

Practice of Lesson Study in Action Research: Improving The Quality of Teachers' Lessons

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ABSTRACT

Collaborative practice among teachers in Malaysia is increasingly being promoted through professional learning communities (PLCs). Lesson Study has been found to help teachers improve the quality of their Daily Teaching Plans (DTPs). Through the implementation of this Lesson Study, Lesson Study experts integrated elements of action research to improve teachers' classroom practice. The study involved a novice teacher teaching Form Two History in a school in Sarawak, Malaysia. The study was conducted over a period of three months. Data collection was done using data triangulation methods namely document analysis, informal interviews, and observation. The findings of the study proved that the practice of lesson study had been successful in helping teachers to design the lesson plan better and in accordance with the Standard Curriculum and Assessment Document (DSKP) of the Form Two History subject. Teachers were also able to design activities that are in line with students' abilities and intelligence. In addition, through this lesson study, teachers' confidence in teaching content in the classroom could be improved, and students' active participation could be promoted. In conclusion, teachers are encouraged to continuously cultivate the practice of Lesson Study to improve the quality and practice of teaching in the classroom.

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INTRODUCTION

Lesson Study is a popular method in the professional development of teachers and it has been widely used in Japan since the 1870s (Soner, 2019). Now, Lesson Study is widely used in education in Malaysia and has become one of the components of the Professional Learning Community (PLC). School teachers make Lesson Study as one of the initiatives to strengthen their teaching practices in the classroom. Based on the widely held belief and perception that improving teachers will then improve teaching practices, professional development has become one of the main agendas in education reform (Chiew, Mohd & Lim, 2016). As you already know, when the teacher's teaching practice is improved, it will indirectly have an impact on student learning. Training aimed at the professional development of teachers is not something new. It is dynamic and has changed according to various perspectives that are clearly focused on change. The action research writing will be presented at the school level and competed up to the national level (Asada, 2012; Reiko Yoshihara, 2020). Indirectly, the production of action research becomes a measuring stick for the effectiveness of development programs for new teachers in schools (Kiyomi Akita 2014; Reiko Yoshihara, 2020) and the role of teachers (Stoeger et al., 2021; Weile et al., 2016; Xu & Liu, 2011).

Saadiah, Jamal and Hamidah (2020) argued that a high academic background among teachers is not a yardstick for the value of professionalism in performing tasks. Teachers' teaching experience is very important in increasing the value of professionalism regardless if the academic background is high or average.

ISSUES AND PROBLEMS

The reflection on issues and problems began with the sharing of a novice teacher who was assigned to teach History subject which was not his option. He mentioned that it was difficult to teach the subject due to his inability to master the content of the History subject. In addition to that, he was still unable to grasp the ability to create a Daily Teaching Plan (DTP) which catered to the learning standards as he was a novice teacher. The problems were detected after an observation session was done by the Head of History Panel during one of the lessons conducted by the novice teacher. Based on the observation, it was found that the teacher was unable to deliver the lesson effectively and the teaching and learning processes were still teacher-centered. Therefore, the first cycle of lesson study was conducted in order to examine the issues and problems faced by the teacher and students. Based on the first observation, the members of the lesson study found a few matters that affected pupils' inability to master a topic and achieve the learning objectives. Moreover, it was found that students were unable to think critically. Teachers noticed that students' thinking abilities were

limited to answering concrete facts only. It was proven when the students were unable to achieve the objectives of the lesson although the teacher tried to explain the situations using imaginations and analogies. Hence, the teachers used the cognitive development theory by Jean Piaget which focuses on children's cognitive development to analyse their problems.

OBJECTIVES

GENERAL OBJECTIVES

To improve the teacher's DTP in accordance to the learning standards stated in the Curriculum and Assessment Standard Document (DSKP).

2. To enhance the teacher's teaching practices based on the 21st century teaching and learning concept.

SPECIFIC OBJECTIVES

To improve pupils' abilities to think critically through a better DTP.

To improve pupils' abilities to think critically by integrating the 21st century teaching and learning abilities in the classroom.

METHODOLOGY

The Lesson Study was conducted at a secondary school in Selangau district in Sarawak, Malaysia. It is located about 30 km from the nearest town which is Selangau. The study was led by an SISC+ for Social Science of the Selangau District Education Office and participated by ten teachers comprised of History teachers, English language teachers, Science teachers and Physical and Health Education teachers. The aim of the study was to aid a novice teacher to create a lesson plan which catered to pupils of different performance levels and to adopt the 21st teaching and learning activities in the lesson in order to improve the teacher's teaching technique in teaching History subject.

The study was done in two cycles. In the first cycle, all of the Lesson Study members gathered together for the first meeting. In the meeting, the members discussed and created the lesson plan together. The Lesson Study was conducted with a Form Two class on the topic of Religions and Beliefs. The class consisted of pupils with different performance levels and learning styles. After the lesson plan was created, the History teacher conducted the lesson and it was attended by the Lesson

Study club members in the school. Each teacher was given a role as the videographer, stenographer, overall observer and case pupils observers. During the lesson, all teachers were asked to fill in a form to write about what they had observed in the lesson according to their respective roles.

After the lesson was conducted, all the Lesson Study members sat together to reflect upon the lesson. Each member was required to provide their feedback based on their roles. After getting the comments and feedback from all the teachers, the Lesson Study team sat together to amend the lesson plan for the second cycle. The data was collected using document analysis, observation and informal interviews with the teacher and pupils.

FINDINGS

Cycle 1

The first cycle of Lesson Study was conducted on 24 July 2023. Cycle 1 involved a total of 10 teachers from the History committee, the English committee, the Science committee and the Physical and Health Education committee (PJPK). Lesson Study members had made conclusions based on observations made during the teaching session in the classroom.



Figure 1: The teachers were briefed by the History teacher before conducting his lesson.

The findings of the first cycle of Lesson Study were based on the following observations:

Teacher's Daily Lesson Plan

The teacher's Daily Lesson Plan was very simple and it was not based on the learning standards embedded in the DSKP. In the teacher's lesson plan, only the activities and summary sections were recorded. The learning objectives were also not written clearly and they only focused on the low order thinking skills. Additionally, no elements of Higher Order Thinking Skills (HOTS) and Citizenship were included in the writing of the lesson plan.

Minggu		Hari	12/05/2023	Tarikh	12/05/2023
Mata Pelajaran		Kelas	2 Creative	Masa	10.30 – 11.30
Sejarah					
Standard Kandungan	5.2 Warisan Kerajaan Alam Melayu				
Standard Pembelajaran	5.2.3 Menjelaskan sosiobudaya masyarakat kerajaan Alam Melayu				
Kriteria Kejayaan	Murid dapat: 1. Mengetahui warisan kerajaan Alam Melayu				
Aktiviti	<p>Set induksi</p> <ul style="list-style-type: none"> Murid dikongsikan tentang sistem pemerintahan dan kegiatan ekonomi <p>Aktiviti</p> <ol style="list-style-type: none"> Murid dibahagikan kepada kumpulan kecil dan suruh membaca tentang sosiobudaya masyarakat kerajaan Alam Melayu Dalam kumpulan murid disuruh untuk menulis tentang sosiobudaya masyarakat kerajaan Alam Melayu yang dibaca mereka. Setiap kumpulan membentangkan hasil kerja mereka. <p>Penutup</p> <ul style="list-style-type: none"> Guru bersoal jawab dengan murid tentang pembelajaran mereka hari ini. 				
REFLEKSI					

Figure 2: The teacher's daily lesson plan during the first cycle of Lesson Study

Teacher's preparation

During the teaching and learning session, the learning objectives were not stated and explained to the students. Consequently, the students were not clear with what they had to achieve at the end of the teaching and learning session. The teacher continued to start the teaching and learning session with a continuous explanation and interspersed with a simple question-and-answer session. In this question-and-answer session, the questions asked by the teacher were very general and unfocused. Subsequently, many students were unable to answer the questions.

Students' Attitude

It could be observed that throughout the teacher's teaching session in Lesson Study Cycle 1, the students showed an inactive attitude in the teaching and learning session. During the group activity, the students carried out the tasks given by the teacher but the discussion session was not carried out properly. It could be due to the instructions given by the teacher were not clear and poorly understood by the students. It could be seen that only one student wrote and searched for information in the textbook. The rest of the group members just kept quiet and watched.



Figure 3: Most students were passive during the group activity and did not contribute their ideas.

Teaching Aid Materials (TAM), Teaching Aid Tools (TAT) and Learning Aid Materials (LAM)

During the teacher's teaching and learning session, there were no study teaching and learning aids provided by the teacher. As a result, students faced difficulties in getting information because they only relied on the History textbooks. Form 2 Creative consisted of students who performed mostly

at low and medium levels. For students who were at a low level, they need learning aids to strengthen their real understanding of the subject matter.



Figure 4: Students only relied on their textbook to find the information.

Cycle 2

Cycle 2 of the Lesson Study was implemented on 7 August 2023. It involved the same line-up of teachers as in the previous Cycle 1 session. Before implementing the second cycle, all of Lesson Study members sat down to discuss on ways to help the teacher build a better lesson plan. The discussion session was conducted using the Form 2 History DSKP as the main reference. The teachers also collaborated to build the teaching and learning materials for the Cycle 2 session. During Cycle 2, the Lesson Study members made a summary based on the observations made during the teaching session in the classroom.



Figure 5: Teachers discussed the findings of the first cycle of Lesson Study.

The findings of the first cycle of Lesson Study were based on the following observations:

Teacher's Daily Lesson Plan

After implementing the Professional Learning Community (PLC) Lesson Study, teachers could build lesson plan items based on the DSKP. The items were written in a more structured and systematic manner guided by the DSKP as shown in Figure 6. It could be seen on the teacher's lesson plan that the teaching objectives were clearly written and suitable for the various performance levels of students. The construction of objectives also took into account the low, medium and high performance levels of students. Along with the learning objectives, the teaching and learning activities were also planned according to the students' performance levels. There were also improvements in the construction of the teacher's set induction activity where he used a video screening as an initial stimulation material before the teaching and learning session began. Additionally, the teacher had successfully integrated the elements of HOTS and Cross-curricular Element (CCE) which was Citizenship in the lesson plan by including HOTS questions.

Rancangan Pengajaran Harian			
Minggu	Hari	Tarikh	Masa
Mata Pelajaran Sejarah	Kelas 2 Creative	18/10/23	10.30 - 11.30
Standard Kandungan	5.2 Warisan Kerajaan Alam Melayu		
Standard Pembelajaran	5.2.4 Menerangkan agama dan kepercayaan masyarakat kerajaan Alam Melayu		
Objektif Pembelajaran	<ol style="list-style-type: none"> Murid dapat menyatakan sekurang-kurangnya 3 contoh agama dan kepercayaan bagi masyarakat kerajaan Alam Melayu (Araas rendah) Murid dapat menguraikan cara penyebaran agama dalam kerajaan Alam Melayu (Araas sederhana) Murid dapat menerangkan tentang kepentingan amalan beragama dalam kehidupan manusia (Araas tinggi) 		
Aktiviti	<p>Set Induksi</p> <ul style="list-style-type: none"> Tayangan video berkaitan agama dan kepercayaan masyarakat di Malaysia Murid menonton tayangan video guru dan diminta menjawab soalan kuit berdasarkan video <p>Aktiviti</p> <ol style="list-style-type: none"> Murid dibahagikan kepada kumpulan (seperti mana yang telah dilakukan pada sesi pdpc yang lalu) Di dalam kumpulan murid diminta untuk mengeluarkan maklumat pada buku teks di muka surat 56-59 dan menterjemahkan maklumat tersebut dalam bentuk peta minda. Setiap kumpulan diberikan soalan KBAT berkaitan dengan tajuk pengajaran. Soalan KBAT : Pada pendapat anda, apakah kepentingan amalan beragama kepada kehidupan seharian manusia? 4 markah Dalam kumpulan, murid diminta untuk memberikan pendapat masing-masing berkaitan dengan soalan KBAT (1 Murid 1 idea). Jawapan diterjemahkan di dalam bentuk peta minda. Setiap kumpulan diminta untuk membentangkan hasil perbincangan kumpulan secara ringkas. Hasil dapatan murid di kukuhkan lagi dengan penerangan daripada guru untuk menambahkan kefahaman murid. Sesi soal jawab bertukar di antara murid dan guru berkaitan dengan tajuk (agama dan kepercayaan) untuk mendalami lagi isi pengajaran. Sesi soal jawab diselang seli dengan kuit ringkas Hasil kerja kumpulan diletakan pada stesen yang ditetapkan untuk sesi Gallery walk. Murid diminta memberikan pendapat masing-masing terhadap hasil kerja kumpulan menggunakan "sticky notes" Selesai gallery walk, beberapa murid dipilih secara rawak untuk merumuskan aktiviti pdpc pada hari ini. Guru memberikan lembaran kerja yang mengandungi 4 soalan ringkas untuk menguji tahap kefahaman murid pada akhir sesi pdpc. <p>Penutup</p> <ul style="list-style-type: none"> Guru bersoal jawab dengan murid tentang pembelajaran mereka hari ini. 		
ABM/BBB/BBM	Kertas A4, Pen, Marker, Selotap, Kertas Majong, LCD, Buku teks, Buku rujukan, Speaker		
REFLEKSI			

Figure 6: The lesson plan was more detailed and aligned with the learning standards in the DSKP.

Teacher's Preparation

The discussion session with the teacher and the Lesson Study members had successfully improved the teacher's confidence and consequently the teacher's teaching and learning session in the classroom seemed more enthusiastic. The teacher was more confident in conducting the lesson and was more in control of the Learning Standard (SP) compared to the previous teaching session. It could be seen that the teacher was more prepared with a variety of questions and used different questioning techniques to help students with different performance levels. The teacher was more creative in forming classroom arrangements that suited the students' performance levels and subsequently the teacher was able to control the classroom situation better. The teacher's teaching and learning session was also more organized starting with induction set, activities and also a summary session. Throughout the teaching and learning session, the teacher only acted as a guide while the students conducted the activities with minimal help from him. This indirectly made it easier for the teacher and the teaching and learning session to run smoothly. The impact of the construction of daily lesson plan items with all of the lesson study members had made the teacher's teaching atmosphere to conceptualise the 21st century teaching and learning.

Students' Attitude

Based on the comparison between Cycle 1 and Cycle 2 of the Lesson Study, there was a very significant

change in the students' attitude which had resulted from the teacher's improvement in building a better

lesson plan. When the teacher's lesson plan improved, the teaching and learning sessions in the classroom also could be implemented in a more systematic manner. This had indirectly impacted student behaviours in the classroom. Students had participated actively in the teacher's teaching and learning session. Pupils also gave full attention during the video screening session during the induction set and gave positive responses during the brief question-and-answer session with the teacher. Even more interesting, the students were also able to give a brief summary related to the video with regards to the subject matter.

In addition, another significant change in students' attitude was that the students became more confident to answer the questions asked by the teacher. This could be seen when students were

competing to answer the quiz questions presented by the teacher. The answers given were also more insightful and related to the facts found in the Form 2 History textbook. One of the factors

that made students became more enthusiastic and competitive was because the teacher had provided small tokens to students who successfully answered the questions correctly. This created an interesting teaching atmosphere and active students' involvement. At the same time, the students had successfully completed the assignments given by the teacher on time. This proved the value of cooperation among students through improved group activities.



Figure 7: Students were given i-Think map to help them find the information easier from the textbook.

Students' Reflection

After the teaching and learning session, the student's reflections were recorded by the teacher. Based on the reflection notes, the students stated that they enjoyed the teaching and learning session conducted. They also mentioned that they liked the group activity and presentation. Pupils thought that it was easier for them to understand the essence of learning if collaborative teaching and learning was done in the classroom.



Figure 8: Students' reflection notes

DISCUSSION

The PLC Lesson Study do not only help in improving the teacher's daily lesson plan, but it has also become a platform for teachers to discuss and share teaching and learning issues in the classroom. Issues in the classroom will be the main focus for Lesson Study members to design and build effective lesson plan items. This indirectly will facilitate the teacher's preparation for their teaching and learning sessions. The Lesson Study practice also will bring together experienced and novice teachers to discuss and learn through the process of collaborative planning, observation and analysis in addition to looking at aspects of students learning through the eyes of others. This will help the teachers in making a comparison of the actual learning observed in the Lesson Study with the teacher's learning (Fanidarwati & Abdul Halim, 2022).

Additionally, the practice of collaboration applied during the construction of teachers' lesson plan items has had a great impact on teaching (Fanidarwati & Abdul Halim, 2022). While implementing this PLC, teachers help each other to build suitable lesson plan by using existing teacher skills. The value of this collaboration has indirectly succeeded in fostering the confidence of teachers who teach. This is evidenced by the nature of cooperation that benefits teachers' teaching through sharing ideas, working together in overcoming challenges, and building their confidence as teachers (Fanidarwati & Abdul Halim, 2022).

Through PLC Lesson Study, teachers also have become more creative by implementing diverse teaching styles in the classroom. Consequently, teachers are able to think of suitable interventions to attract students' interest during the teaching and learning session.

CONCLUSION

The practice of Lesson Study should be continued among teachers since the impacts will lead to positive changes, especially to teachers' teaching practices in the classroom. Through improving the construction of lesson plan items, the teaching and learning in the classroom will become interesting and efficient. Active student involvement and a cheerful classroom atmosphere will influence a teacher's confidence in delivering a lesson. It can be concluded that apart from being a platform for teachers to share issues and discuss effective solutions, the implementation of Lesson Study can also be used as one of the strategies to develop innovative teaching approaches, improve

the curriculum, share the best teaching approaches, develop teacher performance, develop student abilities and develop practical theories of education (Fanidarwati & Abdul Halim, 2022).

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