

Lesson Learnt

by Sundari Su

FILE	ON_LEARNT_OF_THE_LESSON_STUDY_FOR_LEARNING_COMMUNITY_SCOPUS.PDF (517.22K)		
TIME SUBMITTED	24-AUG-2020 10:57AM (UTC+0700)	WORD COUNT	2114
SUBMISSION ID	1373225254	CHARACTER COUNT	12222

1
Lesson learnt of the lesson study for learning community as the learning innovation in the 21st century for student

2
Cite as: AIP Conference Proceedings **2194**, 020034 (2019); <https://doi.org/10.1063/1.5139766>
Published Online: 18 December 2019

Ade Haerullah, Abdu Mas'ud, Nurhasanah, and Sundari



View Online



Export Citation

Lock-in Amplifiers
up to 600 MHz



2
AIP Conference Proceedings **2194**, 020034 (2019); <https://doi.org/10.1063/1.5139766>

2194, 020034

© 2019 Author(s).

1 Lesson Learnt of the Lesson Study for Learning Community as the Learning Innovation in the 21st Century for Student

Ade Haerullah^{1,b)}, Abdu Mas'ud^{1,c)}, Nurhasanah^{2,d)}, Sundari^{2,a)}

¹Departement Biology of Postgraduate Khairun University, Street Pertamina Kampus II Unkhair Gambesi City of South Ternate, North Maluku 97728 Indonesia;

²Departement Biology Education, Faculty of Teacher Training and Education, Khairun University, Street Pertamina Kampus II Unkhair Gambesi City of South Ternate, North Maluku 97728 Indonesia

^{a)}Corresponding author:sundari@unkhair.ac.id

^{b)}ade.haerullah@unkhair.ac.id

^{c)}abdumasud@unkhair.ac.id

^{d)}nurhasanah@unkhair.ac.id

Abstract. Professional educators have one characteristic capable of creating innovation in learning. The latest lesson study focuses on the characteristics of 21st century learning, namely: collaboration, creative and critical and communicative. The purpose of this research is to integrate Lesson study for Learning Community as a learning innovation for the Biology education master students of Khairun Ternate University who program the learning Innovation subject. The results of this study note that in general the Masters of Biology education at the University of Khairun Ternate has understood the philosophy and techniques of implementing the latest Lesson Study; 79% of students have been able to implement a plan-do-see; 80% of students have been able to think critically through reflection analysis and 82% of students have been able to collaborate with lesson design. Lesson study is one technique to develop and implement learning innovations for teachers in the 21st century.

INTRODUCTION

⁹ Lesson study is a model of teacher professional development. Current Lesson Study is better known as Lesson study for learning community (LSLC). The main characteristic of LSLC is emphasizing the implementation of collaborative learning. Collaborative activity in LSLC also emphasizes the existence of communicative, creative learning and critical thinking skills in students. Students actively participate and learn from each other to build their own knowledge through discussion and collaboration. In collaborative learning, the teacher provides a problem or task that encourages exploration, and students inquiry in collaborative learning groups [1][2].

At this time the world of education is a trend and socialized 21st century learning. One of the characteristics of competence in 21st century learning is creative, collaborative, communicative and critical. Professional educators must be able to keep up with the times. The 21st century was marked by the entry of IT technology in various fields of life, including the field of education. Teachers and students, lecturers and students, are required to have teaching and learning abilities in the 21st century and have learning innovations that can keep up with the times [3].

One of the efforts to improve professional and pedagogical competencies of the students of the Biology Education Masters Program in Khairun Ternate University can be done through 2 credits of learning Innovation courses. It is expected that students after graduating this course will have the ability to innovate in carrying out classroom learning. The latest learning innovations are 21st century learning that is technology literate and must be able to have integrity as a cultured human being. Challenges and opportunities to become teachers today are able to adapt and innovate 21st century learning. Lesson study for learning community is an alternative for teachers to start innovating in 21st century learning. This study aims to integrate Lesson study for Learning Community as a learning innovation in the Biology education master students of Khairun Ternate University who program the learning Innovation subject.

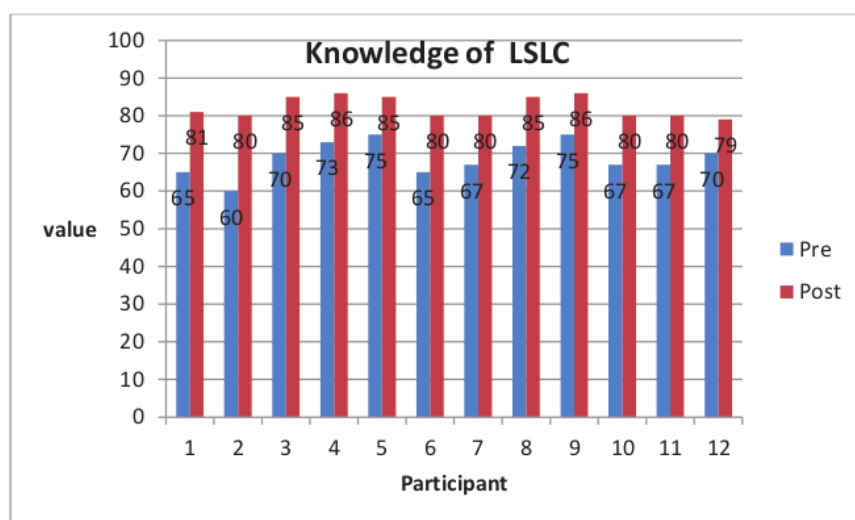
EXPERIMENTAL METHOD

This research is descriptive research with descriptive qualitative and quantitative research methods. The quantitative method is used to make measurements, while the qualitative descriptive method aims to make a description, description or painting systematically, factually and accurately regarding the facts, nature and relationships between the phenomena investigated [4]. Data collection is done by documentation study of the implementation of Lesson Study simulations and Collection of understanding indicators about LSLC and 21st century learning innovations obtained by questionnaire and reflection. Data analysis techniques were carried out in quantitative descriptive. Data analysis used to describe qualitatively using data triangulation model Khemis and Tagart [5].

RESULT

Profile of Knowledge for Masters in Biology Education about LSLC

Knowledge profil about Phylosophi and Technic of Lesson Study of students in the 2018 Biology education master program before and after participating in the socialization and mentoring of LSLC in the learning Innovation subject can be shown in Figure 1



Category: Very Low = 0-20, Low = 21-40, Enough = 41-70, Good = 71-84, Very Good = 85-100

FIGURE 1. Profile of Knowledge of Masters in Biology Education about LSLC

Based on Figure 1, in general the Biology education master program students prior to participating in LSLC socialization in the Learning Innovation subject average values were categorized as sufficient (68.8), while after LSLC socialization in the Learning Innovation subjects the average value was categorized good (82.25)

Increased Knowledge of Masters in Biology Education about LSLC, critical thinking and Collaboration

Profile Increased knowledge of students of the 2018 Biology education master program on LSLC, critical thinking and collaboration before and after participating in the socialization and mentoring of LSLC in the learning Innovation subject can be shown in Figure 2.

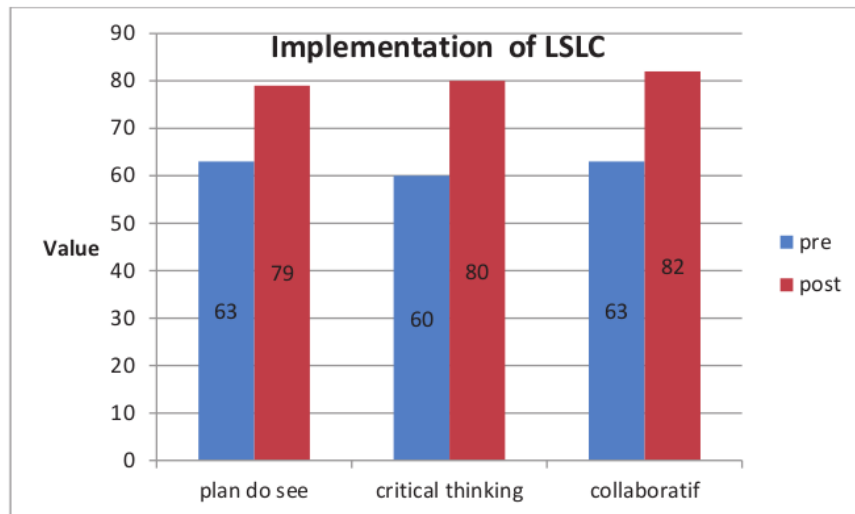


FIGURE 2. Profile of increasing knowledge of Masters in Biology Education about LSLC, critical thinking and collaborative learning.

Based on Figure 2, in general, there was an increase in knowledge of students in the Biology education master program after participating in LSLC socialization and mentoring

Increased Knowledge of Masters in Biology Education about 21st Century Learning and Learning Innovations

Interview results for 2018 graduate Biology education master students about 21st century learning and learning innovations based on 21st century learning competency indicators as shown in Figure 3

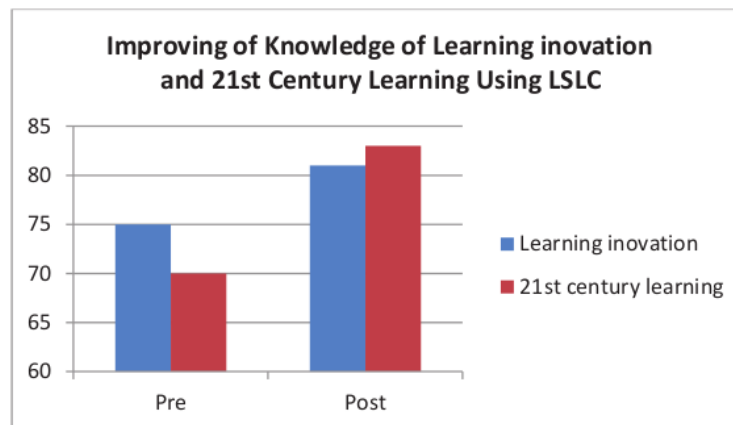


FIGURE 3. Knowledge of the 2018 Biology Education Master about 21st Century learning and learning innovations

Based on Figure 3, it can be seen that there was a significant increase in Biology education master's students about 21st century learning and learning innovations through the implementation of LSLC at the Biology learning innovation.

DISCUSSION

Learning innovation can be done through lifelong learning efforts. The implementation of this study was carried out by the practice and direct simulation of the implementation of Lesson Study for Learning Community (LSLC) for Masters of Biology education as well as teachers in secondary schools in Ternate City and Halmahera. Increasing student knowledge about LSLC as a learning innovation can be found through the presence of pre-test scores and student test posts. This is in line with Ashintya [6]; Susilo et al [7]; Arani et al [8]; Sumarli [9] about improving the quality of education and collaborative learning through lesson study.

In this study there was an increase in student knowledge about critical thinking in learning innovation through reflection activities on the implementation of lesson study. Critical thinking [5] is a mental activity that is useful for formulating answers or finding solutions to solving a problem. Johnson [10] critical thinking is a directed and clear process used in mental activities such as solving problems, making decisions, persuading, analyzing, assuming, and conducting scientific research. In this study reflection activities provide an opportunity to convey scientific and objective opinions on the implementation of meaningful learning as learning material.

Increased student knowledge about collaborative learning through the implementation of plans in compiling design and open class lessons observed by colleagues [4] learn from each other. Collaborative learning is a form of learning used in lesson study learning communities. Collaborative learning can provide opportunities to lead to successful learning practices. As technology for learning, collaborative learning [12] involves active participation of students and minimizing differences between individuals. Collaborative learning has added momentum to formal and informal education from the two powers that met [9][11].

Students' knowledge of 21st century learning through the development of observational indicators of jointly designed lesson study must have criteria that students have the competence to be able to think critically, communicate, collaboratively and be able to innovate in solving problems given by the teacher during learning. Jennifer Nichols [12] simplifies it into 4 main principles of 21st century learning that are explained and developed as follows: 1) Development of learning should use a student-centered learning approach, 2) Students must be taught to be able to collaborate with others, 3) Learning will not mean much if it does not have an impact on the lives of students outside of school. Therefore, subject matter needs to be linked to the daily lives of students, 4) In an effort to prepare students to become responsible citizens, schools should be able to facilitate students to be involved in their social environment.

According to Sato [13], schools that cultivate learning communities for teachers and students are schools that have reformed towards 21st century school models. Based on a review of the national curriculum of several developed countries which are members of the OECD (Organization for Economic Cooperation and Development), there are 4 similar characteristics that form the basis of 21st century school formation, namely. 1) Response to a knowledge-based society, 2) Response to a multicultural society, 3) Response to risk society disparity, 3) Response to mature civil society.

From the results of this study, it is expected that Biology education master students are able to carry out 21st century learning innovations through the implementation of lesson study. In the implementation of the latest lesson study, it is highly correlated with 21st century learning competency indicators, namely collaborative, communicative, critical, and innovative.

CONCLUSION

The implementation of this research for post-graduate Biology education students is the students can improve their knowledge about 21st century learning innovation, collaborative learning, critical thinking competencies, and competencies in creating creations and innovations.

ACKNOWLEDGMENTS

The author would like to thank the LPPM Khairun University as the Research Fund Grants for Post-Graduate Grants in the 2019 budget year,

REFERENCE

1. Hendrayana, S., et al, Lesson Study: a strategy for Increasing Education Professionalism (Experience IMSTEP-JICA). Bandung: UPI Press (2006)
2. Sato, M, Dialogue and Collaboration in the Junior High School Practice "Learning community" (2012). The Pelita Project to improve the Quality of the Ministry of Education and Culture-JICA Middle School / MTs
3. Sudarisman, S. Understand the nature and characteristics of biology learning in an effort to answer the challenges of the 21st century and optimize the implementation of the 2013 curriculum. *Florea: Journal of Biology and Learning*, **2** (1). (2015).
4. Nazir, Mohammad, 2005. Research Methods. Bogor: Ghalia Indonesia (1988)
5. Kemmis, S. and Mc. Taggart, *The Action Research Reader*. Victoria, Deakin University Press
6. Ashintya Widhiartha, Putu, *Lesson Study An Effort to Improve the Quality of Non-Formal Education Indicators*. Use Widya. Surabaya (2008)
7. Susilo, H., Chotimah, H., Joharmawan, R., Jumiati, Dwitasari, Y ., Sunarjo. School Based Lesson Study: Conservative Teachers Towards Innovative Teachers. (2009). Malang: Bayumedia
8. Arani, M, RS., Keisuke, F., Lassegard, JP. Lesson Study as Professional Culture in Japanese Schools: A Historical Perspective on Elementary Classroom Practices. *Japan Review*, **22**: 171-200 (2010)
9. Sumarli and Murdani, Eka. Collaborative Learning Model with Peer Tutors in the Subject of Electrical Barriers-Parallel Series, (2015). JRKPF UAD Vol.1 No.2
10. Johnson, B. Contextual Teaching and Learning (Translation). Bandung: MLC. (2007)
11. Hobri and Susanto, Collaborative learning, caring community, and assisted jumping tasks Worksheet Liswa based on scientific approach: One of the Alternative Learning Mathematics in the MEA era. Proceedings of the National Seminar on Mathematics and Learning Mathematics Education Study Program FKIP Universitas Jember (2016)
12. Nichols, J. R, *Four Essential Rules of 21st Century Learning*. *Online*. Available : <http://www.teachthought.com/learning/4-essentialrules-of-21stcentury-learning/12>. (2015).
13. Sato, Manabu, Reforming Schools. Concepts and Practices of the Learning Community. Translation. Pelita / JICA (2014).

Lesson Learnt

ORIGINALITY REPORT

% **14**
SIMILARITY INDEX

% **14**
INTERNET SOURCES

%
PUBLICATIONS

%
STUDENT PAPERS

PRIMARY SOURCES

1 sinta3.ristekdikti.go.id %**2**
Internet Source

2 repository.ubaya.ac.id %**2**
Internet Source

3 repository.uin-malang.ac.id %**2**
Internet Source

4 www.slideshare.net %**1**
Internet Source

5 jurnal.ustjogja.ac.id %**1**
Internet Source

6 dergipark.org.tr %**1**
Internet Source

7 eprints.umm.ac.id %**1**
Internet Source

8 www.journals.mindamas.com %**1**
Internet Source

9 journal.iain-samarinda.ac.id %**1**
Internet Source

10

www.scribd.com

Internet Source

% 1

11

www.iiste.org

Internet Source

<% 1

12

eprints.uny.ac.id

Internet Source

<% 1

EXCLUDE QUOTES OFF

EXCLUDE MATCHES OFF

EXCLUDE
BIBLIOGRAPHY OFF