

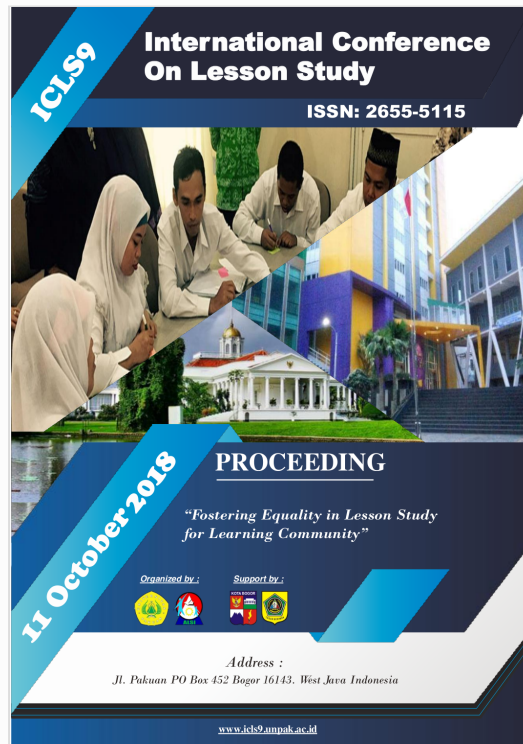


Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author: Artikel 10
Assignment title: Nurwidodo 3
Submission title: Implementation of lesson study for learning community (LSL...
File name: Implementation_of_lesson_study_for_learning_community_L...
File size: 5.82M
Page count: 18
Word count: 5,690
Character count: 31,982
Submission date: 26-Sep-2024 12:06PM (UTC+0700)
Submission ID: 2465943527




Artikel 10

Implementation of lesson study for learning community (LSLC) impact on piloting school teachers in Batu City

 Nurwidodo 3

 Kepangkatan Dosen

 University of Muhammadiyah Malang

Document Details

Submission ID

trn:oid::1:3020979773

Submission Date

Sep 26, 2024, 12:05 PM GMT+7

Download Date

Sep 26, 2024, 1:22 PM GMT+7

File Name

Implementation_of_lesson_study_for_learning_community_LSLC.pdf

File Size

5.8 MB

18 Pages

5,690 Words

31,982 Characters

8% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text

Exclusions

- 10 Excluded Sources

Match Groups

- 29 Not Cited or Quoted 8%**
Matches with neither in-text citation nor quotation marks
- 0 Missing Quotations 0%**
Matches that are still very similar to source material
- 0 Missing Citation 0%**
Matches that have quotation marks, but no in-text citation
- 0 Cited and Quoted 0%**
Matches with in-text citation present, but no quotation marks

Top Sources

- 7% Internet sources
- 4% Publications
- 1% Submitted works (Student Papers)

Integrity Flags

1 Integrity Flag for Review

- Hidden Text**
0 suspect characters on 1 page
Text is altered to blend into the white background of the document.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **29 Not Cited or Quoted 8%**
Matches with neither in-text citation nor quotation marks
- **0 Missing Quotations 0%**
Matches that are still very similar to source material
- **0 Missing Citation 0%**
Matches that have quotation marks, but no in-text citation
- **0 Cited and Quoted 0%**
Matches with in-text citation present, but no quotation marks

Top Sources

- 7% Internet sources
- 4% Publications
- 1% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1	Internet		
		repository.unpas.ac.id	2%
2	Internet		
		www.semanticscholar.org	2%
3	Internet		
		eprints.umk.ac.id	2%
4	Publication		
		...00000 0000000 00000 000 0000 000 0000 000000 000000".0000 0000 000 00000	1%
5	Publication		
		Deborah Masniari, Nova Susanti, Neneng Lestari, Azfin Gustria. "Describing Stude...	1%
6	Internet		
		doaj.org	1%
7	Internet		
		dosen.undiksha.ac.id	1%

International Conference On Lesson Study

ICLS9

ISSN: 2655-5115



11 October 2018

PROCEEDING

*“Fostering Equality in Lesson Study
for Learning Community”*

Organized by :



Support by :



Address :

Jl. Pakuan PO Box 452 Bogor 16143. West Java Indonesia

WELCOMING SPEECH FROM RECTOR OF UNIVERSITAS PAKUAN

Distinguished President of Association of Lesson Study Indonesia, Mr. Sumar Hendayana, Ph.D.
Distinguished keynote Speakers/invited speakers
Respectable Delegates and Guests
Honorable Presenter and participants
Ladies and Gentlemen...

Welcome to the 9th International Conference on Lesson Study (the 9th ICLS) at Universitas Pakuan Bogor Indonesia. It is organized with the aim of sharing information and discoveries related to research-based lesson study.

Lesson Study is an improved learning quality approach implemented by teachers in a collaborative manner to achieve the learning objectives, to carry out learning, to observe the implementation of the lesson, and to reflect on the learning studied for improvements in the next lesson plan. The main focus of lesson study implementation is student activity in the classroom, assuming that the student activity is related to teacher activity during classroom teaching.

Since Universitas Pakuan got the Grant of Lesson Study from the Ministry of Research, Technology and Higher Education in 2012. Universitas Pakuan consistently implemented the Lesson Study. We have collaborated with many schools in Bogor, and some of them are our piloting school. Currently, two faculties implemented Lesson Study there are Faculty of education and faculty of Mathematics and Natural Sciences.

This conference is expected to provide and share information about the development of lesson study implementation results in each country.

Thank you for your attention, and have a nice conference...

INTRODUCTION

Sumar Hendayana, Ph.D
(Presiden ALSI)

3
3
4
3
1

Nine years ago faculty of Mathematics and Science of University of Education of Indonesia (UPI) was initiating the commencement of a conference on Lesson Study for disseminating the best practice of Lesson Study of SISTEMS (Strengthening In-service Teacher Training of Mathematics Education at Secondary Levels) in West Java. The Implementation of Lesson Study was started from one regency in West Java namely Sumedang. Then, it spreads into 16 regencies in West Java. The conference of Lesson Study had been well known as Indonesia Conference on Lesson Study (ICLS). The first through the fifth ICLS was held by Indonesia University of Education supported by the Education Departement of the Government of West Java that involved all teachers in West Java Province. In order to build up the network of lesson study to be wider in the level of national and international, all initiators of lesson study in Indonesia agreed that the 6th ICLS in 2015 and the following years will be held at other universities in Indonesia. Therefore, the 6th ICLS in 2015 was held at Ganesha University of Education in Singaraja Bali. Since the commencement of the 6th ICLS, it was spreaded into the International Conference on Lesson Study (ICLS). In 2016 the 7th ICLS was held at University of Muhammadiyah Malang and Hamzanwadi University held the 6th ICLC in Lombok.

1
3
4
3
1

The University of Pakuan will host the 9th ICLS which will be held on 11-13 October 2018. The theme of the conference is **Fostering Equality in Lesson Study for Learning Community**. Attending the 9th ICLS, participants will gain invaluable frontier knowledge about education and pedagogy since the 9th ICLS has confirmed the attendance of the caliber international speakers such as Professor Manabu SATO from Japan, Professor Christine Lee from Singapore, Professor Siripaarn Suwanmonkha from Thailand, Professor Anna Permanasari from Indonesia, and Sumar Hendayana, Ph.D. the president of ALSI. Besides, the 9th ICLS will facilitate the experts of elementary, secondary, and higher education to share their experiences or the results of their innovation especially in learning improvement that is specially developed through lesson study. The special characteristic of ICLS is that during the commencement of the conference, there will be a package of "school visit". In this session, the participants of the conference will be led to visit the schools that have implemented lesson study. Therefore, the participants will get opportunity to observe the student learning through lesson study which guide the students to learn by utilizing the local materials. I as the president of ALSI cordially invite the policy makers, education stake holders, and education practitioners to participate in the 9th ICLS. The other advantage of taking part in the 9th ICLS is all participants will automatically become the member of the Association of Lesson Study Indonesia (ALSI). I wish the 9th ICLS in University of Pakuan in Bogor can run very well as it is expected.

A FOREWORD OF THE CHAIRPERSON OF THE 9th ICLS

FOSTERING EQUALITY IN LESSON STUDY FOR LEARNING COMMUNITY

Dr. Eri Sarimanah, M.Pd

The Chairperson of the 9th ICLS

Assalamu'alaiykum Wr. Wb

A warm welcome extended to the publication of this edited abstract book, an abstract collection of plenary papers and parallel papers under the sponsorship of the 9th **International Conference on Lesson Study** theme "Fostering Equality in Lesson Study for Learning Community." ICLS is an annual meeting (henceforth conference) conducted by among scholars and practitioners who are concerned with sound research and solemn discussion in a classroom context where situated in lesson study. Chiefly this context, this annual meeting becomes a mandatory for conducting the 9th ICLS. The 9th ICLS is organized by Universitas Pakuan Bogor in collaboration with Indonesian Association of Lesson Study (henceforth ALSI) and the Ministry of Research, Technology and Higher Education. This conference is conducted on 11th – 13th October 2018.

Throughout this foreword, we would like to express our sincere gratitude due the following invited keynote speakers of this conference; Prof. Manabu Sato, Ph.D (Gakushuin University, Japan), Prof. Christine Lee, Ph.D (Nanyang Institute of Education, NTU Singapore), Prof. Dr. Anna Permanasari, M.Si (Pakuan University, Indonesia), Prof. Assoc Tatsuya Kusakabe, Ph.D (**Center for the Study of International Cooperation in Education; CICE**, Hiroshima University, Japan), Sumar Hendayana, Ph.D (Indonesia University of Education, Indonesia), Prof Siripaarn Suwanmonkha, Ph.D (Chulalongkorn University, Thailand), , due to their contributors to the 9th ICLS mission. Our sincere appreciation is due to subsequent to the following speakers; Ms. Naomi Takasawa (JICA, Japan), Rie Takahashi (PICO, Thailand), Prof. Yoshida Kazuhiro, Ph.D (Hiroshima University, Japan), Ms. Yamane Tomomi (Hiroshima University, Japan), Prof. Chayapim (Chulalongkorn University, Thailand), Yoko Takimoto (Gakushuin University, Japan), Kanoko Katanayagi (Tokyo University, Japan), Zanaton binti Hj. Iksan, Ph.D (University Kebangsaan Malaysia), Sayyidah (University Kebangsaan Malaysia), Noel Jimbai, Ph.D (Sarawak, Malaysia). Additionally, we would like to express our thanks to the practitioners, researchers, teachers, school principles, and others who are willing to contribute an article to this valuable conference. Their ideas, experiences and recent research findings in the field of teaching and learning process based on lesson study are value-added teacher professional development.

School visit plays an influential role for every Lesson Study conference, so is throughout the 9th ICLS. In the 9th ICLS, four partner schools are applying 'Do' cycle for host school visit. The school are namely SDN Kencana 3, SMPN 1 Cigombong, SMPN 3 Cibinong and SMPN 4 Cibinong. Therefore, this school visit remains as one of the main agendas of the 9th ICLS. This school visit is issued of the last day of ICLS. Throughout the school visit, the trained teachers will present best practices to the 9th ICLS participants. It is aimed at providing a completed and fruitful experience for in the implementation of Lesson Study to all participants. Overall this conference covers valuable plenary sessions. Moreover, we conceded around 123 registered papers form Indonesia, Japan, Singapore, Thailand, and Malaysia where presented in parallel sessions. It will be of interest of practitioners and scholars in the teacher professional development domain. We do hope that participants will find this conference vitamin and energy for thought and classroom improvement.

CONFERENCE THEME:

In proudly hosted by Universitas Pakuan

Fostering Equality in Lesson Study for Learning Community

ORGANIZATION:

Universitas Pakuan. Jl Pakuan No 1 Cuheuleut Bogor 16163

www.unpak.ac.id

PARTICIPANTS:

Thailand, Malaysia, Jepang, Indonesia

PROGRAM CHAIRS:

Chair	: Dr. Eri Sarimanah, M.Pd.
Secretary	: Prihastuti Harsani, M.Si.
Treasures	: Dr. Surti Kurniasih, M.Si.
Secretarial Section	: Dr. Indarini Dwi Puspitasari, M.Si
IT	: Agung Prajuhana Putra, M.Kom. Sufiatul Maryana, M.Kom. Fredy Herlambang, SE.
Publication and Proceeding Section	: Didit Ardianto, M.Pd
Events and Trials Section	: Ir. Hj. Yuary Farradia, M.Sc
School Visit Section	: Atti Herawati, M.Pd
General Affair	: Dr. Umar Mansyur, M.Si
Consumtion Section	: Dra. Susi Sutjihati, M.Si.

  **ADVISORY COMMITTEE:**

1. Sumar Hendayana PhD, Indonesia Association of Lesson Study - Indonesia University of Education
2. Professor Manabu Sato, President International Platform of School as Learning Community, Gakushuin University
3. Assoc Prof Tatsuya Kusakabe, Center of International Cooperation in Education, Hiroshima University
4. Professor Christine Lee, National Institute of Education (NIE), NTU Singapore
5. Prof Didi Suryadi, MEd; Indonesia University of Education
6. Professor Shiriparn, Thailand
7. Maitree, Khon Khan, Lesson Study Thailand
8. Professor Herawati Susilo, Universitas Negeri Malang
9. Assoc Professor Eisuke Saito, Monash University
10. Prof Anna Permanasari, Indonesia University of Education
11. Professor Yoshiaki Shibata, International Center of Lesson Study, Nagoya University,
12. Chen Li Hua, Taiwan
13. Son Woo Jung, Korea
14. Professor Pete Dudley, Lesson Study UK, Cambridge University
15. Assoc Prof Azan, Lesson Study Malaysia, USM
16. Professor Suratno, UJember
17. Prof Dr Ahman, LPPM UPI
18. Dr. rar. nat Asep Supriatna, M.Si
19. Dr. Ibrohim, M.Si
20. Pupung Purnawarman PhD
21. Dr Riandi, M.Si

TABLE OF CONTENTS

COVER	i
WELCOMING SPEECH FROM RECTOR OF UNIVERSITAS PAKUAN	ii
INTRODUCTION	iii
A FOREWORD OF THE CHAIRPERSON OF THE 9 th ICLS	iv
EDITORIAL BOARD	v
ADVISORY COMMITTEE	vi
TABLE OF CONTENTS	vii

6	THE IMPLEMENTATION OF 5E LEARNING CYCLE MODEL ON THE TOPIC 'STRUCTURE AND FUNCTION OF PLANTS' TO IMPROVE THE SCIENTIFIC LITERACY OF THE SECOND YEAR STUDENTS OF A JUNIOR HIGH SCHOOL IN PEKANBARU	1
	Evi Suryawati, Mariani Natalina, Nadia , Deswati	

4	APPLICATION OF LESSON STUDY AND ITS INFLUENCE TO UNDERSTANDING UNIVERSITY STUDENT LEARNING (<i>University Student 2017 Of Class C Economic Education FKIP UNPAS</i>)	8
	Firman Sanjaya	

	PLANNING OF STUDENTS' SOFT SKILLS DEVELOPMENT IN LESSON STUDY ORIENTED LECTURES THROUGH EMPOWERMENT OF STUDENTS' ACTIVITY UNIT	13
	Fitri Aryanti, Cartonno, Ida Yuyu N. Hizqiyah	

7	THE EFFECT OF BEHAVIOR COGNITIVE COUNSELING WITH A MODELING TECHNIQUE ON THE AROUSING SELF POTENTIAL IN DIRECTING INDIVIDUALS IN THE ERA OF INDUSTRIAL REVOLUTION 4.0	20
	I Ketut Dharsana, Ni Ketut Suarni, Nyoman Dantes, I Ketut Gading, Kadek Suranata, Gede Nugraha Sudarsana	

	DEVELOPING AUTHENTIC ASSESSMENT TROUGHT LESSON STUDY BASED LEARNING	30
	Ida Yuyu Nurul Hizqiyah, Moh. Nurhadi, Aas Saraswati, Uus Toharudin	

	ANALYSIS OF COLLABORATIVE CULTURE IMPROVEMENT THROUGH LESSON STUDY FOR TEACHER	36
	Iga Octrina, Ratu Ilma Indra Putri, Nurjannah	

	PROBLEM BASED LEARNING TO ENHANCE STUDENTS' COLLABORATIVE SKILLS	44
	Laksmi Dewi, Nadia Hanoum, Dadi Mulyadi	

	LESSON STUDY IMPLEMENTATION USING PROBLEM BASED LEARNING (PBL) MODEL AUDIO VISUAL MEDIA TYPE	54
	Lili Sukarlina, Asep Deni Normansyah, Cahyono, Deni Zein Tarsidi	

	THE INFLUENCE OF LESSON STUDY IN MATHEMATICS LEARNING ACTIVITIES IN PROCESS CLASS 7C JUNIOR BPI 1 BANDUNG	58
	Lina Roufah, Nia Tresnasih	

	TEACHERS' PERCEPTION ON CLASSROOM MANAGEMENT IN ENGLISH TEACHING BEFORE AND AFTER LESSON STUDY IMPLEMENTATION	67
	Lukman Arif Rachman, Pupung Purnawarman	

IMPROVING STUDENTS' METACOGNITIVE SKILLS THROUGH MATHEMATICS LEARNING BASED LESSON STUDY Muhammad Ilyas, Ma'rufi, Fahrul Basir, Nur Wahidin Ashari, Karmila	84
THE CULTIVATING OF SOCIO-EMOTIONAL THROUGH LESSON STUDY FOR LEARNING COMMUNITY (LSLC) TO THE STUDENTS AT KINDERGARTEN IDHATA Misnar, Asrul Karim, M.Taufiq	91
A META ANALYSIS STUDY OF THE EFFECTIVENESS OF LESSON STUDY IMPLEMENTATIONS IN TEACHING Ni Ketut Suarni, I Made Citra Wibawa, Nyoman Dantes, I Ketut Dharsana, Kadek Suranata, Gede Nugraha Sudarsana	97
THE EFFECTIVENESS OF LESSON STUDY IN IMPROVING LECTURERS' PERFORMANCE Ni Putu Ferriyanti, I Ketut Suar Adnyaa, Putu Roni Angga Mahendta	102
PEDAGOGICAL DIALOGUE: COLLABORATIVE LEARNING STRATEGIES Nia Tresnasih, Lina Roufah	108
MALAY LANGUAGE TEACHERS' PERCEPTION TOWARDS PROFESSIONAL LEARNING COMMUNITY (PLC) LESSON STUDY IN THREE DISTRICTS IN SARAWAK Noel Jimbai Anak Balang, Zamri Mahamod, Noraisyah Buang	120
THE PROCESS OF STUDYING A COGNITIVE EMPATHIC UNDERSTANDING: STUDENT INTERACTION APPROACH Olivia Hadiwirawan	125
INSTRUCTIONAL DESIGN LINEAR EQUATIONS IN TWO VARIABLES USING DART GAMES AND LESSON STUDY FOR LEARNING COMMUNITY (LSLC) Ratu Ilma Indra Putri, Nurjannah, Amalia Ansari, Yastri Nopalia, Iftitah Primasanti	134
IMPLEMENTATION OF COLLABORATIVE LEARNING BASED ON STUDENT RESEARCH ON CLIMATE CHANGE AT MIPA FKIP TANJUNGPURA UNIVERSITY Reni Marlina, Erwina Oktavianty, Husna Amalya Melati, Eka Ariyati	144
THE DEVELOPMENT OF TEACHING MODEL PROJECT-COPY THE MASTER (PC-THE MASTER) BASED LESSON STUDY IN WRITING CULINARY FEATURE IN DEVELOPMENT WRITING SKILL SUBJECT Rina Rosdiana and Stella Talitha	153
IMPLEMENTATION OF LESSON STUDY USING LEARNING MANAGEMENT SYSTEM MOODLE IN EFFORTS TO IMPROVE LEARNING OUTCOME IN REVIEW OF JUNIOR HIGH SCHOOL MATHEMATICS MATERIAL COURSES, FACULTY OF TEACHER TRAINING EDUCATION, PANCASAKTI UNIVERSITY TEGAL Rizqi Amaliyakh Sholikhakh, Dian Nataria Oktaviani	160
SCAFFOLDING LEARNING COMMUNITY THROUGH THE IMPLEMENTATION OF LESSON STUDY IN BIOLOGY EDUCATION STUDY PROGRAM PAKUAN UNIVERSITY Surti Kurniasih, Susi Sutjihati, Desti Herawati	166
LESSON STUDY IMPLEMENTATION: COGNITIVE ABILITY, A SKILL TO DRAW AND ARRANGE INSTRUMENTS BY GRADE X STUDENTS IN SUBJECT MATTER OF INTRODUCTION TO CHEMICAL INSTUMENTS AND MATERIALS IN CHEMISTRY LABORATORY Fitria Fatichatul Hidayah, Dwi Anggraini Ristanti	172

	INTEGRATING LUWU LOCAL CULTURE INTO THE TEACHING OF READING COMPREHENSION (STUDENTS' PARTICIPATION AND PERCEPTION) Rahmawati Upa	181
3	TEACHER'S ABILITY TO USE AND DEVELOP INSTRUCTIONAL MEDIA THROUGH LESSON STUDY AS A TEACHER PROFESSIONAL DEVELOPMENT MODEL Agni Danaryanti, Rahmita Noorbaiti, Siti Mawaddah	188
	THE PERSPECTIVE OF PROSPECTIVE TEACHERS IN GAZING A QUALIFIED LEARNING : A CASE STUDY IN THE FACULTY OF TEACHER TRAINING AND PEDAGOGY'S STUDENTS AT DWIJENDRA UNIVERSITY I Ketut Suar Adnyana, Ni Putu Ferryanti, Arif Hidayat	197
2	IMPLEMENTATION OF LESSON STUDY FOR LEARNING COMMUNITY (LSLC): IMPACT ON PILOTING SCHOOL TEACHERS IN BATU CITY Iin Hindun, Nurwidodo, Poncojari Wahyono, Fuad Jaya Miharja, Abdul Rais	204
	ADAPTING TEACHER'S STRATEGY IN TRIGGERING STUDENTS' PARTICIPATION IN LEARNING ENGLISH THROUGH LESSON STUDY Ifadah, Muhimatul, Hakim, Lukman	212
	IMPLEMENTATION OF LESSON STUDY IN INTERNSHIP PROGRAM FOR PROSPECTIVE TEACHER Taufiq Hidayanto	217
	CRITICAL THINKING SKILLS OF STUDENTS IN PRACTICUM ANIMAL PSYCHOLOGY THROUGH PREDICT, OBSERVE AND EXPLAIN (POE) MODEL BASED LEARNING LESSON STUDY Triasianingrum Afrikani, Muhammad Taufik A, Suci Siti Lathifah	223
	EDIT INDONESIAN SCRIPT Asep Supriyana	233

IMPLEMENTATION OF LESSON STUDY FOR LEARNING COMMUNITY (LSLC): IMPACT ON PILOTING SCHOOL TEACHERS IN BATU CITY

Iin Hindun, Nurwidodo, Poncojari Wahyono, Fuad Jaya Miharja, Abdul Rais
Department of Biology Education, Faculty of Teacher Training and Education (FTTE)
University of Muhammadiyah Malang
Malang, Indonesia
iinhindunhindun@yahoo.co.id

Abstract— The LSLC implementation was conducted in five piloting schools in Batu City since 2016. The schools involved included Junrejo 1 Elementary School, Ngaglik I Elementary School, Muhammadiyah 04 Elementary School, Junior High School 1 of Batu and Junior High School 8 of Muhammadiyah. This study aims to identify the impact of LSLC on model teachers in piloting schools. Data was collected by interviewing and filling out questionnaires of teachers involved in LSLC activities. A total of 17 teachers were involved as model teachers, and 50 people were involved as observers during the 2016-2017 implementation. During this period, the school implemented two to four open lessons. The results showed that LSLC provided a different learning experience so that the teacher model was able to: 1) plan learning together with colleagues, 2) open classes for observational activities to get an overview of how students learn responses, 3) conduct collaborative learning reflection studies and 4) obtaining best-practices from new learning practices. Thus, the implementation of LSLC can make the model teacher more responsible for learning plans, implementation of learning and follow-up.

Keywords: Lesson study for learning community, teachers, piloting school, Batu City

INTRODUCTION

Lesson study becomes a role model for teacher development that is proliferating in various countries. This Japanese model is the essence of various teacher development models that have developed in the United Kingdom, the United States, India, Vietnam, Singapore, and Indonesia [1]–[5]. The flexibility of adaptation is one of the factors why Lesson Study can be developed by countries outside Japan with various cultures [6]. These variations of adaptation led to the development of perspectives on lesson study both from the standpoint of learning theory, learning design, learning review, expert mentoring, repetitive learning, to collaborative and constructive learning evaluation [6]–[9].

At present, from the perspective of the stakeholder involvement approach, the lesson study perspective shifts from a classical-based to the community-based approach. This broader perspective is then known as the Lesson Study for Learning Community (LSLC). The implementation of LSLC gives space to all components of education such as students, teachers, education practitioners, and even parents to learn from each other and cooperate [10], [11]. In another perspective, Hiebert, Gallimore, dan Stigler [12] stated that the community-based lesson study approach is a progressive step needed to change the individualism and conservatism commonly found in many teachers in America. In other words, the LSLC approach provides space for teachers to improve the quality of daily learning comprehensively. Concretely, LSLC is

intended to build a system of activities in schools to foster teacher professionalism and collegiality in order to work together in learning [10]

Teacher coaching is an integral part of achieving educational goals. Therefore, teacher coaching is a logical step that must be done to improve the quality of learning. However, to achieve these goals requires an integral unity of steps [12]. In other words, the development process should be implemented sustainably through the implementation of learning [13]. Within this framework, the guidance of the teaching profession is directed at improving the quality of learning.

Some experts have reported how LSLC is implemented as a teacher development model through improving classroom learning. The results of the study [14] show that LSLC strengthens teacher competencies in classroom management and planning learning. In line with this, (Cajkler, Wood, Norton, & Pedder, 2013; Fernandez, 2010; Julien & Daniel, 2017; Myers, 2012; Shernoff, Sinha, Bressler, & Schultz, 2017) states that LSLC implementation can be done in various ways. Activities include planning essential learning goals, selecting appropriate media, studying learning videos. Whereas [6], [8] emphasizes the focus of mentoring in conducting learning through the opening of a systemized class, observing student learning activities, predicting student learning responses, reflecting learning outcomes to redesigning learning to improve subsequent activities.

With these various achievements, LSLC is considered very appropriate and needs to be socialized, reviewed its principles and procedures to be appropriately implemented in the field. The implementation of LSLC in Indonesia is carried out with the pilot school model. It was developed in various regions such as Bandung, Bogor, Sukoharjo, Pasuruan, Malang, and Batu [20]–[23].

The implementation of the LSLC program in Batu City was initiated by the Faculty of Teacher Training and Education (FTTE) of the University of Muhammadiyah Malang (UMM) and the Batu City Education and Culture Office supported by Benesse Indonesia. The socialization of LSLC activities involved five piloting schools including three elementary schools and 2 secondary schools. The schools involved were Junrejo 1 Elementary School (ES), Ngaglik 1 ES, Muhammadiyah 04 ES, Junior High School (JHS) 1 of Batu and JHS Muhammadiyah 08 of Batu. Besides, this activity involved around 70 teachers from various levels of education.

With these numerous resource engagements, it is interesting to learn how LSLC has an impact on the teachers involved. This study specifically aims to investigate the impact of LSLC implementation on teachers involved in piloting schools in Batu City.

METHODS

This research was conducted using a qualitative descriptive design. The subjects involved were teachers from the Batu City piloting school who participated in the LSLC program. This research was carried out in the odd semester of the 2017/2018 school year. Data collected by interview method with the open-ended question model and questionnaire filling. The focus of LSLC activities that are considered includes open plan activities, open lesson, and reflection.

A. Participant

The respondents in this study were teachers from 5 piloting schools in Batu City. The teacher in question is a teacher who has been involved as a model teacher or an observer. The total number of teachers involved as respondents in this study amounted to 17 persons.

B. Procedure

Interviews and questionnaires are carried out after the implementation of LSLC for one semester. LSLC is conducted in various activities including 1) non-technical activities such as

socialization activities, lesson study workshops, and 2) technical activities, such as expert modeling classes, open plan, open lesson, and reflection. Respondents selected in this study must be involved in all the activities that have been carried out.

The frequency of LSLC implementation varies in each piloting school starting from 1 time (JHS 1 Batu) to 4 times (Muhammadiyah 4 ES). In each implementation cycle always consists of design, practice, and reflection. Designing lesson design as the initial and critical stage of quality learning. Practice examining how the process and student learning outcomes as the lesson design planned has been run, while reflection is used as a forum to discuss findings in the learning process and provide reinforcement for learning that has taken place.

RESULTS

During the implementation of LSLC, significant progress was obtained, including the benefits of the lesson study felt by schools, ranging from management, model teachers, observers to students at the school. The following are the benefit reports drawn from the results of the LSLC implementation based on written statements by model teachers and observers from piloting schools.

A. Impact of LSLC on schools

Responses from school management elements show that LSLC can be accepted as a way to assist student participation in learning (Table 1). Increasing student participation in learning is one of the impacts of LSLC implementation from the student side. Philosophically, increasing student learning participation is part of learning democracy facilitated in LSLC [24]. Increasing student participation in learning is inseparable from the collaborative efforts of teachers to create space for discussion between students on problems that must be solved together. Indirectly, interrelated relationships emerge between students such as mentoring between students in one group and between groups, peer-processes, and peer-discussion [6], [25]

Table 1. Comments on elements of school management towards LSLC

Respondent	Comments
Respondent 1	<i>"That in LSLC, students become more active. Besides, learning with LSLC can make a fun atmosphere for children, so they are easier to understand the material being learned. "</i>
Respondent 2	<i>"With the implementation of LSLC that has been implemented so far, I see that:</i> <ol style="list-style-type: none"> <i>1) Students learn more actively and fun.</i> <i>2) Students more easily understand the material.</i> <i>3) Students learn by experiencing themselves and find their own ways/steps in solving problems."</i>
Respondent 3	<i>"I get new things from coaching based on LSLC in our school, and this doesn't appear before, like:</i>

-
- 1) *Students become aware of the basic concepts of material taught.*
 - 2) *Students can find their own way of learning.*
 - 3) *Students are more understandable and embedded in their memory about the material because they can find their own way*
".
-

Besides, the increase in students' interest in learning is one of the results that had previously been thoroughly discussed during the preparation of lesson design. As discussed earlier, the design stage is a fundamental stage in determining the essential aspects of each learning topic. The meaning is, in the LSLC implementation period, teachers are collaboratively able to find and develop learning goals and scenarios that are good for students' learning processes so that students are not faced with things that are not essential material [13], [16], [26]. This is an excellent achievement because the teacher in the learning process through LSLC can present school functions that are comfortable for students to learn and enhance their collaborative abilities.

B. *The impact of LSLC on the model teacher*

According to 3 respondents, professionally applying LSLC has an impact on increasing teacher competency in exploring student characteristics (Table 2). This is a skill that is needed by teachers in their professional service activities to students.

Table 2. Teacher model comments on LSLC

Respondent	Comments
Respondent 1	<i>"With LSLC I can feel to be a person who knows and understands the character of my students better. Besides that, I became easier to feel students who were experiencing difficulties".</i>
Respondent 2	<i>"LSLC activities have had a positive impact on me personally regarding preparing lesson design. I think not only concerning new knowledge about how to develop learning plans in LSLC, but the most noticeable thing is, how we need to think about making lesson design very deeply, especially in setting desired learning goals. Even more than that, I also feel not only in formulating goals, but also new skills in compiling scenarios of collaborative learning activities that consider and implement jumping status for students in high-ability categories</i>
Respondent 3	<i>"I feel LSLC activities have a positive influence on me regarding learning implementation, especially in seriousness to serve students who have different characteristics, some are easy to understand, but some are long time-consuming. In my opinion, LSLC makes me more painstaking to provide comprehensive services to all students. Through this coaching activity, I am required to implement active learning where all students learn in groups and self-study is more passionate. I am also encouraged to be more transparent in the implementation of learning because in the implementation of the open lesson, the class is open to being seen, witnessed and observed</i>

by observers".

The opinion of the two respondents has the same point of view regarding competencies that are felt to develop as long as they are involved in coaching within the scope of LSLC. When referring to research [2], [5] teacher professional development is a need that needs to be encouraged through the expansion and renewal of competencies possessed by the teacher. Exercises, skills, and beliefs are areas that need to be stimulated through the development of pedagogy, changes in curriculum and class-based technology.

Teacher professional development is a need that needs to be encouraged through the expansion and renewal of competencies possessed by the teacher. Exercises, skills, and beliefs are areas that need to be stimulated through the development of pedagogy, changes in curriculum and class-based technology [21]. Besides, the repeated training process and the implementation of the open lesson can gradually bring a positive influence to the teacher, including the skills in understanding the characteristics of the students they face. This is believed to foster confidence and confidence in the teacher in providing the best professional services [12].

On the other hand, other respondents' comments focused on the post-learning reflection function. The existence of a reflection phase at LSLC was felt to be very helpful for the teacher in gaining a comprehensive view of the learning process that had been planned and implemented (Table 3). The presence of observers during the learning process makes it easy for teachers to observe student activities in the process. The role of observers is very central as an extension of the eyes and ears to see and hear student learning activities

Table 3. Impact of LSLC on the views of teachers

Respondent	Comments
Respondent 4	<i>"After I participated in this semester, I felt that the LSLC activity had a positive impact on the model teacher regarding reflecting the learning outcomes where I as a model teacher was helped by observers. I think there is a benefit from the teacher observer, especially to reveal the learning events experienced by students that escaped my attention. At the time of reflection, I got a lot of complete information from observers about the impression of students learning in class. I am very grateful to observers because I can learn more from the learning that has been carried out through reflection activities because the observers are more observant in seeing my students."</i>
Respondent 5	<i>"I noted that with LSLC, I could learn firsthand how to be a teacher who can understand the different character of students. Besides, I became more skilled and learned from students about the difficulties faced by students."</i>
Respondent 6	<i>"I observed that coaching in this LSLC became more I learned how to learn students. Besides, I became more sensitive in seeing the difficulties experienced by my students. Coaching that is integrated into this learning process allows me to be able to analyze strengths, strengths, and even shortcomings of observations on how students learn".</i>

C. *Impact of LSLC on the observer*

Coaching through LSLC is not only felt directly by the model teacher, but also other elements involved such as observers. Although in the process of implementing learning they are not directly involved as teachers, observers remain an inseparable part of an LSLC coaching system. Some respondents stated that their involvement in LSLC as observers was able to learn a learning process from a different perspective (Table 4) because so far they have more often seen the learning process from being a teacher rather than as a student. It becomes a learning perspective that is new and interesting to them [4], [12].

Table 4. Impact according to observers about LSLC

Respondent	Comments
Respondent 1	<i>"With LSLC that has been done, I learned to be an observer in the student learning process, so that I can take a lot of best-practice from this process even since the preparation of the learning design. I feel this and have an impact on how individual competencies as a professional educator can improve through this coaching model.</i>
Respondent 2	<i>"I can find out the learning problems faced by students, besides that, I also get new knowledge about how the principles and philosophy of LSLC are. More than that, I gained a better understanding of how students learn and how the teachers teach.</i>
Respondent 3	<i>"As an observer, I can understand the position of students when getting information so that they can provide solutions to students' problems."</i>

CONCLUSION

LSLC has a positive impact on teachers regarding developing learning plans through deep thinking regarding the desired goals by considering and implementing status jumping for students with different characteristics from each other. Concerning learning implementation, teachers become more dedicated to providing comprehensive services to all students by implementing active and transparent learning because they are open to being seen, witnessed and observed by observers. Besides, the teacher gets complete information about the students' learning impression in class and can learn more from the learning that has been carried out through reflection activities.

REFERENCES

- C. Wilkins, "Education reform in England: Quality and equity in the performative school," *Int. J. Incl. Educ.*, vol. 19, no. 11, pp. 1143–1160, 2015.
- E. Saito *et al.*, "The teacher as a 'colony': a case study of agentive responses to 'colonising' education policy in Vietnam," *Cambridge J. Educ.*, vol. 48, no. 1, pp. 65–86, 2018.
- J. Lieberman, "Reinventing teacher professional norms and identities: The role of lesson study and learning communities," *Prof. Dev. Educ.*, vol. 35, no. 1, pp. 83–99, 2009.

- W. H. Chong and C. A. Kong, "Teacher collaborative learning and teacher self-efficacy: The case of lesson study," *J. Exp. Educ.*, vol. 80, no. 3, pp. 263–283, 2012.
- B. Doig and S. Groves, "Japanese lesson study: Teacher professional development through communities of inquiry," *MTED*, vol. 13, no. 1, pp. 77–93, 2011.
- W. Cajkler and P. Wood, "Mentors and student-teachers 'lesson studying' in initial teacher education," *Int. J. Lesson Learn. Stud.*, vol. 5, no. 2, pp. 84–98, 2016.
- K. Wood, "The many faces of lesson study and learning study," *Int. J. Lesson Learn. Stud.*, vol. 7, no. 1, pp. 2–7, 2018.
- P. Dudley, *Improving practice and progression through Lesson Study*. Crown Publisher, 2008.
- E. Susetyarini and F. J. Miharja, "The implementation of lesson study-learning community for prospective biology teachers," *Int. J. Adv. Res.*, vol. 5, no. 10, pp. 1228–1235, 2017.
- M. Sato, "Lesson study untuk meningkatkan profesionalisme guru: sekolah sebagai learning community," in *Seminar Nasional Pendidikan*, 2014, no. 1, pp. 1–8.
- E. Saito *et al.*, "School reform for positive behaviour support through collaborative learning: utilising lesson study for a learning community," *Cambridge J. Educ.*, vol. 45, no. 4, pp. 489–518, 2015.
- J. Hiebert, R. Gallimore, and J. W. Stigler, "A knowledge base for the teaching profession: what would it look like and how can we get one?," *Educ. Res.*, vol. 31, no. 5, pp. 3–15, 2002.
- T. C. Rock and C. Wilson, "Improving teaching through Lesson Study," *Teach. Educ. Q.*, no. 1999, pp. 77–92, 2005.
- M. L. Angelini and N. Alvarez, "Spreading lesson study in pre-service teacher instruction," *Int. J. Lesson Learn. Stud.*, 2017.
- B. Julien and M. Daniel, "Lesson Study ... and its effects," *Hell. J. Res. Educ.*, vol. 6, pp. 21–35, 2017.
- J. Myers, "Lesson Study as a means for facilitating preservice teacher reflectivity," *Int. J. Scholarsh. Teach. Learn.*, vol. 6, no. 1, pp. 1–21, 2012.
- W. Cajkler, P. Wood, J. Norton, and D. Pedder, "Lesson Study: towards a collaborative approach to learning in initial teacher education?," *Cambridge J. Educ.*, vol. 43, no. 4, pp. 537–554, 2013.
- D. J. Shernoff, S. Sinha, D. M. Bressler, and D. Schultz, "Teacher perceptions of their curricular and pedagogical shifts: Outcomes of a project-based model of teacher professional development in the next generation science standards," *Front. Psychol.*, vol. 8, pp. 1–16, 2017.
- M. L. Fernandez, "Investigating how and what prospective teachers learn through microteaching lesson study," *Teach. Teach. Educ.*, vol. 26, pp. 351–362, 2010.
- I. Yudiani, "Manajemen lesson study sebagai teknik supervisi kolegial di SMP," *J. Pendidik. Hum.*, vol. 2, no. 2, pp. 164–175, 2014.
- H. Slamet, T. Subadi, S. Utama, and R. P. Khotimah, "Peningkatan kompetensi guru melalui lesson study," *WARTA*, vol. 13, no. 1, pp. 55–64, 2010.
- N. Nurwidodo, S. Hendayana, I. Hindun, and E. Sarimanah, "Strategies for establishing networking with partner schools for implementing lesson study in Indonesia," *JPBI (Jurnal Pendidik. Biol. Indones.)*, vol. 4, no. 1, pp. 11–22, 2018.
- T. Suratno, I. Ni'mah, E. Zulkifly, and N. Nur'aini, "Implementasi model Lesson Study di tingkat sekolah dasar: studi kasus di UPI Kampus Serang," 2009.
- M. Ueno, "School reform and democracy in the public theory of John Dewey: The

transformation of liberalism and its ethics,” *Electronic Library Service*, Tokyo, pp. 167–195.

P. Wood and W. Cajkler, “A participatory approach to Lesson Study in higher education,” *Int. J. Lesson Learn. Stud.*, vol. 5, no. 1, pp. 4–18, 2016.

E. Saito and M. Atencio, “Lesson study for learning community (LSLC): conceptualising teachers’ practices within a social justice perspective,” *Discourse*, vol. 36, no. 6, pp. 795–807, 2015.

