

Implementation of Lesson Study in Improving Creative Thinking and Student Learning Outcomes in Social Sciences Subjects

Ni'matuz Zuhroh^{1*}

¹Universitas Islam Negeri Maulana Malik Ibrahim, Indonesia

*e-mail: zuhroh@pips.uin-malang.ac.id

ABSTRACT

There is a Japanese teacher professional development model that effectively improves the quality of learning, namely Lesson Study. This research aims to analyze the impact of implementing lesson study on improving creative thinking and student learning outcomes in Social Sciences (IPS) subjects at MTsN Batu City. The research method used is classroom action research (PTK) with a qualitative and quantitative approach. The research subjects were students of class VIII MTsN Batu City. Data was collected through observation, interviews, and learning outcomes tests. The research results show that lesson study significantly improves students' creative thinking abilities and learning outcomes. Qualitative Findings: Observations revealed increased student participation in group discussions and submission of new ideas. Teachers report that collaboration in lesson planning allows them to design more interactive and engaging strategies. Interviews with students showed increased confidence and engagement in exploring social studies concepts. Quantitative Findings: Test results show significant improvements in students' academic achievement. The student's average score on the initial test of 75 increased to 85 on the final test, with the t-test showing that this difference was statistically significant ($p < 0.05$). This demonstrates that lesson study has increased students' understanding and mastery of social studies material.

Keywords:

Lesson Study; Creative Thinking; Learning Outcomes; Social Sciences.

ABSTRAK

Terdapat sebuah model pengembangan profesional guru Jepang yang secara efektif meningkatkan kualitas pembelajaran yaitu Lesson Study. Penelitian ini bertujuan menganalisis dampak implementasi lesson study terhadap

peningkatan berpikir kreatif dan hasil belajar siswa pada mata pelajaran Ilmu Pengetahuan Sosial (IPS) di MTsN Kota Batu. Metode penelitian yang digunakan adalah penelitian tindakan kelas (PTK) dengan pendekatan kualitatif dan kuantitatif. Subjek penelitian adalah siswa kelas VIII MTsN Kota Batu. Data dikumpulkan melalui observasi, wawancara, dan tes hasil belajar. Hasil penelitian menunjukkan bahwa lesson study secara signifikan meningkatkan kemampuan berpikir kreatif dan hasil belajar siswa. Temuan Kualitatif: Observasi mengungkapkan peningkatan partisipasi siswa dalam diskusi kelompok dan pengajuan ide baru. Guru melaporkan bahwa kolaborasi dalam perencanaan pelajaran memungkinkan mereka merancang strategi yang lebih interaktif dan menarik. Wawancara dengan siswa menunjukkan peningkatan kepercayaan diri dan keterlibatan dalam eksplorasi konsep-konsep IPS. Temuan Kuantitatif: Hasil tes menunjukkan peningkatan signifikan dalam pencapaian akademis siswa. Nilai rata-rata siswa pada tes awal sebesar 75 meningkat menjadi 85 pada tes akhir, dengan uji t menunjukkan perbedaan ini signifikan secara statistik ($p < 0.05$). Ini menunjukkan bahwa lesson study berhasil meningkatkan pemahaman dan penguasaan siswa terhadap materi IPS.

Kata kunci:

Lesson Study; Berpikir Kreatif; Hasil Belajar; IPS.

1. Introduction

Education plays a crucial role in shaping students' character and thinking abilities, including creative thinking abilities, which are important in the era of globalization (Haniah, Nursalam, & Hamid, 2023). Social Sciences (IPS) subjects in junior high schools and MTsN are important in developing students' critical and creative thinking abilities. Through social studies, students understand social, economic, and cultural dynamics and learn to analyze social events, develop problem-solving abilities, and make decisions based on the information they obtain (Karningsih, 2021). Interactive and contextual social studies learning also helps students develop empathy and social awareness, making them responsible citizens who care about the surrounding environment. However, social studies learning is often trapped in conventional methods that do not support students' creative thinking development (Maladerita, Anwar, & Erianjoni, 2023). Innovation in learning strategies is needed to stimulate students' creativity and improve their learning outcomes. Teachers must create a supportive learning environment and use the right approach so that students can optimally develop their potential (Khatoon, Ruba Ahmed Mohammad Bakreen, & Masri, nd).

One promising approach is lesson study, a Japanese teacher professional development model that effectively improves learning quality. Lesson study involves collaboration between teachers in planning, observing, and reflecting on the learning process to improve and optimize teaching practices continuously (Rock & Wilson, 2005). This model allows teachers to share experiences, identify obstacles, and find effective solutions through in-depth discussions and observations. The lesson study process allows teachers to share experiences, identify learning obstacles, and find effective solutions through in-depth discussions and observations (Takahashi & Yoshida, 2004). The process begins with joint planning, where the teacher designs a detailed learning plan and sets objectives,

teaching methods, and the necessary tools and materials. The plan should encourage students to think critically and creatively. The next stage is the implementation of the learning plan by one of the teachers, while the others systematically observe the process to identify aspects that need to be improved and what is going well. This observation provides an opportunity to see students' responses to the material and teaching methods (Lewis, Perry, & Murata, 2006) .

After observations, the reflection stage is carried out, where teachers discuss the results of their observations, look for ways to improve learning plans, and learn from real experiences. This reflection allows for improvements in teaching practice based on existing evidence (Kartikasari, Rahman, & Ahyan, 2023). The benefits of lesson study include increasing teachers' professional abilities through intensive collaboration and discussion while encouraging continuous learning among teachers (Dewi & Dharsana, 2020). It also increases student engagement, makes learning more interesting and meaningful, and improves student learning outcomes. Lesson study supports the development of a curriculum that is more relevant and responsive to changing times (Makinae, 2019) . Regular observation and reflection help identify areas of the curriculum that need to be adjusted or improved, ensuring the curriculum is always up-to-date and in line with the challenges and needs of education in the modern era. A relevant and up-to-date curriculum equips students with knowledge and skills that align with current developments, which is crucial in the era of globalization with rapid changes in various sectors of life (Rosihan, 2012).

Furthermore, lesson study also has a positive impact on teachers' professional development. Teachers involved in lesson study can continue learning and developing through collaboration with colleagues (Wiseza, 2020). They can share knowledge and experiences while receiving constructive feedback to improve their teaching practices. This will create a dynamic and collaborative learning culture among teachers (Foeh & Suryani, 2019). Additionally, lesson study can also increase classroom learning effectiveness. With careful planning and observation, teachers can identify the most effective teaching strategies to achieve learning goals (Istiana & Awaludin, 2018). They can adapt teaching methods according to students' needs and characteristics to make learning more personalized and relevant (Milla, 2024). The implementation of lesson study also positively impacts student motivation and involvement in learning. Students involved in a well-designed learning process will feel more motivated to learn (Manurung, Fahrurrozi, Utomo, & Gumelar, 2023). They will participate more actively in class activities making learning more interactive and interesting. This will ultimately improve overall student learning outcomes (Miftakh, Dewi, & Wachyudi, 2023).

Lesson study helps teachers overcome learning challenges through reflection and regular discussions, increasing teacher readiness and self-confidence (Zubaidah, 2010) . In the long term, lesson study supports developing a sustainable education system focusing on continuous improvement and learning innovation. This creates an adaptive education system that meets the needs of students and society (Gusti et al., 2020). Lesson study strengthens collaboration between the school and community, with the participation of parents and other community members providing additional perspectives (Yulianto, 2023). This creates a holistic learning environment and supports student development. In addition, lesson study increases accountability in learning, makes teachers more transparent and responsible, and encourages them to provide quality education (Kioupi & Voulvoulis, 2019) .

In Indonesia, lesson study can address complex educational challenges and improve the quality of education, producing graduates who are competent and ready to compete at the global level (Lewar, El Puang, & Lawotan, 2023). Lesson study also strengthens teacher collaboration and communication, building solidarity and cooperation (Alifah, 2019). Overall, lesson study improves the quality of education and prepares the younger generation to face future challenges, creates an inclusive and

sustainable education system, and produces graduates with strong character and the ability to think creatively and critically (Pujiastuti, M.Irfan, & Yunus, 2024).

This research aims to analyze the impact of lesson study on improving creative thinking abilities and learning outcomes for social studies students at MTsN Batu City. The research subjects consisted of 70 class VIII students. Using a classroom action research (PTK) design, this research is expected to improve the quality of social studies learning and provide practical recommendations for teachers and schools. This research aims to find empirical evidence of the effectiveness of lesson study in improving creative thinking and student learning outcomes, as well as identifying supporting and inhibiting factors for its implementation. Practical recommendations for teachers are also expected to optimize social studies learning. Lesson study is expected to be an effective solution to improve the quality of education in Indonesia, especially in social studies subjects at MTsN Batu City.

2. Methods

2.1. Research Design

This study uses both qualitative and quantitative approaches. It employs a classroom action research (PTK) design with four stages: planning, action, observation, and reflection. (Sugiyono, 2014). 1) Planning: Social studies researchers and teachers design learning plans to improve students' creative thinking abilities, including objectives, methods, tools, learning materials, and data collection instruments such as observation sheets, interview guides, and learning outcomes tests. 2) Action: Social studies teachers implement lesson plans in the classroom while researchers and other teachers observe students' interactions, responses to teaching methods, and their involvement. 3) Observation: Data from observations records student responses, participation in discussions, and completion of assignments. Findings are used to identify areas of improvement and design effective strategies for the next cycle. 4) Reflection: Researchers and teachers discuss the results of observations and learning outcomes tests to evaluate the effectiveness of the learning plan and identify the strengths and weaknesses of the approach used.

2.2 Population and Sample

The population used is limited and homogeneous. The subjects were 70 students of class VIII MTsN Batu City. Data was collected through observation, interviews, and learning outcomes tests. The sampling technique used the Purposive Sampling technique, which means taking data sources by considering various factors based on certain objectives to determine the subjects of this study. (Sugiyono, 2014).

2.3 Data Collection

Data collection was conducted through observation, interviews, and learning outcome tests. Through interviews, researchers wanted to know more about respondents' answers using the help of interview guidelines to facilitate and focus the questions to be asked. With observations and learning

outcome tests, researchers can discover the development of Lesson Study in Improving Creative Thinking and Student Learning Outcomes.

2.4 Data Analysis

Qualitative data were analyzed using thematic techniques to understand patterns in student and teacher responses. Quantitative data was analyzed with descriptive and inferential statistics to test hypotheses and determine significant differences in student learning outcomes before and after lesson study. This research aims to provide teaching strategies that improve students' creative thinking abilities and become a reference for teachers in developing innovative learning plans. The research results are expected to improve the quality of education in Indonesia, creating a learning environment that supports the development of student's creative thinking abilities to face the challenges of globalization.

3. Results and Discussion

In this research, data analysis was carried out after the lesson study, which showed an increase in students' creative thinking abilities in social studies subjects. Classically, cycle I was 60% to 85%; in cycle II, there was an increase of 25%; for cycle II to cycle III, it was 85% to 100%, an increase of 15%. The creative thinking ability of individual students was 75.8 in Cycle I to 79.2 in Cycle II; there was an increase of 3.4 or from 48 % to 72% in Cycle II, an increase of 24%, Value from Cycle II Results and Discussion.

To find out the value of the indicators of success in critical thinking skills as a group, use the formula:

$$\text{penilaian} = \frac{\text{Skor yang diperoleh}}{\text{Jumlah skor Max}} \times 100\%$$

To determine the value of the indicators of success in individual critical thinking skills, namely through an evaluation test, a minimum threshold for success is determined, namely:

Minimum Completeness Criteria 75. And to assess the percentage of individual problem-based learning completeness using the formula:

$$\text{Prosentase Ketuntasan} = \frac{\text{Jumlah siswa yang tuntas}}{\text{Jumlah siswa}} \times 100\%$$

To determine changes in the results of actions from cycle 1 to cycle II and cycle III obtained from the evaluation results, they were analyzed using the formula :

$$P = \frac{\text{Post Rate} - \text{Base Rate}}{\text{Base Rate}} \times 100\%$$

Information:

P = Improved Presentation.

Post rate = Average value after action

Base rate = Average value before action.

79.2 to the third cycle value of 87.4, then there is an increase of 8.2 or from 72% to 92%, so an increase of 20%.

The pre-test results show that ten students, or 40% of the students, achieved completeness in learning, while 15 students, or 60%, still need to complete it. Meanwhile, the average score obtained was 71.6. This shows that the results achieved by students still need to meet the targets they want to achieve. Based on the scores from the pre-test results above, it can be seen that using the lecture method alone without any other supporting methods cannot improve students' creative thinking abilities in analyzing a problem or case. Therefore, there must be other methods to activate students so they are enthusiastic and can improve their critical thinking skills in dealing with problems. After holding the pre-test, the core activities continued using the lesson study method by dividing students into five groups. The following are the results obtained by students in lesson study learning.

Table 1. Evaluation Results of Students' Creative Thinking Ability Using the Lesson Study Model in Groups in Cycle 1

Ex	Name	Group Assessment				Final score
		Cooperation	Case analysis	presentation	Results of group work	
1	A.E	3	3	3	70	71
2	F.J	2	2	2	70	70
3	KO	2	2	3	72	71
4	P- T	3	3	2	70	70
5	UY	3	2	3	70	70
Number of values		13	12	13	352	352
Average value		2.6	2,4	2.6	70.4	70.4
Percentage		65%	60%	65%	70.4%	70.4%

Based on table 1, the results of the evaluation of creative thinking skills in the groups above show that only 65% of students could cooperate. In contrast, in case analysis, the students were still relatively low, namely at 60%; in making presentations, 65% of students could complete the results of their discussions successfully. However, by answering questions, they were still unable to answer well. At the same time, regarding the results of student reports well, only 70% of students can make reports well systematically and classically, and only 70% of students can think creatively using lesson study in groups.

Table 2. Evaluation Results of Students' Creative Thinking Abilities Using the Lesson Study Model in Groups in Cycle 1

Ex	Name	Group Assessment	Final
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	Cooperation	Case analysis	Presentation	Group Results	Work	score
1	4	3	4	80		85
2	3	4	4	75		79
3	3	4	3	80		84
4	4	3	3	73		80
5	3	3	4	73		80
Number of Values	17	17	18	381		408
Average value	3,4	3,4	3.6	76.2		81.6
Success Percentage	85%	85%	90%	76.2%		82%

Based on Table 2, the results of the evaluation of students' creative thinking abilities in groups in cycle II above, it can be seen that there was an increase from cycle I to cycle II. The collaboration aspect increased by 20%. Case analysis increased by 25%, presentations increased by 25%, group work results increased by 10%, and final grades by 12% from cycle I to cycle II.

Table 3. Evaluation Results of the Implementation of Lesson Study in Improving Students' Creative Thinking Abilities Through Case Analysis in Cycle III

Ex	Name	Group Assessment					Final score
		Cooperation	Case analysis	Presentation	Group Results	Work	
1		4	4	4	90		96
2		3	4	4	85		86
3		4	4	4	90		91
4		4	4	4	83		84
5		4	4	4	83		84
Number of Values		19	20	20	431		441
Average value		3.8	4	4	86.2		88.2
Success Percentage		95%	100%	100%	86%		88 %

Based on Table 3, the results of the evaluation of students' creative thinking abilities in groups in cycle II above can be seen that there was an increase from cycle II to cycle III, cooperation items increased by 10%, case analysis by 15%, presentations increased by 10%, while group results from the cycle III 86% and final score 88%.

So that as a group, 86% of students have been able to think creatively using lesson study,

which is also proven through evaluation or individual test results, which can be seen in the following table. Apart from assessing in groups, to determine the success of the Lesson Study learning model in improving students' critical thinking skills, individual tests are held to determine the extent to which students understand problems or cases taken from up-to-date information related to disaster mitigation material through the following Lesson Study. Table:

Table 4. Evaluation Results of Individual Students' Creative Thinking Abilities in Cycle 1

No	Student's name	Problem					NA	Completeness	
		1	2	3	4	5		Complete	Not Completed
1	A	20	15	20	20	10	85	✓	
2	B	20	10	20	5	15	70		✓
3	C	20	10	20	5	15	70		✓
4	D	20	10	20	5	15	70		✓
5	E	20	10	20	5	15	70		✓
6	F	20	10	20	5	15	70		✓
7	G	20	10	20	5	15	70		✓
8	H	20	10	20	5	15	70		✓
9	I	20	15	20	20	10	85	✓	
10	J	20	15	20	20	5	80	✓	
11	K	20	10	20	5	15	70		✓
12	L	20	10	20	5	15	70		✓
13	m	20	15	15	20	15	85	✓	
14	N	20	15	15	15	15	80	✓	
15	O	20	15	15	15	15	80	✓	
16	P	20	10	20	5	15	70		✓
17	Q	20	10	20	10	15	75	✓	
18	R	20	20	20	15	15	90	✓	
19	S	20	15	20	15	15	85	✓	
20	Q	20	10	20	10	15	75	✓	
21	U	20	10	20	5	15	70		✓
22	V	20	10	20	5	15	70		✓
23	W	20	15	15	15	15	80	✓	
24	X	15	15	10	15	15	70		✓
25	Y	20	15	15	20	15	85	✓	

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Amount	495	310	465	270	355	1895	12	13
Average value	19.8	12.4	18.6	10.8	14.2	75.8		
Percentage of Lesson Study Completion							48 %	52%

Based on Table 4. results in evaluation in a way, the individual is known that 48% of students are complete and able to analyse well, 52% of students are still able to analyse cases and still need to complete the target minimum expected 80%. Matter this still needs to be achieved, then it is necessary to cycle II. The following are the results of the reflection from cycle III.

Table 5. Evaluation Results of Individual Students' Creative Thinking Abilities in Cycle II

No	Student's name	Multiple Choice Questions	Question Description / Case Analysis	NA	Completeness	
					Q	BT
1	A	70	20	90	✓	
2	B	60	25	85	✓	
3	C	60	25	85	✓	
4	D	60	25	85	✓	
5	E	60	20	80	✓	
6	F	60	10	70		✓
7	G	60	25	80	✓	
8	H	60	10	70		✓
9	I	60	25	85	✓	
10	J	60	25	85	✓	
11	K	60	10	70		✓
12	L	60	10	70		✓
13	m	60	25	85	✓	
14	N	60	20	80	✓	
15	O	60	20	80	✓	
16	P	60	15	75	✓	
17	Q	60	15	75	✓	
18	R	60	25	85	✓	
19	S	70	20	90	✓	
20	Q	70	10	80	✓	

21	U	60	10	70		✓
22	V	60	10	70		✓
23	W	60	20	80	✓	
24	X	60	10	70		✓
25	Y	60	25	85	✓	
Amount		1530	455	1980	18	7
Average value		61.2	18.2	79.2		
Percentage of Individual Completion in Lesson Study Learning					72%	28%

Based on Table 5. The results of the learning evaluation in cycle II showed an increase in the average score of 79.2, so there was an increase of 3.4 from cycle 1. Students have begun to be able to analyze well. This can be seen from the percentage of completion in cycle II of 72%. Shows an increase of 24%, which needs to be by the expected standard, namely a minimum of 80%, so treatment cycle III is needed.

Table 6. Evaluation Results of Individual Students' Creative Thinking Abilities in Cycle III

No	Student's name	Question Type			NA	Completeness	
		Multiple choice	Description	Case analysis		Q	BT
1	A	50	30	15	95	✓	
2	B	50	20	15	85	✓	
3	C	50	20	15	85	✓	
4	D	50	25	15	90	✓	
5	E	50	30	15	95	✓	
6	F	50	20	15	85	✓	
7	G	50	20	15	85	✓	
8	H	45	20	5	70		✓
9	I	50	30	10	90	✓	
10	J	50	25	10	85	✓	
11	K	50	20	15	85	✓	
12	L	50	25	15	90	✓	
13	m	50	30	15	95	✓	
14	N	50	30	15	95	✓	

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15	O	50	30	15	85	✓	
16	P	50	25	15	90	✓	
17	Q	45	30	15	90	✓	
18	R	50	30	10	90	✓	
19	S	50	25	10	85	✓	
20	Q	50	25	15	90	✓	
21	U	50	20	15	85	✓	
22	V	50	25	15	90	✓	
23	W	50	25	15	90	✓	
24	X	50	10	10	70		✓
25	Y	50	25	15	90	✓	
Amount		1,240	615	340	2185	23	2
Average value		49.6	24.6	13.6	87.4		
Percentage						92%	8%

The value of 72% in the second cycle to 92 % in the third cycle has met the specified standard, namely 80%; therefore, the Lesson Study learning cycle was stopped.

The way to find out students' responses to learning in social studies through lesson study is as follows:

Table 7. Student Responses to Social Sciences Lessons

No	Question	Frequency			Percentage		
		Yes	No	Someti mes	Yes	No	Someti mes
1	Do I understand the article or problem?	20	3	2	80%	12%	8%
2	Do I look for and explain cases with relevant issues?	15	5	5	60%	20%	20%
3	Am I receiving information without knowing its basis or source?	3	20	2	12%	80%	8%
4	Do I develop the information given by the teacher?	12	11	4	48%	44%	16%
5	Can I name examples that are different from those that already exist?	16	5	4	64%	20%	16%

6	Do I dare to speak up to express my opinion and ask questions about what is unclear?	16	9	-	64%	36%	-
7	Do I support my opinion with evidence or references related to the problem?	16	9	-	64%	36%	-
8	Do I ask for clarification when unclear about what has been said?	20	3	2	80%	12%	8%
9	Am I bound to just one opinion?	22	-	3	88%	-	12%
10	Do I accept other people's opinions that differ from my own?	22	2	1	88%	8%	4%
11	Am I polite when speaking and able to control my emotions if an opinion differs from mine?	22	2	1	88%	8%	4%
12	Do I understand the learning material with any problems/news related to the learning material?	24	-	1	96%	-	4%
13	Studying social studies using the lesson-study learning model made me understand the material well	24	-	1	96%	-	4%
14	Studying social studies using the lesson-study learning model made me understand the cases that are happening now, and I was able to combine them with the material I was studying	24	-	1	96%	-	4%
15	Studying social studies using the lesson study model made me gain new knowledge other than through books	24	-	1	96%	-	4%

To assess How much creative thinking ability students have can be seen in Table 7. The questionnaire has several questions; this is very important because it determines how much creative

thinking ability students have and how students respond to using lesson study. Based on the results of the questionnaire, the highest percentage of student responses to problem-based learning is that students can better understand articles facilitated by the teacher in lesson study and sort the information received so that students do not just accept information without knowing the basis and source, and can develop the information conveyed by the teacher, mention examples that differ from existing ones (Marmer, 2006). Being willing to speak to convey opinions and ask questions about what is not clear, strengthening their opinions with evidence or references related to the problem, being willing to ask for clarification when students are not clear about what is explained by the teacher can increase students' creativity and critical thinking in social studies learning.

Lesson study is a model for developing the teaching profession through collaborative and continuous learning assessments to build a learning community (Pangestuti, 2017). It is said to be collaborative and sustainable to build a learning community in the learning process; teachers work together to plan, teach, and observe learning that they develop cooperatively. Learning using lesson study is created collegially to develop critical thinking and generate innovative work that students produce. This principle is emphasized in the learning scenarios (Lesson Design) teachers use, which must generate high-level learning objectives beyond standard ones. This research aims to find empirical evidence of the effectiveness of lesson study in improving students' creative thinking abilities and learning outcomes, as well as identifying supporting and inhibiting factors in its implementation. In addition, this research provides practical recommendations for teachers to optimize social studies learning. Lesson study is an effective solution for improving the quality of education in Indonesia, especially in social studies subjects at MTsN Batu City. The effectiveness of lesson study in improving creative thinking from the results of observations and interviews shows a significant increase in students' creative thinking abilities. Students more actively participate in discussions, propose new ideas, and demonstrate better analytical skills. This increase aligns with the findings, which state that lesson study encourages a collaborative learning environment that improves students' critical and creative thinking abilities. Learning Results: Quantitative data from the learning results test show an increase in the average student score from 75 to 85 after implementing the lesson study, with a statistically significant difference ($p < 0.05$). This finding is supported by research by Fernandez and Yoshida (2004), which states that lesson study can improve student learning outcomes through continuous improvements in teaching methods. In addition, Fernandez and Yoshida (2004) also describe Japanese lesson study as 'a systematic investigation of teaching practices, which happens to be carried out by examining lessons'. In its simplest form, we can describe lesson study as a form of teacher inquiry in which teachers collaboratively plan lessons in response to research questions, observe the lessons being taught, and then discuss what they have learned about teaching and learning (Fernandez & Yoshida, 2004).

The following are supporting and inhibiting factors for implementing lesson study:

a. Supporting factors:

- Teacher Collaboration: Teachers feel more motivated and supported through working together in designing and implementing learning plans. This collaboration creates a

supportive environment for sharing ideas and best practices, as suggested by Stigler & Hiebert (1999) In their research on the effectiveness of lesson study in Japan.

- Resources: Access to adequate learning materials and tools helps implement lesson study smoothly. This shows that adequate resource support is crucial for the success of this program, as stated by Dudley (2014) .
- School Commitment: Full support from the school in providing time and facilities for implementing lesson study is very important. This commitment reflects the importance of institutional support for the success of innovative educational programs, as demonstrated in a study by Chokshi and Fernandez (2004) Chokshi & Fernandez (2004) .

b. Obstacle factor:

- Time Limitations: The planning and reflection process requires quite a long time, which is sometimes difficult to fit into a busy teaching schedule. Time limitations are often an obstacle in implementing teaching methods that require intensive reflection and collaboration, as stated by Lewis & Hurd (2011) .
- Variation in Teacher Ability: Differences in ability and experience between teachers can hinder collaboration. This highlights the need for ongoing training and professional development to equalize teacher ability levels, as suggested by Doig & Groves (2011) .
- Resistance to Change: Some teachers resist new methods and prefer conventional ones. This resistance is often caused by a lack of understanding or belief in the effectiveness of new methods, as found in research by Hargreaves (2005) .

c. Practical Implications

The implementation of lesson study not only provides direct benefits in improving student learning outcomes and strengthens teachers' professional competence in designing and implementing student-centered learning. Teachers at MTsN Batu City report increased confidence in implementing more innovative and interactive learning strategies and the ability to adapt the curriculum according to student needs.

4. Conclusion

Lesson study, which involves collaboration between teachers in planning, observing, and reflecting on the learning process to improve and optimize teaching practices continuously, should be carried out sustainably; this finding is supported by research by Fernandez and Yoshida (2004). This research shows that the implementation of lesson study at MTsN Kota Batu has proven to be effective in improving creative thinking abilities and student learning outcomes in social studies subjects; this is in line with the findings expressed by Lewis et al. (2006), which state that lesson study encourages a collaborative learning environment that improves students' critical and creative thinking abilities. Lesson study also provides new insights into effective teaching strategies, increases teacher collaboration, and supports the development of a sustainable education system. Practical

recommendations from this research can help teachers optimize social studies learning and are expected to be applied more widely in other schools in Indonesia.

5. References

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