal perspectives, and appropriate action plans can be developed that very specific to each person. In reflection in the context of lesson study, the model teacher is given the opportunity to first reflect on the learning. As Ayu reflects on herself after carrying out the do stage of lesson study.

“Pembelajaran PBL melalui breakout room telah membantu saya mengembangkan beberapa keterampilan pribadi yang penting dalam peran sebagai fasilitator dan pembelajar. Sebagai fasilitator dalam breakout room, saya perlu berkomunikasi dengan jelas dan efektif kepada anggota kelompok. Saya harus mampu menjelaskan tujuan, arahan, dan pertanyaan dengan jelas, serta mendengarkan aktif dan responsif terhadap pemikiran dan ide-ide dari anggota kelompok lainnya. Dalam breakout room, waktu menjadi faktor penting untuk menyelesaikan tugas atau diskusi. Saya telah belajar untuk mengelola waktu dengan efisien, membuat rencana kerja, dan memprioritaskan aktivitas agar kelompok dapat mencapai tujuan dalam batas waktu yang diberikan. Ini telah memperbaiki keterampilan manajemen waktu saya secara keseluruhan.”

Ayu's reflection states that she must give clear instructions to students so that they don't have to spend too much time solving problems. Fellow teachers make observations during the lesson. The observer observes the weaknesses and strengths of the model teacher. Pedagogical strategies for developing relationships. The teacher team considers that activities to facilitate this level could focus on analyzing students' skills/knowledge in the area being studied; plan and justify their responses to scenarios or problem-based learning, as well as make comparisons between two related incidents to analyze similarities and differences between settings, actions, consequences, people involved, and so on. They support activities such as debates and roles that show how the issue or incident fits into the student's own professional framework, style preferences, and worldview, as well as how this compares with the views of others. In this way, it is suggested that students can begin to formulate a way forward.

An individual's professional experience plays an important role in reflection in lesson study. Previous experience in teaching, working with students, or being involved in curriculum development can provide valuable insight when reflecting on lessons. These experiences can help a person identify patterns, understand complex situations, or see the impact of actions in a broader context.

Thinking

Reflection at the level of thinking involves a person's ability to use evidence, logical thinking, and deep understanding in formulating arguments or reasoning. At the Reasoning level, reflection involves the ability to collect and use relevant evidence to support arguments or reasoning. This may include references to literature, empirical data, research, or direct experience. It is important to include strong, reasoned evidence to support the arguments put forward in the reflection. In the lesson study context, observers collect empirical evidence through notes on lesson implementation times, photo documents and video recordings. As stated by one of the observers, Sinta said:

"Pada menit ke-55, siswa mengalami kejenuhan dengan ditandai ada siswa bernama Denis memainkan bolpen. Beberapakali terlihat siswa Bernama Adi menguap"

Apart from that, Siti revealed the results of her reflection

"Pada siswa berinisial T, dalam mengerjakan tugas masih banyak yang kosong... hal ini terlihat pada saat, siswa disuruh untuk menunjukkan lembar kerja (LKPD) nya"

In implementing lesson study, observation is focused on students' findings during learning. Therefore, fellow teachers need critical and logical analysis in providing solutions to model teachers. In this case, reflection at the Reasoning level, is important to develop logical, critical and analytical skills to formulate strong and proven arguments. Reflection at this level requires the ability to look deeper, use rational thinking, and connect information with relevant knowledge to produce structured and meaningful thoughts.

Reconstruction

Reflection at the Reconstruction level involves a person's ability to reconstruct, re-reflect, and question existing views or understanding. As stated by Menik as an observer during the implementation of the lesson study, he said:

"Pembelajaran yang dilakukan oleh Ayu, sudah berjalan lancar dan sukses. Beberapa siswa model menunjukkan keaktifan saat breakout room, ada juga siswa yang usil melakukan Tindakan konyol saat berada di breakout room. Siswa pada kelompok 2 mengalami kebingungan untuk menemukan informasi pada paragraph yang telah disajikan. Jadi guru model perlu memberikan penguatan atau gambaran singkat sebagai bahan pemantik agar siswa mudah menemukan informasi penting pada paragraf"

Reflection at the Reconstruction level in PBL learning through breakout rooms involves the ability to reconstruct and question the understanding and experience gained during the breakout room session. Reflection at the Reconstruction level also involves the ability to examine the perspectives that have been adopted during the breakout room session. One must be able to dig deeper, question the assumptions underlying thoughts and actions, and consider different points of view to gain broader insight (Nurtanto et al., 2020). At the Reconstruction level, reflection in PBL learning through breakout rooms can involve changing the approach or strategy used (Abdulah et al., 2021). One must be prepared to revise approaches used in group collaboration, in data collection and analysis, or in formulating solutions. The ability to see from different points of view and try new approaches can enrich the learning experience.

Lesson study in PBL learning through breakout rooms, reflection at the Reconstruction level allows someone to critically evaluate, reconstruct and improve the learning process that occurs. It

involves deep thinking, critical evaluation, and the ability to revise learning designs and practices. By reflecting at the Reconstruction level, one can strengthen the PBL learning experience through breakout rooms and improve overall student learning outcomes. PBL learning carried out online through break out rooms can be a solution to improve student learning outcomes (Fitriani et al., 2021). Able to help students improve critical thinking skills, provide students with meaningful experiences in learning, and can help students solve problems in learning activities (Widarsa, 2019).

CONCLUSIONS AND RECOMMENDATIONS

Based on the discussion above, it can be concluded that reflection in lesson study plays an important role in improving teaching practices and student learning achievement. By conducting in-depth reflection, teachers can identify problems, evaluate their practices, and find appropriate solutions. Reflection also involves critical, logical and analytical thinking to produce structured and insightful thoughts. In lesson study, teacher team collaboration is key in developing more effective learning practices. Teacher team collaboration in lesson study also helps create an environment that supports experimentation and innovation in teaching. Lesson Study provides teachers with insight into the weaknesses and strengths in their teaching practices. By reflecting on learning experiences, teachers can identify areas that need improvement and develop appropriate solutions. The theoretical implication of reflection in lesson study is to create an environment that supports experimentation and innovation in teaching. With collaboration between teachers, they can plan, implement, and evaluate lessons together, trying new approaches, learning strategies, or different learning tools.

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