# The Implementation of Lesson Study Based Learning Management and the Effect toward Students' Activeness in Lecturing

#### Imam Gunawan

Education Administration Department, Faculty of Education State University of Malang imam.gunawan.fip@um.ac.id

**Abstract:** The purpose of this research was to: (1) describe the process of lesson study based instructional management; and (2) enhance students' activity in lecturing by implementing the lesson study based instructional management. The method used in this research was descriptive qualitative and classroom action research, which were implemented with two cycles, the first cycle and the second cycle. The research instruments were the lesson study observation sheet and students' activity observation sheet during the learning process. The results showed that: (1) the process of lesson study based instructional management was a cyclical process involving the development of the lesson plans, the implementation of learning (do, open class), and the evaluation of learning (see), and (2) there was an improvement in terms of students' activeness in following the lecturing activity when lesson study based instructional management was implemented.

Keywords: instructional management, lesson study, students' activity

Abstrak: Tujuan penelitian ini adalah: (1) mendeskripsikan proses manajemen pembelajaran berbasis lesson study; dan (2) meningkatkan keaktifan mahasiswa dalam perkuliahan dengan menerapkan manajemen pembelajaran berbasis lesson study. Metode penelitian yang digunakan ialah deskriptif kualitatif dan penelitian tindakan kelas (PTK), yang dilaksanakan dengan dua siklus, yaitu Siklus I dan Siklus II. Instrumen penelitian ialah lembar observasi lesson study dan lembar pengamatan keaktifan mahasiswa dalam perkuliahan. Hasil penelitian menunjukkan bahwa:(1) proses manajemen pembelajaran berbasis lesson study bersifat siklus yaitu perencanaan pembelajaran (lesson plan), pelaksanaan pembelajaran (do,openclass), dan evaluasi pembelajaran (see);dan (2)ada peningkatan keaktifan mahasiswa dalam perkuliahan dengan menerapkan manajemen pembelajaran berbasis berbasis lesson study.

Kata kunci: keaktifan mahasiswa, lesson study, manajemen pembelajaran

Learning management is a process of empowering all resources to achieve learning objections. Operationally, learning management is the implementation of management functions, particularly the learning components, such as: students, teachers, objections, material, methods, instruments, and evaluations (Rahayu, 2015:358). Learning management is an activity of planning teaching and learning program, administering teaching and learning process, and evaluating learning process and result, also developing a class management (Danarwati, 2016:8).

In designing a class, a lecturer must concern

material balance, media, and method to achieve the learning objections. The lecturer's ability in managing learning process is the ability in planning, implementing and evaluating students in the learning process (Danarwati, 2016:8). Learning management is a set of activities: (1) learning plan, syllabus, lesson plan, and teaching material; (2) learning implementation, including methodology and learning design; and (3) learning assessment, including content outline, question item verification, and assessment aspects (Widodo, 2016:16).

Instructional management includes student control, instructional style, setting rules, and the regulation of student misbehaviors (Sass, et al., 2016:288). Instructional design and resources had been made to include scaffolding learner participation in a discussion forum (Gasevic, et al., 2016:3). The lectures approach to instructional management sets the tone for the overall classroom atmosphere and ultimately student behavior stressors (Martin, et al., 2012:547). Stated differently, what a teacher believes is the best behavior and instructional management style may not be realized depending on the class environment (Martin and Sass,2010:1125). Personal factors such as professional commitment proved to be important trait for an effective instructional management (Khan, 2012:130). In order to improve the learning quality, lesson study activity is one of alternatives that can be implemented by a lecturer. Lesson study is originated in Japan as an approach to support the continuing professional development of teachers (Leavy & Hourigan, 2016:162). Lesson study is an activity of lecturers' collaboration to design learning and evaluate the success of teaching strategy to improve the quality of learning process and learning result of students.

In lesson study, lecturers plan, teach, and observe the learning activity. moreover, lesson study requires them to come together and work interdependently to support student learning in the every practice of teaching, thus helping teacher's experience different types of knowledge in a coherent and related whole (Murata, 2010:577-578). Lesson study is a model of teacher's profession training through sustainable learning, based on collegiality and mutual learning principle to build a learning community (Rahardjo, 2012:43). Lesson study can act as a vehicle to promote meaningful learning and knowledge development among preservice teachers (Leavy&Hourigan, 2016:162). Lesson study is not a method or learning strategy, yet it can implement various methods or learning strategies. Lesson study is a structured approach to teacher learning and certain common elements are necessary in order to justify calling it lesson study (Bjuland & Mosvold, 2015:89).

Lesson study is a teacher's collaborative activity in order to develop learning. The teachers eventually implemented these plans in the classroom and then reflected on the lessons together (Saito & Atencio, 2013:88). The basic concept of the lesson study is to see how to improve and develop lessons in real situations (Nesusin, et al., 2014:1412). The process of lesson study is: (1) defining the problem; (2) planning the lesson; (3) teaching the lesson; (4) evaluating the

lesson and reflecting on its effect; and (5) revising the lesson (Norwich & Ylonen, 2013:163; Nesusin, et al., 2014:1414; Murata, 2011:2). The lesson study cycle is conducted through an activity what is so called as: planning-doing-seeing (Saito, et al, 2006:72). Lesson study process includes cycles composed of several phases: collaborative planning, lesson observation by colleagues and other knowledgeable advisors, analytic reflection, and on going revision (Fernandez, 2010:351; Lewis, 2002:24; Stigler & Hiebert, 1999:32). Lesson study has been implemented as a viable approach to support teachers' professional development (Saito & Atencio, 2013:87).

Students' activeness in lecturing generally is one of the lecturer evaluation components toward students. The students' activeness in lecturing is, for instance answering question, and/or responding other students' statements. This learning activity is identified by optimum involvement, such as intellectual, emotional, or physical, if necessary (Aunurrahman, 2012:54). Students' activeness in lecturing class is an activity done by students during the learning process by activating physical and mental aspects, and it must be developed by lecturer to achieve the learning objections (Vitasari, et al, 2015:2). Students' activeness is affected by their learning motivation, because by having learning motivation, students will do activity in lecturing in order to get what they want (Sari & Rahardi, 2013:8). The lecture stimulates students to learn actively; through assignments, questions and study tasks, students are stimulated to comprehend, integrate and apply their learning actively (vanBeek, et al., 2014:3). The examples of learning activities are giving examples, playing games, experiments, posing questions that make students think, demonstration and practicing (Sriklaub and Wongwanich, 2014:3375)

#### **METHOD**

The method used in this research was descriptive qualitative and classroom action research (CAR). Descriptive qualitative method was employed to describe lesson study based learning management process. This descriptive qualitative method was used since this research focused on the learning process and it required a profound observation in a natural situation toward that learning activity. The researcher in this case, acted as an active instrument, data research collector and data interpreter. This research also used CAR since it attempted to improve lecturer's teaching performance through enhancing

the students' activeness in lecturing. CAR in this research emphasized on process, which is lecturing process that can boost students' activeness in lecturing.

Lesson study is a form of research (Yoshida & Fernandez, 2016:55). The implementation of lesson study stages is similar as the CAR cycles (Kemmis & McTaggart, 2014:23). Lesson study was carried out by combining the CAR cycles, namely: (1) planning stage, where the model lecturer and observer lecturer planned the action needed; (2) doing stage, where the model lecturer administered lecturing activity and being observed by the lecturer observer; and (3) seeing stage, where the model lecturer and the observer lecturer had reflection and evaluation on the lecturing done. The implementation of CAR by integrating lesson study in this research was conducted with two cycles, Cycle I and Cycle II (Figure 1).

The research instrument employed was lesson study observation sheet and students' activeness observation sheet. The lesson study observation sheet covered these following questions: (1) whether the students learn about the lecturing topic; (2) students who cannot attend the lecturing activity; (3) why the students cannot learn well; and (4) the lecturer's effort in encouraging less active students. Whereas, the students' activeness learning observation covered: (1) responding motivation given by the lecturer; (2) reading the problems on Student Worksheet; (3) solving the problem or discovering the answer and how to answer them; (4) delivering opinion; (5) discussing or asking among the students and lecturers; (6) presenting the result of group work; and (7) summarizing material discussed.

#### RESULTS AND DISCUSSION

#### Results

## **Lesson Study Based Learning Management**

Lesson study based learning management process covers learning plan, learning administration, and learning evaluation. The learning plans that can be seen in this activity are: (1) the model lecturer and the observer lecturer arranged a Lesson Plan referring to Semester Learning Plan; (2) identified material, media and lecturing method that would be implemented in an open class; (3) determined the learning model planned in each cycle; and (4) determined the time allocation in every lecturing activity.

In addition, the learning administrations in each cycles, are: (1) the learning activity consisted of opening activity, main activity, and closing activity; and (2) students classification in each cycle to support the implementation of cooperative learning model applied. This student classification aimed to give assignment to the students, in which every group had to do a group work to discuss material before it was discussed in class discussion. In a class discussion, the students were given a chance to ask, answer a question, or respond toward other group discussion result. Nevertheless, in the implementation of this activity, the model lecturer gave reinforcement toward the class material, gave appreciation and motivation toward group which had discussed the material correctly and also explained the material in more detail if there were some groups that had not discussed it perfectly.

On the other hand, the learning evaluations

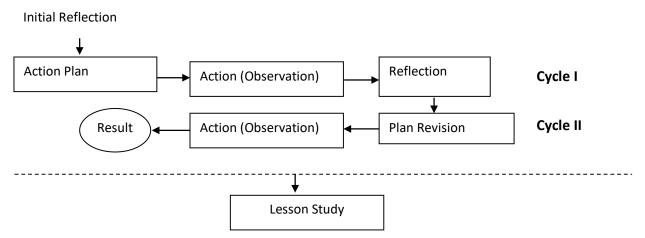


Figure 1. Classroom Action Research Cycles (Adopted from Ulfatin, 2015:118)

seen in this activity are: (1) in each cycle, the model lecturer and observer lecturer conducted reflection toward the learning activity done by the model lecturer; and (2) assessment done by the model lecturers toward the students activity in the lecturing. Nevertheless, the reflection toward the learning implementation referred to lesson study observation sheet. Lesson study observation sheet contained of observation result description by the observer lecturer when he/she observed the class (the description of lecturer's observation result is shown in Table 1 and Table 2). Moreover, in reflection stage, the observer lecturer gave some suggestions to the model lecturer in order to improve the lecturing activity in the future. The assessment done by the model lecturer toward students was related to the students' activeness aspect in class. The model lecturer refers to the students' activeness observation sheet in assessing the students' activeness.

Hence, if we refer to the above statements, we can explain that the lesson study based learning management process covers learning plan activity, learning activity implementation, and activity evaluation. Furthermore, lesson study based learning management process refers to the management cycles, starts from planning, implementation and evaluation. The lesson study based learning management process is illustrated in Figure 2.

#### Students' Activeness in Class

The model lecturer in the lesson study activity was the researcher, as the Lecturer of Education Administration Department of Faculty of Education, State University of Malang, whereas, the observer lecturers were four lecturers and one lecture as the Lecturer Advisor from the Faculty of Education, State University of Malang. The course in this lesson study was Classroom Management. The participants of Classroom Management Course were students of 2013 academic year or the fifth semester students in the Odd Semester of 2015-2016. The result of lesson study integrated with CAR implementation is explained as follows.

#### Cycle I

In the implementation of lesson study in Cycle I, the lecturer previously designed a Semester Learning Plan (SLP) and Lecturing Implementation Plan (LIP). After the model lecturer made SLP and LIP, the lesson study activity was started, which was carried out an open lesson activity, namely planning stage. Next, the lecturing activity was conducted (doing stage) with open class. Then, the seeing stage was carried out with open lesson.

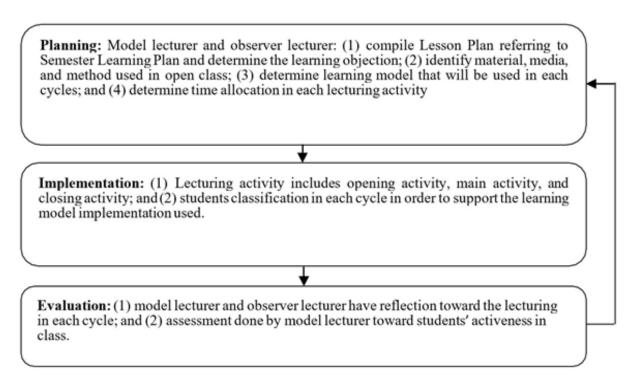


Figure 2. Lesson Study based Learning Management Process

# Planning Stage

This stage aimed to produce learning design that can teach students effectively and boost students' activeness in learning. The lecturers, collaboratively shares the idea and opinion in compiling Lesson Plan at planning stage in order to produce material organizing ways, learning process, and learning instruments preparation.

Nevertheless, the agreement obtained in this planning stage is: (1) the learning model to be used was Two Stay Two Stray (TSTS); (2) learning material was a basic concept of classroom management; (3) using students' activeness observation in delivering opinion; (4) using assessment rubric of students' written note; (5) learning instrument used were laptop and Liquid Cristal Display (LCD); and (6) learning media used was slide about the basic concept of classroom management in form of Microsoft power point (ppt).

# **Doing Stage**

This stage is the implementation of the agreement made by the lecturer team in planning stage. The model lecturer administered the leaning process based on the Lesson Plan. Besides, the observer lecturer conducted an observation during the learning process. In short, the learning activities consist of three stages. That stage is syntax of TSTS learning.

Step 1, the lecturer classified the students into 7 groups, each group would discuss different sub-theme with other groups through discussion method. Step 2; the seven groups were divided into smaller groups, which were group A and B. The job of group A was delivering information of the group discussion result (stay) to visitor group, meanwhile, the job of Group B is finding information from other groups (stray) and taking the note of the result. The syntax implementation of Learning Model TSTS was started by Group B which visited Group A with rotation system, which were 7 rounds. On the 7th round, Group B would go back to their groups (initial group). Finally, in step 3, each group delivered the discussion result, and the other groups listened and gave suggestions or questions to the group presenting the discussion result. However, there was a problem arising where the first group did not present their own theme, but presenting the theme from other groups.

## Reflection Step (See)

The model lecturer and observer lecturer

discussed the observation result during the learning process together. The reflection done together with observer resulted findings that the learning process had run smooth in general. The learning activity conducted in the classroom was suitable with the plan, especially in administering learning model syntax TSTS, the model lecturer really implemented the learning model syntax of TSTS correctly. Besides, the learning activity administration refers to the learning objections. The model lecturer guided the learning process consistently, managed the time correctly, situated the class into interactive class and explained if there was a material which was hard to be understood by the students.

However, there were some problems found in this learning process, and the solving solution was discussed from that problem. The problems found in doing stage became the consideration in arranging Lesson Plan in Cycle II. Nonetheless, the observation findings, analysis result based on the discussion in reflection stage, and the solving solution are presented in Table 1.

Furthermore, the reflection of Cycle I became the consideration material in action activity to be a learning improvement. The improvement action toward Lesson plan referring to reflection result was (1) giving assignment to every students during the learning process with Student Worksheet, and (2) applying learning model of Cooperative Integrated Reading (CIR) that allows every students to have their own activities in lecturing. Thus, the result of reflection and follow up plan are presented in learning improvement by compiling Lesson Plan that will be implemented in Cycle II.

#### Cycle II

The lesson study implementation in Cycle II was the follow up result from Cycle I. Cycle II attempted to improve the learning by considering problems emerged in Cycle I. The model lecturer compiled Lesson Plan by considering reflection result in Cycle I and also from the observer lecturer's suggestions.

## Planning Stage

In this cycle II of planning stage, the Lesson Plan was modified based on the reflection in Cycle I. The model lecturer made Lesson plan beforehand by considering the reflection result from Cycle I. Nevertheless, the agreement resulted in planning stage is: (1) learning implementation by integrating two learning models, namely Cooperative Integrated Reading (CIR) and Two Stay Two Stray (TSTS), (2) learning material is aspect and classroom management function; (3) using Student Worksheet; (4) using student's activeness observation sheet in delivering opinion; (5) using assessment score of student's writing note; (6) learning instruments used were laptop and LCD; and (7) learning media used was slide of aspect and classroom management functions in Microsoft power point (ppt). Next, the model lecturer prepared learning instruments to be used in Cycle II.

# **Doing Stage**

This stage is the implementation of the agreement made by lecturer team in planning stage. The model lecturer administered the learning based on the Lesson Plan arranged. Meanwhile, the other lecturer acted as the observer in monitoring the learning process. Hence, there are four steps in this learning activity. These steps are the integration of learning models steps of CIR and TSTS.

In step 1, the lecturer divided the students into 9 groups, where each group will discuss different material from other groups. In step 2, the lecturer

gave discourse/ scrapbook based on the learning topic to every student based on the topic they got. The students then worked in group to find the main idea and responded based on their group analysis toward the discourse/ scrapbook given. On the other hand, every student took note of their group discussion result. Meanwhile, in step 3, these 9 groups were divided again into smaller groups, namely group A and B. The job of Group A was providing information of their group discussion result (stay) toward the groups visiting them, whereas, the job of Group B is looking for information from other groups (stray) and taking note of the result. Lastly, in step 4, each groups presented their discussion result, and other groups studied and gave opinion or suggestion to the group presenting their discussion result. However, the first group did not present their theme, yet the other group's theme.

## Reflection Stage (See)

The model lecturer with observer lecturer discussed the observation result during the learning process in this seeing stage. The reflection conducted together with the observer found out that in

Table I. Observation Findings, Analysis and Alternatives of Sollution (Cycle I)

No	<b>Observation Findings</b>	Analysis	Alternatives of Solution
1	There are some students who did not pay attention when the other students presented their group work result	It happened since the students were busy themselves in preparing their topic to be presented	Every group was given time allocation for small discussion before presenting their work result in class discussion.
2	There were some less active students in delivering opinion, asking or responding toward the answer of other groups or students.	The students must be trained to take a note of every material explained that can be used as the issue to ask or respond toward the answers of other students during presentation.	The model lecturer directly pointed out the students who were less active in asking, questioning or responding toward other student's question and answer during class discussion.
3	Based on the observer's observa- tion, in the beginning, there was one group discussed a topic out of the determined topic	There was misunderstanding between the model lecturer and students in group division, particularly the material to be discussed. It emerged since the students were not ready enough in implementing learning model.	Monitoring the students' activity mire intense by visiting students during group work.
4	Based on the observer's observation, there was one student daydreaming during class discussion.	Short time allocation (100 minutes) with full teaching material made some students could not catch up the lecturing rhyme, so they could not take a note.	The lecturer paid attention for all students, gave special attention for students who did not concentrate during lecturing, and asked that student to give opinion in class.

general the learning process could run well. The observer lecturer responded that the model lecturer implemented innovative learning where all students can be active in lecturing. It happened since all students did the Student Worksheet that had been compiled by the model lecturer. In addition, based on the topic discussed about education innovation in classroom sub topic, the model lecturer did not only give explanation but also became a model in implementing innovative learning that could make students to be active.

Moreover, the model lecturer also guided the learning consistently, managed the lecturing time wisely, and situated the class into interactive class and also made the students active. As a matter of fact, it is different from the doing stage in Cycle I where the lecturer less optimizing the individual activity in a group. In doing stage of Cycle II, every student was active in finishing the task individually or collectively by learning instrument such as Student Worksheet. However, there were some problem findings in learning process, thus from those problems, the solutions were discussed. The problems and solutions are presented in Table 2.

## Acting Stage

Based on the reflection result in Cycle II, there were some actions taken in order to improve the learning quality continuously. The revision of the Lesson Plan referred to the reflection result, such as: (1) modifying the learning method implemented; and (2) the model lecturer gave detail explanation on how to do the Student Worksheet to the students beforehand.

#### Discussion

## **Lesson Study Based Learning Management**

Lesson study based learning management process is a cycles consisting of learning plan (lesson plan), learning implementation (do, open class), and learning evaluation (see). The first stages from the lesson study process were: (1) preparation/plan; (2)

Table 2. Observation Findings, Analysis and Alternatives of Solution (Cycle II)

No	Observation Findings	Analysis	Alternatives of Solution
1	The students who delivered opinion during class discussion was less varied. It happened since the students who answered the question from other groups only the spokesman.	All students must be given a chance to answer questions from the other groups related to the material presented. The other students, besides the spokesman must be given a chance to give response toward other students' answer.	The model lecturer divided the task of every student, for instance there are students as group discussion speaker (spokesman) and student who give response toward the questions from other groups (all students are allowed to give opinion).
2	In the beginning, the students were confused to do Student Worksheet because they did not understand the instruction of doing it.	Students needed enough time to read instruction in Student Worksheet. The format of Student Worksheet must be simplified for the next meetings.	Model lecturer visited each group during discussion to ensure that all students could do the Student Worksheet
3	There were more students who actively took note and summarized the material, both during the material discussion through presentation by the students and when the lecturer explained additional course material.	Student's note result in lecturing should be used as assessment material. Student's note is one of indicators that the student followed the class actively	The model lecturer asked the students to submit the note result. That note was checked by the model lecturer as the consideration in giving score.
4	Most of the groups could do the Student Worksheet properly, yet there were still some groups who were confused in doing that Student Worksheet.	The format of Student Worksheet compiled by the model lecturer must be simplified without eliminating the material content and learning objection,	Model lecturer revised the format of Student Worksheet by increasing concept map and figures to enable students to understand the course material.

study lesson; and (3) evaluation (review session) (Baba, 2007:3). Lesson study is a learning process engaging team or studying together from the learning process implemented, either individual learning or other collective learning, started from preparation until learning implementation and reflection toward that learning. Furthermore, lesson study based learning management is an activity to design learning collaboratively, started from teaching plan, learning implementation, learning process observation, learning evaluation and learning result analysis (Haryoto, et al, 2010:64).

The characteristics of lesson study based learning management are the teachers plan, implement and do evaluation of the learning process collaboratively (Ariyanto, 2012:iv). Moreover, lesson study learning process is the teachers collaboratively: (1) formulating the learning objections (2) arranging the research lesson plan to actualize the objection; and (3) conducting research lesson with lesson study participants to obtain the proof of students learning development (Lewis, 2002:25). In addition thereto, lesson study management is a process of lesson study management started from planning, implementation and evaluation (Suryanti, 2012:iv). Thus, lesson study management is applied with collegiality, collaborative, learning each other and sustainability principle. The learning management of lesson study is a collaborative process of some teachers in identifying the learning problems, designing the learning scenario, teaching students based on the scenario, evaluating and revising the learning scenario, teaching students with revised scenario, re-evaluating the learning process, and disseminating the result to other teachers (Anggara & Chotimah, 2012:188).

The learning management with lesson study is objected to transform the planned curriculum into implemented curriculum in learning process and then evaluation toward that learning process conducted (Firman, 2007:42). Nevertheless, lesson study learning is learning carried out collaboratively with some stages: plan, do, and see (reflection). Lesson study is a collaborative activity conducted by a group of teacher in order to elevate the performance and learning quality that can increase their competence and professionalism (Mahmudi, 2009:84). Hence, the objections of lesson study are: (1) obtain better understanding on how student learn and how the lecturers teach; (2) get particular useful results from other lecturers in conducting learning; (3) improving the learning systematically; and (4) building pedagogical knowledge, in which a lecturer can get knowledge from other lecturers (Purwati & Suspandi, 2011:10).

As a matter of fact, lesson study is advantageous for some points, namely: (1) effective way to improve lecturer' teaching quality and student's learning activity; and (2) speeding up the readiness and maturity of young lecturer. On the other hand, Lesson study is a staff development program, as the implementation leaves a significant impact on the quality of teachers and teaching, this concept has been adopted by other countries and has become a model to improve the quality of education and teaching (Copriady, 2013:178). Lesson study a good idea; teachers with a common focus meet and plan lessons together; these lessons may have a focus on building skills or understanding, and are known as research lessons, which are taught by one, and observed by not only all of the teachers who are doing the planning, but also by observers who, at one end of the spectrum, may come only from the teachers' own school, or, at the other end (Doig & Groves, 2011:79).

Thus, the systematic process of lesson study management is the teacher working collaboratively to develop lesson plan and instruments, do observation, reflection and revision of lesson plan in cycles and continuously (Malahayati, 2012:53). Therefore, lesson study must be developed for a better learning quality by the teacher in order to be a professional teacher (Winarsih & Mulyani, 2012:43). However, if we refer to the lesson study cycle, then this activity means a research attempting to study the learning practice to develop better learning implementation. This statement is in line with Lewis, et al, stating that "in which they propose three types of research to sustain lesson study practice: (1) expansion of a descriptive knowledge base; (2) explication of the innovation's mechanism; and (3) iterative cycles of improvement research (Suratno, 2012:197).

Therefore, thing to be concerned is the difference between lesson study with CAR. Lesson study determines more on the effort to enhance the education competence in developing learning activity, on contrary, CAR is a research activity aimed to solve learning problems and it is pragmatic. It is congruent with the statement of Sriyati (2014:61) arguing that lesson study is a strategy to improve teacher's professionalism through learning activity from other people, meanwhile, CAR is an activity based on the research. Basically, the fundamental

difference of CAR and lesson study principal is CAR is based on the research, while lesson study is not always based on the research and it has broader scope than CAR (Sriyati, 2014:64)

In addition thereto, lesson study provides better understanding on how student learn and teachers teach. The other results that is useful from other lecturers in teaching are, improving the learning quality systematically and comprehensively, through learning method innovation, learning media, an establishing pedagogical knowledge, where a lecturer could gain knowledge from other lecturers, or even, the lecturer learns from the students. Therefore, in this lesson study process, the lecturer does not only teach but also study, either from other lecturers or the students. Teacher does not only become the one who teach, but also study through dialogue with the students, so they do not only teach but also learn (Freire, 2013:65).

Lesson study based learning management is a collaborative process from a group of teachers to work together in: (1) identifying teaching problems encountered by teacher; (2) planning learning steps as identified problem solving efforts; (3) conducting a learning by a model teacher observed by the observer teacher; (4) evaluating learning process conducted; (5) revising lesson plan based on the evaluation result; (6) conducting learning process again; (7) evaluating the learning done; and (8) disseminating the experience and finding from the evaluation result to the other teachers (Mahmudi, 2015:5). Lesson study is understood as enhancing the school based approach for improvement of teaching as for professional development (Isoda, 2010:18).

# The Implementation of Lesson Study Based Learning Management and the Effect toward Students' Activeness

Students' activeness in learning can increase their thinking ability. Lesson study based learning management could boost students' activeness in lecturing (Moro, et al, 2016: 126). Instructional management is the support teachers in modifying how, not what, they teach (Marks, et al, 2003:50). The implementation of lesson study based learning implementation has a potential to enhance the spontaneous activeness of students' social skill (Buku, et al., 2016:96). In other words, the implementation of lesson study learning can enhance students' activeness and participation during the learning process (Suyadi, 2011:88). The implementation of lesson study can improve students' learning activeness (Sripatmi, 2011:125). Besides, the implementation of lesson study can increase students' activeness, teamwork and interaction in group work, also students' competence in presenting (Yamtinah, et al, 2013:75). In brief, lesson study activity can improve students' activeness (Maisaroh, 2016:99).

In order to improve students' activeness, learning motivation is needed. Learning motivation is internal and external courage from a students who are still learning to change their behavior, which are generally marked with these indicators, namely: (1) having willingness to be successful, (2) having a need of study (3) having hope and dream in the future; (4) getting appreciation in learning; (5) having interesting activity in learning; and (6) having a conducive learning environment (Uno, 2008:34). These learning styles were conceived as a coherent repertoire of learning activities that students usually employ, their learning motivation and their conception oflearning, a whole that is characteristic of them in a certain period (Endedijk & Vermunt, 2013:58). Thus, a lecturer could create a systematic lecturing that can stimulate students' activeness in lecturing.

Learning activities in the context of student learning have been categorized in cognitive, affective and regulative activities (Vermunt & Verloop, 1999:259). Furthermore, McKeachi stated that there are seven aspects of students' activeness, such as: (1) students' participation in determining the learning activity objection; (2) emphasizing of affective aspects in learning; (3) students' participation in learning activity, especially interaction among students; (4) class solidity as a study group; (5) learning freedom given to the students and opportunity to do and make important decision in the leaning process; and (6) time allocation to solve personal problem of student, whether related to the learning (Yamin, 2007:48). As a matter of fact, there is no learning process without student's activeness. It means that students must be active in learning process, however what makes it different is the percentage of that activeness (Djamarah, 2005:87). The activity expected in lecturing is interaction between the lecturer and students, and students become more dominant in class. In addition, the lecturing process will be more dynamic if the students participate actively. One of the dynamic activeness aspects is when a student focuses on the lecturer's explanation, as well as the reflection and implementation in form of problem solving. So, that learning activity covers physical and mental activity.

It can be seen from the interaction of students

with the lecturer, answering questions asked by the lecturer, student's courage to deliver their idea in a discussion, listening to other students' opinion, working together with the group members, doing task given by the lecturer, and taking note of material (Nasution, 2012:145). Besides, if the students are used to make a question, it can boost students' courage to deliver their idea, both to their friends or lecturers (Ratriningsih, et al, 2015: 241). Moreover, students are trained to answer their friend's question, because in this class, they were given a chance to answer the question correctly. Hence, it can enhance student's argumentation and analysis skill toward any problems.

Related to those statements above, there are some indicator of students' activity measured, including (1) reading the material; (2) giving a question to lecturer or friends; (3) delivering idea in group discussion or presentation of discussion result; (4) responding others' idea; (5) paying attention or listening the material explanation from lecturer or friends; (6) taking a note; (7) having group discussion, (8) doing assignment given by the lecturer; and (9) being care to other group members' problem (Kusuma and Aisyah, 2012:60). Without student's activeness in lecturing, the learning result will never be achieved optimally. Students' activeness is students' activity in learning and teaching process engaging emotional skill and emphasizing more on students' creativity, improving the minimum skill, and having creative students who master the concepts (Riswani & Widayati, 2012:18).

#### CONCLUSIONS AND SUGGESTIONS

Based on the result of this research, it can be concluded that lesson study based learning management process is cyclical, which has some cycles on it such as learning plan (lesson plan), learning implementation (do, open class), and learning evaluation (see); and (2) lesson study based learning management affects students' activeness in lecturing. Referring to the result of this research, it is suggested to the lecturer to apply various learning model in lecturing. Besides, it is suggested to the Head of Program to hold workshop of the implementation of lesson study based cooperative learning model in university. Meanwhile, it is suggested to the Dean to have lesson study community in faculty level in order to support the campus as the prominent learning center. At last but not least, it is expected that the next researchers conduct this research by adding research variables with different design of this research.

#### REFERENCES

- Aldridge, J. M., Fraser, B. J., Bell, L., & Dorman, J. 2012. Using a New Learning Environment Questionnaire for Reflection in Teacher Action Research. *Journal of Science Teacher Education*, 23(3): 259-290.
- Anggara, R. A., & Chotimah, U. 2012. Penerapan Lesson Study Berbasis Musyawarah Guru Mata Pelajaran (MGMP) terhadap Peningkatan Kompetensi Profesional Guru PKn SMP Se-Kabupaten Ogan Ilir. *Jurnal Forum Sosial*, 5(2): 188-197.
- Ariyanto, S. Y. 2012. Pengelolaan Pengembangan Pembelajaran Pendidikan Kewarganegaraan Berbasis Lesson Study. Tesis tidak diterbitkan. Surakarta: Pascasarjana Universitas Muhammadiyah Surakarta.
- Aunurrahman. 2013. Belajar dan Pembelajaran. Bandung: Alfabeta.
- Baba, T. 2007. How is Lesson Study Implemented? Dalam Isoda, M., Stephen, M., Ohara, Y., dan Miyakawa, T., (Eds). *Japanese Lesson Study in Mathematics its Impact, Diversity and Potential for Educational Improvement*. New Jersey: World Scientific Publishing.
- Bjuland, R., & Mosvold, R. 2015. Lesson Study in Teacher Education: Learning from a Challenging Case. *Teaching and Teacher Education*, *52*: 83-90.
- Buku, M. N. I., Mite, Y., Fauzi, A., Widiansyah, A. T., Anugerah, D. Y., & Sari, M. S. 2016. Penerapan Pembelajaran Cooperative Script Berbasis Lesson Study sebagai Upaya Peningkatan Keaktifan Lisan dan Kecakapan Sosial Mahasiswa S1 Pendidikan Biologi Matakuliah Strategi Belajar Mengajar. Prosiding Seminar Nasional Biologi / IPA dan Pembelajarannya, FMIPA Universitas Negeri Malang, Malang, 15 Oktober.
- Copriady, J. 2013. The Implementation of Lesson Study Programme for Developing Professionalism in Teaching Profession. *Asian Social Science*, 9(12): 176-186
- Danarwati, Y. S. 2016. *Manajemen Pembelajaran dalam Upaya Meningkatkan Mutu Pendidikan*, (Online), (http://stia-asmisolo.ac.id/jurnal/index.php/jmbb/article/download /21/19, diakses 26 Juli 2016).
- Djamarah, S. B. 2005. Guru dan Anak Didik dalam Interaksi Edukatif: Suatu Pendekatan Teoritis Psikologis. Jakarta: PT Rineka Cipta.
- Doig, B., & Groves, S. 2011. Japanese Lesson Study: Teacher Professional Development through Communities of Inquiry. *Mathematics Teacher Education and Development*, 13(1): 77-93.
- Endedijk, M. D., & Vermunt, J. D. 2013. Relations between Student Teachers' Learning Patterns and Their Concrete Learning Activities. *Studies in Educational Evaluation*, *39*: 56-65.
- Fernandez, M. L. 2010. Investigating How and What Prospective Teachers Learn through Microteaching Lesson Study. *Teaching and Teacher Education*,

- 26: 351-362.
- Firman, H. 2007. Critical Success Factors untuk Pengembangan Lesson Study Berbasis MGMP: Pelajaran yang Dipetik dari Kabupaten Sumedang. Makalah disajikan dalam Seminar Nasional Exchange of Experiences on Best Practices of Lesson Study, FPMIPA Universitas Pendidikan Indonesia, Bandung, 21 Juli.
- Freire, P. 2013. Pendidikan Kaum Tertindas. Jakarta: Penerbit Pustaka LP3ES Indonesia.
- Gasevic, D., Mirriahi, N., Dawson, S., & Joksimovic, S. 2016. Effects of Instructional Conditions and Experience on the Adoption of a Learning Tool. Computers in Human Behavior, 43: 1-14.
- Haryoto, Lestari, M. D., & Suseno, N. A. 2010. Pengelolaan Pembelajaran Lesson Study Mata Pelajaran IPA di SMA. Widyatama, 19(1):58-65.
- Isoda, M. 2010. Lesson Study: Problem Solving Approaches in Mathematics Education as a Japanese Experience. International Conference on Mathematics Education Research 2010 (ICMER 2010). (Online), Procedia - Social and Behavioral Sciences, hlm. 3375-3380, (http://www. sciencedirect.com, diakses 14 Juni 2016).
- Kamus Bahasa Indonesia. 2008. Jakarta: Pusat Bahasa Departemen Pendidikan Nasional.
- Kemmis, S., & McTaggart, R. 2014. The Action Research Planner. Victoria: Deakin University Press.
- Khan, A. 2012. Instructional Management of a Private and A Government Secondary School Principal in Northern Pakistan. International Journal of Educational Development, 32: 120-131.
- Kusuma, F. W., & Aisyah, M. N. 2012. Implementasi Model Pembelajaran Kooperatif Tipe Think Pair Share untuk Meningkatkan Aktivitas Belajar Akuntansi Siswa Kelas XI IPS. Jurnal Pendidikan Akuntansi Indonesia, 10(2): 43-63.
- Leavy, A. M., & Hourigan, M. 2016. Using Lesson Study to Support Knowledge Development in Initial Teacher Education: Insights from Early Number Classrooms. Teaching and Teacher Education, *57*: 161-175.
- Lewis, C. C. 2002. Lesson Study: A Handbook of Teacher-Led Instructional Change. Philadelphia Research for Better Schools, Inc.
- Mahmudi, A. 2009. Mengembangkan Kompetensi Guru Melalui Lesson Study. Forum Kependidikan, 28(2): 84-89.
- Mahmudi, A. 2015. Lesson Study, (Online), (http://staff. uny.ac.id/sites/default/files/ tmp/Lesson-Study-MGMP-Jetis-2006 1.pdf, diakses 25 Mei 2016).
- Maisaroh, S. 2016. Peningkatan Keaktifan Mahasiswa pada Proses Pembelajaran Mata Kuliah IPS 2 Menggunakan Model Kooperatif Jigsaw dalam Kegiatan Lesson Study. Elementary School (Jurnal Pendidikan dan Pembelajaran Ke-SD-an), 3(1): 99-112.

- Malahayati, E. N. 2015. Meningkatkan Kemampuan Memecahkan Masalah melalui Metode Project Based Learning Berbasis Lesson Study. *Konstruktivisme*, *7*(1): 52-61.
- Marks, S. U., Shaw-Hegwer, J., Schrader, C., Longaker, T., Peters, I., Powers, F., & Levine, M. 2003. Instructional Management Tips for Teachers of Students with Autism Spectrum Disorder. Teaching Exceptional Children, 35(4): 50-55.
- Martin, N. K., & Sass, D. A. 2010. Construct Validation of the Behavior and Instructional Management Scale. Teaching and Teacher Education, 26: 1124-1135. Martin, N. K., Sass, D. A., & Schmitt, T. A. 2012. Teacher Efficacy in Student Engagement, Instructional Management, Student Stressors, and Burnout: A Theoretical Model Using In-Class Variables to Predict Teachers' Intent-to-Leave. Teaching and Teacher Education, 28: 546-559.
- Moro, H. K. E. P., Aprilia, N., Bagus, T. P., Febrianti, N., Yunianto, I., Dhaniaputri, R., Prastowo, I., Abdillah, A., & Irawati, H. 2016. Penerapan Indonesia Lesson Study untuk Meningkatkan Aktifitas Mahasiswa dalam Mata Kuliah Teknik Budidaya Hewan. Prosiding Symposium on Biology Education (Symbion), Prodi Pendidikan Biologi, FKIP, Universitas Ahmad Dahlan, 27 Agustus.
- Murata, A. 2010. Teacher Learning with Lesson Study, (Online), Procedia - Social and Behavioral Sciences, (http://www.sciencedirect.com, diakses 2 Maret 2016).
- Murata, A. 2011. Introduction: Conceptual Overview of Lesson Study. Dalam Hart, L. C., Alston, A. S., & Murata, A. (Eds.)., Lesson Study Research and Practice in Mathematics Education: Learning Together. New York: Springer.
- Nasution, A. M. 2012. Upaya Meningkatkan Keaktifan Belajar Siswa melalui Model Pembelajaran Kooperatif Tipe Team-Game-Tournament dengan Media Teka-teki Silang pada Mata Pelajaran Ilmu Pengetahuan Alam. Laporan penelitian tidak diterbitkan. Yogyakarta: LPPM Universitas Negeri Yogyakarta.
- Nesusin, N., Intrarakhamhaeng, P., Supadol, P., Piengkes, N., & Poonpipathana, S. 2014. Development of Lesson Plans by the Lesson Study Approach for the 6<sup>th</sup> Grade Students in Social Study Subject Based on Open Approach Innovation. 5<sup>th</sup> World Conference on Educational Sciences - WCES 2013, (Online), Procedia - Social and Behavioral Sciences, hlm. 1411-1415, (http://www.sciencedirect.com, diakses 20 Maret 2016).
- Norwich, B., & Ylonen, A. 2013. Design Based Research to Develop the Teaching of Pupils with Moderate Learning Difficulties: Evaluating Lesson Study in Terms of Pupil, Teacher and School Outcomes. Teaching and Teacher Education, 34: 162-173.

- Purwati, H., & Supandi. 2011. Meningkatkan Kompetensi dan Profesionalisme Dosen melalui Lesson Study. *Aksioma*, 2(2): 1-12.
- Rahardjo, M. 2012. *Model Pembelajaran Inovatif*. Yogyakarta: Gava Media.
- Rahayu, E. F. 2015. Manajemen Pembelajaran dalam Rangka Pengembangan Kecerdasan Majemuk Peserta Didik. *Manajemen Pendidikan*, 24(5): 357-366.
- Ratriningsih, W., Sapti, M., & Ika, W. 2015. Meningkatkan Keaktifan Belajar Siswa melalui Model Pembelajaran Snowball Throwing dengan Alat Peraga. *Ekuivalen*, 23: 240-245.
- Riswani, E. F., & Widayati, A. 2012. Model Active Learning dengan Teknik Learning Starts With A Question dalam Peningkatan Keaktifan Peserta Didik. *Jurnal Pendidikan Akuntansi Indonesia*, *X*(2): 1-21.
- Saito, E., & Atencio, M. 2013. A Conceptual Discussion of Lesson Study from a Micro-Political Perspective: Implications for Teacher Development and Pupil Learning. *Teaching and Teacher Education*, 31: 87-95.
- Saito, E., Harun, I., Kuboki, I., & Tachibana, H. 2006. Indonesian Lesson Study in Practice: Case Study of Indonesian Mathematics Science Teacher Education Project. *Journal of In-Service Education*, 32(2): 71-84.
- Sari, D. P., & Rahardi, R. 2013. Peningkatan Keaktifan dan Hasil Belajar Siswa Kelas XI IPS pada Pokok Bahasan Turunan dengan Pembelajaran Kooperatif Tipe Teams Games Turnament, (Online), (http://jurnal-online.um.ac.id/data/ artikel/artikel3AE82C 0B256A1626C9.pdf, diakses 2 Juli 2016).
- Sass, D. A., Lopes, J., Oliveira, C., & Martin, N. K. 2016. An Evaluation of the Behavior and Instructional Management Scale's Psychometric Properties using Portuguese Teachers. *Teaching and Teacher Education*, 55: 279-290.
- Sriklaub, K., & Wongwanich, S. 2014. Learning Activities

  Aimed at Promoting Students' Interest: Synthesis
  of Master Teachers' Activity Organizing Methods
  via TVMedia. 5<sup>th</sup> World Conference on Educational
  Sciences WCES 2013. (Online), Procedia Social and Behavioral Sciences, (http://www.sciencedirect.com, diakses 20 Maret 2016).
- Sripatmi. 2011. Implementasi Lesson Study pada Perkuliahan Aljabar Linier untuk Meningkatkan Aktivitas dan Prestasi Belajar Mahasiswa Semester III Pendidikan Matematika FKIP UNRAM. Prosiding Seminar Nasional Lesson Study 4 Peran Lesson Study dalam Mengembangkan Keprofesionalan Pendidik dan Peningkatan Kualitas Pembelajaran secara Berkelanjutan, FMIPA Universitas Negeri Malang, November.
- Sriyati, S. 2014. Bagaimana Implementasi Penelitian

- Tindakan Kelas dalam Aktifitas Lessons Study? *Jurnal Pengajaran MIPA*, 19(1): 61-68.
- Stigler, J. W., & Hiebert, J. 1999. The Teaching Gap: Best Ideas from the World's Teachers for Improving Education in the Classroom. New York: The Free Press.
- Suratno, T. 2012. Lesson Study in Indonesia: An Indonesia University of Education Experience. *International Journal for Lesson and Learning Studies*, 1(3): 196-215.
- Suryanti, E. W. 2012. Manajemen Lesson Study Berbasis Sekolah: Studi Multi Situs di SMA Laboratorium UM dan SMA Negeri 1 Grati Pasuruan. Tesis tidak diterbitkan. Malang: Program Pascasarjana Universitas Negeri Malang.
- Suyadi, G. 2011. Peningkatan Aktivitas Kolaboratif Kerja Kelompok dalam Pembelajaran Kalkulus 2 pada Mahasiswa Pendidikan Matematika Semester III FKIP UNILA. Prosiding Seminar Nasional Lesson Study 4 Peran Lesson Study dalamMengembangkanKeprofesionalanPendidik dan Peningkatan Kualitas Pembelajaran secara Berkelanjutan, FMIPAUniversitas Negeri Malang, November.
- Ulfatin, N. 2015. *Metode Penelitian Kualitatif di Bidang Pendidikan: Teori dan Aplikasinya*. Malang: MNC Publisher.
- Uno, H. B. 2008. *Teori Motivasi dan Pengukurannya*. Jakarta: PT Bumi Aksara.
- VanBeek, J. A., deJong, F. P. C. M., Wubbels, T., & Minnaert, A. E. M. G. 2014. Measuring Teacher Regulating Activities Concerning Student Learning in Secondary Education Classrooms: Reliability and Validity of Student Perceptions. *Studies in Educational Evaluation*, 45: 1-8.
- Vermunt, J. D., & Verloop, N. 1999. Congruence and Friction between Learning and Teaching. *Learning and Instruction*, *9*: 257-280.
- Vitasari, R., Joharman, & Suryandari, K. C. 2015. Peningkatan Keaktifan dan Hasil Belajar Matematika melalui Model Problem Based Learning Siswa Kelas V SD Negeri 5 Kutosari, (Online), (http://www.jurnal.fkip.uns.ac.id/index. php/pgsdkebumen/article/ download/2226/1640, diakses 2 Maret 2016).
- Widodo, S. F. A. 2016. Manajemen Pembelajaran Pendidikan Agama Islam di Perguruan Tinggi Umum, (Online), (http://staff.uny.ac.id/sites/default/files/pendidikan/manajemenpembelajaran-pendidikan-agama-islam.pdf., diakses 26 Juli 2016).
- Winarsih, A., & Mulyani, S. 2012. Peningkatan Profesionalisme Guru IPA Melalui Lesson Study dalam Pengembangan Model Pembelajaran PBI. *Jurnal Pendidikan IPA Indonesia*, *I*(1): 43-50.
- Yamin, M. 2007. *Kiat Membelajarkan Siswa*. Jakarta: Gaung Persada.

Yamtinah, S., Ashadi, Haryono, & Utami, B. 2013. Penerapan Lesson Study untuk Meningkatkan Keaktifan dan Kemampuan Mengelola Asesmen Pembelajaran bagi Mahasiswa Calon Guru Kimia. Seminar Nasional Kimia dan Pendidikan Kimia

V Kontribusi Kimia dan Pendidikan Kimia dalam Pembangunan Bangsa yang Berkarakter, FKIP Universitas Sebelas Maret, Surakarta, 6 April. Yoshida, M., & Fernandez, C. 2016. Lesson Study: An  ${\it Introduction}. To kyo: Global \ Education \ Resources.$