

THE IMPACT OF LESSON STUDY ON STUDENTS LEARNING ACTIVITIES AT THE UNIVERSITY OF COKROAMINOTO PALOPO

Rusdiana Junaid (Rose)
The University of Cokroaminoto Palopo,
Indonesia
rosejunaid246@yahoo.com.au

Rustan Santaria (Rustan)
State Islamic Institute Palopo, Indonesia
rustan1123@yahoo.com

Hafirah Patang (Fira)
The University of Cokroaminoto Palopo,
Indonesia
hafirah_patang@yahoo.co.id

Magfirah Thayyib (Firah)
The University of Cokroaminoto Palopo,
Indonesia
magfirah_thayyib@yahoo.com

Abstract

Lesson Study has been implemented at the University of Cokroaminoto Palopo (UNCP), South Sulawesi, Indonesia since 2013. The focus has been in two faculties, namely the Faculty of Teacher Training and Education, which involved four study programs and the Faculty of Science, which involved two study programs. Since the implementation of the *lesson study* at this university, considerable research have been undertaken by the role model lecturers, such as the improvement of lecturers' collegiality, the implementation of certain teaching models, methods, and strategies through *lesson study* activities, and the change of the lecturers' mindset. However, none has looked at the impact of *lesson study* on the students learning activities. Therefore, this paper aims at giving an overview of the impact of *lesson study* on the students learning activities at the University of Cokroaminoto Palopo. It highlights some of the main differences in the students learning activities across several subjects both before and after *lesson study* was implemented. The focus of the inquiry is "What are the impacts of *lesson study* on the students learning activities?" This study involved 16 role model lecturers and 10 observers from 6 different study programs. Data were collected through an open-ended questionnaire, observers' field notes, and an observation sheet. The open-ended questionnaire was distributed to the 16 role model lecturers and the observation sheet to the 10 observers. The observation sheet was focused on the activities and the interaction between the role model lecturers and the students in the *open class* sessions. Data collected were analyzed qualitatively. The results of the data analysis shows that there are at least six major impacts of *lesson study* on students learning activities. They are: 1) increasing the students' collaborative engagements, 2) promoting the students' learning autonomy or creating self-regulated learners, 3) improving the students' critical thinking, 4) stimulating mutual respect among the students, 5) developing the students' creativity, and 6) Elevating the students' self-confidence.

Keywords: *lesson study*, learning activities, collaborative engagement, critical thinking, self-regulated learners

INTRODUCTION

The University of Cokroaminoto Palopo (also known as UNCP) is one of the ten universities across Indonesia which was awarded *Lesson Study Batch V Grant* from Directorate General of Higher Education Ministry of National Education and Culture in 2013. This grant was awarded to UNCP for 3 years, namely in 2013, 2014, and 2015 respectively. Therefore, since 2013, this *lesson study* program has been implemented at this university.

In the first year of its implementation, *lesson study* was applied in one faculty that is the Faculty of Teacher Training and Education. The four study programs at this faculty, Civics Education, Mathematics Education, Indonesian and Literature Education, and English Education were actively involved in the whole *lesson study* programs both in the first and the second semester. Then in 2014, the second year on the grant, this *lesson study* program was expanded to the Faculty of Science which involved two study programs, they are Physics Sciences and Biology sciences. Each study program involved at least two lecturers as role models. The following year, in 2015, as it was planned, this program was disseminated to the two junior high schools; they were the State Junior High School Number 3 Palopo and the Private Junior High School of Cokroaminoto Palopo.

Since the implementation of the *Lesson Study* at the University of Cokroaminoto Palopo, considerable research has been carried out by the role model lecturers. They looked at, for example the improvement of lecturers' collegiality in carrying out the *lesson study* activities, the change of the lecturers' mindset after implementing *lesson study*, teacher's interest towards the implementation of *Lesson Study*, and the results of the implementation of certain teaching models, methods, techniques, and strategies through lesson study activities. The results of these research illustrate that *lesson study* activities contribute positively to the teaching and learning process in general. In other words, there is an improvement in the quality of the teaching and learning process in the classes where *lesson study* were implemented.

Through *lesson study* activities, lecturers are motivated to prepare her or his teaching materials well. Lecturers have great opportunities to learn from each other and gain content and pedagogical knowledge through *plan* session. Furthermore, role model lecturers have an opportunity to examine their practices in order to answer the questions about how she or he can serve the students more effectively in the learning process. Lecturers can build good behaviors such as: listening actively, emphatically, expressing brilliant ideas and brainstorming things to be prepared and to be done. All these evidences are revealed by various research that had been carried out by the role model lecturers (Ma'rufi et al., 2013; Patmaniar, 2014; Taufiq, 2014; Supu, 2014; Thayyib, 2014; Junaid, 2014; 2015; Suardi, 2015; Bakri, 2015; Manrulu, 2015).

Regardless of the many issues that had been researched by the roles model lecturers, the impact of lesson study on the students learning activities gain less

attention. Therefore, the researchers of the present study agreed to investigate this issue by involving the 16 role model lecturers as the respondents and 10 observers in the *open classes*. The main focus of the inquiry is “*What are the impacts of lesson study on the students learning activities?*” This open-ended question generated various different responses. In other words, despite using one open-ended question, rich descriptive data could be gathered.

RESEARCH METHODS

Data Sources

Data of the present study were provided by the 16 role model lecturers as the respondents from the six different study programs at the two faculties, the Faculty of Teacher Training and Education and the Faculty of Science who have implemented *Lesson Study* in their classes since 2013 up to 2015. The six study programs, the names of the subjects, and the number of role model lecturers involved in this study are listed in table 1 on page 4.

Other than the 16 role model lecturers, research data also were provided by the observers in every *open-class*, both by the information given through observation sheet and their field notes. There were 10 observers participated the present study. The data given by the role model lecturers and the observers were analyzed qualitatively by applying 5 steps: data collection, reduction, categorization, display, verifying to draw conclusions.

Research Instruments

Data of the research were collected by using a questionnaire, an observation sheet, the observers’ field notes, and a camera as well as a handy cam as instruments. An open-ended questionnaire was distributed to the 16 roles model lecturers at the end of their *Lesson Study* activities. By using an open-ended questionnaire, rich descriptive data could be gathered since respondents were free to express their ideas based on what they have experienced.

An observation sheet was focused on the activities and the interactions between the role model lecturers and the students during the *do* sessions took place. The observation sheet which was given to 10 observers consisted of eight items: two items in the pre-activities when the lecturers started their classes, 4 items in the main

activities when the lecturers did the core of the lessons, and two items in the post-activities when the lecturers were about to close their meetings. In the observation, the researchers and the observers watched closely the activities and the interactions between the role model lecturers and the students. In addition to the information taken based on the observation sheet provided, the researchers and the observers were free to take notes during their observation in the *open-classes*.

Table 1. The Number of Role Model lecturers in each Study Program

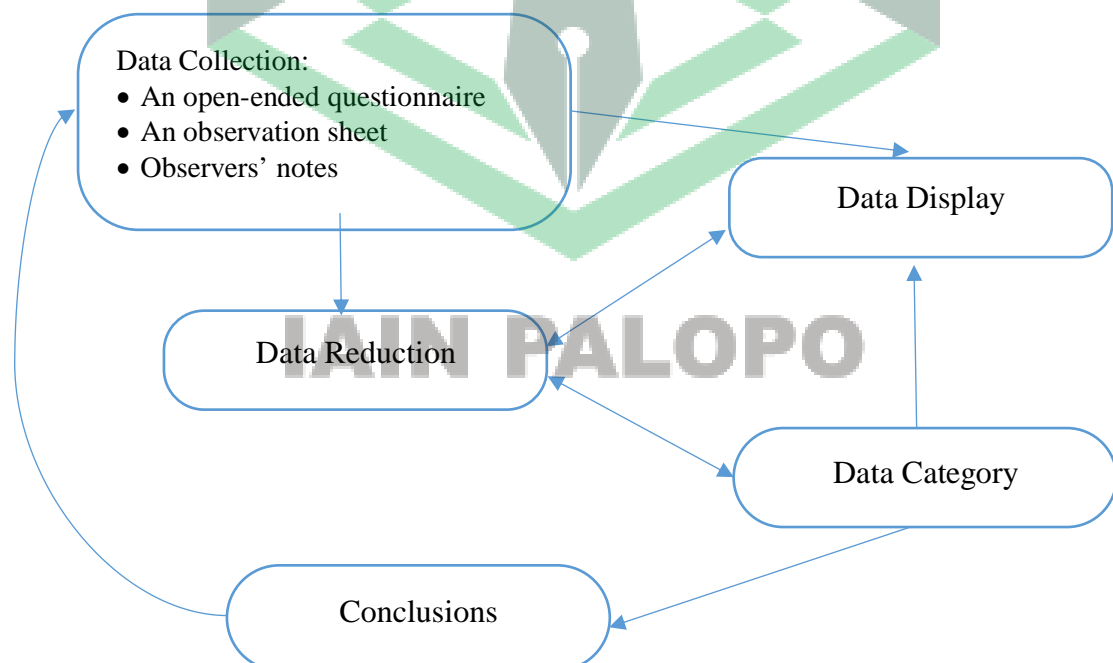
A. Faculty of Teacher Training and Education		Quantity of the Role Model Lecturers
No	Study Program/ Subjects	
1	Civics and Citizen Education:	
	a. <i>Pendidikan Kewarganegaraan</i> (Civic Education)	2
	b. <i>Pengantar Hukum Indonesia</i> (Introduction to Indonesian Law)	
2	Mathematics Education	
	a. <i>Aljabar Linear</i> (Linear Algebra)	3
	b. <i>Statistika dasar</i> (Basic Statistics)	
	c. <i>Geometri Analitik</i> (Analytic Geometry)	
3	Indonesian and Literature Education	
	a. <i>Keterampilan Menulis</i> (Writing Skills)	3
	b. <i>Prakmatik</i> (Pragmatics)	
	c. <i>Wacana Bahasa Indonesia</i> (Indonesian Discourse)	
4	English Education:	
	a. English Learning Media	
	b. Communicative Grammar	4
	c. Theory of Translation	
	d. Cross Cultural Understanding	
B. Faculty of Science		
No	Study Program	
1	Physics sciences:	
	a. <i>Fisika Dasar</i> (Basic Physics)	2
	b. <i>Fisika Semi Konduktor</i> (Semi-Conductor Physics)	
2	Biology sciences	
	a. <i>Anatomy tumbuhan</i> (Plant Anatomy)	2
	b. <i>Morfologi tumbuhan</i> (Plant Morphology)	
Total		16

Data Analysis

The present study followed a qualitative research style. It allowed the respondents to talk openly about their experiences during the implementation of the *Lesson Study* in their classes. It is qualitative seeing that the findings were described in a narrative description (Creswell, 2005). In other words, the data of the research were presented in a descriptive form. The substantial qualitative data collection gathered from the open-ended questionnaire becomes a means for forming and developing categorical information for later generalization analysis.

In relation to the data collected from the information sheets, they were listed based on the same items (data in the pre-activities, main activities, and post-activities), then they were grouped into the same category. In addition to the researchers' observation sheets, the observers' notes during the *open classes* were taken into account in the analysis and these enrich research data of the present study. The steps of data analysis can be seen in picture 1.

Picture 1. Steps and Components in the Data Analysis



Modified from Sugiyono, 2007:247

RESEARCH FINDINGS

The notion of the *Lesson Study* is a powerful, professional learning approach that dramatically improves learning and teaching and the practice and subject knowledge of teachers (Dudley, 2011), is strengthened by the findings of the present study. Variety of responses provided by the 16 role model lecturers to the question on what the impacts of *Lesson Study* on the students learning activities illustrate that *Lesson Study* produces rich improvements in the students learning activities and students achievements. The various responses to the open-ended questionnaire provided by the 16 respondents are presented in table 2.

Table 2. Responses emerged to the open-ended question “What the impacts of *Lesson Study* on the students learning activities are”

No	Statements	Respondents
A Collaborative Engagements		
1	The students enjoy discussing the teaching materials and are happy to help their friends who do not understand the materials being discussed	5, 1, 12, 14
2	I notice every time I offer a learning problem, the students are get used to share information and ideas to solve the issues of the learning problem	6, 4, 5
3	All my students involve in the learning process and the majority of them are enthusiastic to help their friends who are slow to understand the teaching materials	3, 15, 10
4	Since I implement <i>Lesson Study</i> in my teaching, students learning activities improved in terms of the student’s creativity and their collaborative engagements	13, 2, 8
5	My students are willing to work collaboratively to solve a certain learning problem	10, 7, 11
B Self-Regulated Learners/ Learning autonomy		
6	<i>Lesson Study</i> motivates my students to become self-regulated learners. I notice this every time I give them individual tasks to be completed in the classroom	12, 6, 8
7	The students are enthusiastic to become self-regulated learners. This can be observed when the students do individual tasks at the end of the lesson	12, 7, 2
8	Students are able to differentiate between nominal sentence and verbal sentence (understand the characteristics) by themselves after they are given few examples	10, 13, 16

No	Statements	Respondents
9	Students are able to differentiate between either and neither usage by themselves (understand the characteristics) by themselves after they are given few examples	10, 9, 10
10	If the students are happy to study, then they will study by themselves even if the lecturers do not ask them to do so	10, 1
11	I notice my students become more autonomous learners after I implement <i>Lesson Study</i> in my classes	15, 11
12	The students become more independent in their learning	13, 5
C Critical Thinking		
13	Critical thinking of the students increased. This can be noticed when a student gave inappropriate answer to a question, then other students offer an appropriate answer immediately.	5, 11, 15, 16
14	<i>Lesson Study</i> improves the student's ability in analyzing and synthetizing an issue. It engages students' higher order thinking'.	4, 3, 5
15	Through <i>Lesson Study</i> activities, the students are able to think more deeply about the issue being discussed	2, 12, 10
16	The students in my class become more critical, especially when they discuss familiar topics	14, 1, 14
D Respect each other		
17	Since the implementation of <i>Lesson Study</i> in my class, many things change. One of them is the growth of the student's mutual respects. This can be seen when they discuss a serious problem	7, 1, 5, 15
18	When discussing an issue, it is clear that the students respect each other.	2, 4, 12, 16
19	I notice, since I implement <i>Lesson Study</i> in my classes, mutual respects among the students exists	8, 9, 14
E Be Creative		
20	The students become more creative compare to the time when the <i>Lesson Study</i> has not been implemented	16, 15, 8
21	Since I implement <i>Lesson Study</i> in my teaching, students learning activities improved in terms of the student's creativity and their collaboration engagements	12, 3, 4
22	The students are free to design their learning media assigned to them	9
23	My students are more creative when giving examples of an issue	2, 10, 6, 13

No	Statements	Respondents
F	Self-confidence	
24	In my class, more and more students improve their self-confidence	10, 6, 7, 15
25	My students' self-confidence improve significantly	15, 8, 14
26	All students tried to get involved in the discussion	1, 10, 11
27	The majority of the students are brave to express their ideas directly	12, 1, 4, 5, 9, 16

Akin to the data gathered from the open-ended questionnaire, the data collected from the observation sheet and the observers' notes, generally are classified into the six major categories regardless of the different expressions given by the 10 observers. The six categories are collaborative engagements, learning autonomy, critical thinking, mutual respect, student's creativities, and self-confidence.

DISCUSSIONS

This session presents discussions of the results of the data gathered from open-ended questionnaire, the observation sheet, and the observer's notes. In the process of the data analysis, particularly in the data reduction stage, all the similar expressions are grouped together as displayed in table 2. On the respondent's column, for example, for number 1, there are four respondents, namely respondent's number 5, 1, 12, and 14. This means that there are four respondents who have similar expressions which are classified into "collaborative engagement" category. Respondent number 5's statement: "*The students enjoy discussing the teaching materials and are **happy to help their friends who do not understand the materials being discussed.***" Criteria used to put this statement into "collaborative engagement" category is the word "...*happy to help their friends who do not understand the materials...*" "Help their friends indicates that they have a collaborative engagement.

The data collected from the observation sheet which were focused on the interactions and the activities between the role model lecturers and the students were analyzed in the same ways. Some of the observers stated different expressions but to mean the same thing. For example, observer 1 says: "*All students are enthusiastic at the beginning of the lesson and clearly engaged in the classroom discussion when the role model lecturer offered an issue to be discussed in the main activities*". Another observer, which is observer 7 says: "*The students are enthusiastic and actively*

contributed their ideas in the discussion session". Even if the expressions provided by the observers 1 and 7 are different, the meaning reminds the same.

In the *open class* session, the role model lecturers and the observers had the opportunities to observe the lesson, collected data on the student's behaviors, and the overall activities during the lesson. The results of these observations were discussed in the *see* session (reflection, post-discussion) which involved the Head of the English Education Study Program, the role model lecturers, and the observers. This discussion was definitely meaningful to share and exchange views regarding students activities. It can be learnt through this discussion about what the students learnt, what they still did not understand, what they enjoyed most and what they found difficult, how lecturer helped them, how certain students helped other students, etc. This post-discussion was most helpful to make improvement in the process of teaching and learning for the next topic.

Based on the observation notes of the observers, it is found that the majority of the role model lecturers guide the students through a variety of learning experiences in the classrooms. The role model lecturers put into practice all the suggestions given by their colleagues in the *plan* session. As a results, and this circumstances promotes students active learning. This in turn, leads to the improvement of the students' outcomes in demonstrable ways and resulted in the six major categories as displayed in table 2 on page 6. In sum, the findings can identify the main differences in the students learning activities across several subjects both before and after *lesson Study* was implemented.

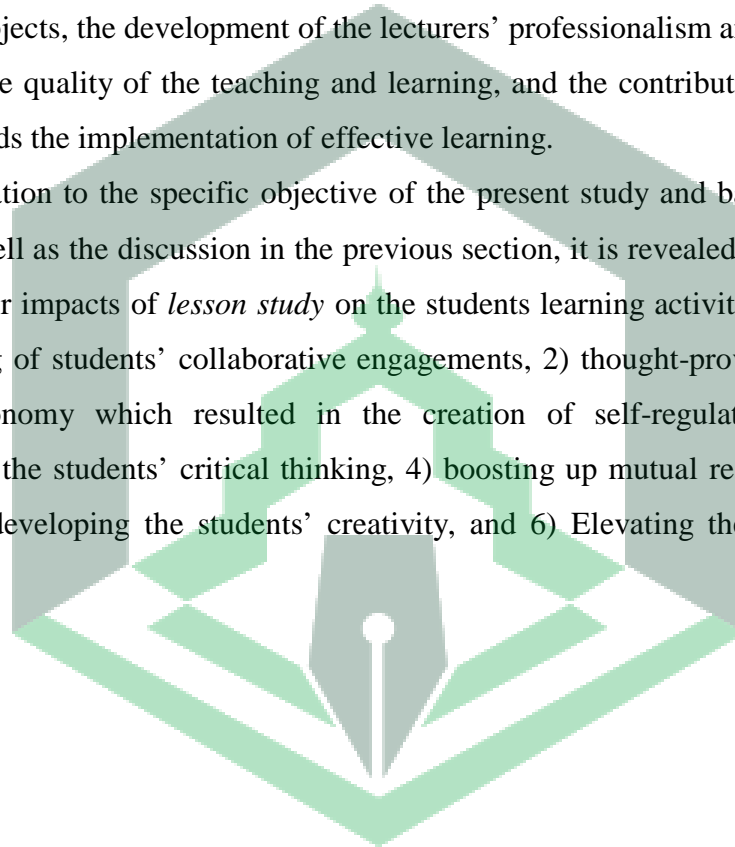
Table 2. General Summary of the Findings

No	Students Circumstances	
	Before the implementation of <i>LS</i>	After the implementation of <i>LS</i>
1	Weak collaborative engagements	Strong collaborative engagements
2	Dependent learners/ small amount of self-regulated learners	Independent learners/ large amount of self-regulated learners
3	Uncritical thinkers	Critical thinkers
4	Less mutual respect among students	Growth of mutual respect among students
5	Less creative	More creative
6	Low self-confidence	High self-confidence

CONCLUSIONS

Lesson study has been implemented at the University of Cokroaminoto Palopo since 2013 in the two faculties, namely the Faculty of Teacher Training and Education and the Faculty of Science. Lots of benefits gained as a result of the implementation of *Lesson Study*. Among others are the collaboration engagements among the lecturers, the establishment of specific subjects' team teaching, ideas sharing across the lecturers of various subjects, the development of the lecturers' professionalism and commitments to improve the quality of the teaching and learning, and the contribution of education experts towards the implementation of effective learning.

In relation to the specific objective of the present study and based on the data analysis as well as the discussion in the previous section, it is revealed that there are at least six major impacts of *lesson study* on the students learning activities. They are: 1) the increasing of students' collaborative engagements, 2) thought-provoking students' learning autonomy which resulted in the creation of self-regulated learners, 3) improving of the students' critical thinking, 4) boosting up mutual respect among the students, 5) developing the students' creativity, and 6) Elevating the students' self-confidence.



IAIN PALOPO

REFERENCES

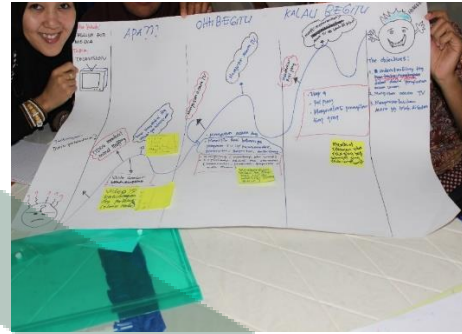
- Bakri, M. (2015). *Meningkatkan Kemampuan Menulis Karangan Mahasiswa Semester V Program Studi Pendidikan Bahasa dan Sastra Indonesia melalui Lesson Study*. Palopo.
- Bouma, G.D. and Ling, R. 2016. *The Research Process* (Fifth Ed.). Oxford: OUP.
- Creswell, J.W. (2005). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (2nd ed.). New Jersey: Pearson Merrill Prentice Hall.
- Dudley, P. 2011. *Lesson Study: a Handbook*. www.lessonstudy.co.uk.
- Manrulu. (2015). *Efektifitas Kegiatan Lesson Study dalam Merancang Pembelajaran pada Mata Kuliah Gelombang dan Optik*. Paper presented at the Seminar on Lesson Study. FKIP UNCP. Palopo.
- Ma'rufi, Muntaha, M., and Muh. Ilyas 2013. *Peningkatan Kemampuan Berpikir Kreatif Mahasiswa melalui Pembelajaran Berbasis Problem Posing pada Matakuliah Aljabar Linear*. Paper presented at the Lesson Study Seminar of Exchange Experience. Jakarta, 22-23 November 2013.
- Junaid, R. 2014. *The Improvement of Lesson Design Quality and the Change of the Lecturers' Mindset through Lesson Study to Improve the Quality of Learning Process*. Paper Presented at SULE-IC 1, Palembang, 16-18 May 2014.
- Patmaniar, 2014. *Implementasi Lesson Study melalui Model Pembelajaran Kooperatif Tipe Think Pair Share (TPS) pada Matakuliah Geometri Analitik*. Paper presented at the Seminar on Lesson Study. FKIP UNCP.
- Santana, K.,S. 2010. *Menulis Ilmiah Metodologi Penelitian Kualitatif*. Edisi kedua. Jakarta: Yayasan Pustaka Obor Indonesia.
- Sugiyono, 2007. *Metode Penelitian Kuantitatif Kualitatif dan R & D*. Bandung: Alfabeta.
- Supu, I. 2014. *Peningkatan Kemampuan dan Minat Belajar Mahasiswa Program Studi Fisika melalui Lesson Study*. Paper presented at the Seminar on Lesson Study. FKIP UNCP.
- Suardi. 2015. *Teaching Activities in English Learning Models Subject through Lesson Study for English Education Program*. Paper presented at the WALIS International Conference, 23 – 27 November 2015 at Khon Kaen University, Thailand.
- Taufiq, 2014. *Implementasi Lesson Study pada Mata Kuliah Program Basic*. Paper presented at the Seminar on Lesson Study. FKIP UNCP.
- Thayyib, 2015. *The Betterment of Group Dynamic in Theory of Translation Class through Lesson Study*. Paper presented at the WALIS International Conference, 23 – 27 November 2015 at Khon Kaen University, Thailand.

Appendices

- 1 Seminar on Lecturers' Professionalism Development through *Lesson Study*



- 2 Workshop on Teaching Plan and Teaching Materials



- 3 Workshop on Teaching Plan and Teaching Materials



- 4 Through *Lesson Study* Students Get Used to be Independent Learners



- 5 Through *Lesson Study*, Students Build Strong Collaborative Engagement



- 6 The Growth of mutual respect among the students



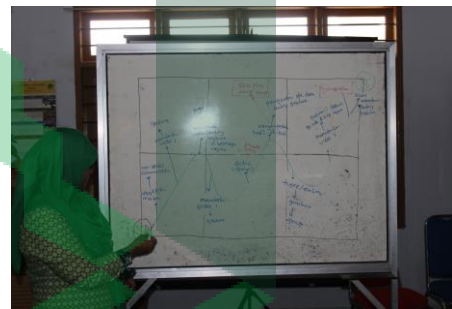
7 Through *Lesson Study*, Students Build Strong Collaborative Engagement

8 Through *Lesson Study*, the students Improve Their Self-confidence



9 Through *Lesson Study*, the students are Led to be Critical Thinkers

10 Reflection (post-discussion) after open class



IAIN PALOPO