

LESSON STUDY TO IMPROVE STUDENT ENGLISH GRAMMAR MASTERY USING JIGSAW TECHNIQUE TO THE THIRD SEMESTER STUDENTS OF IKIP SILIWANGI

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Abstract: The implementation of Lesson Study is aimed to improve students' ability in mastering the teaching materials on English grammar, fostering creativity, improving critical thinking, and increasing ability to work both personally and in group. In implementing this lesson study, the researchers used jigsaw as a learning technique. This study was conducted in 3 cycles, in which each cycle consists of planning (Plan), implementation (do), and reflection (see). The results showed that there are good developments on students' learning where the constraints that appear can be minimized. Besides, students understand the function and word forms, they have high critical thinking or curiosity, and they have no difficulties in comprehending Grammar Formula. Moreover, the result also showed that students have high motivation in learning English and there was no gap between high-motivated and low-motivated students. Finally, after knowing what, why, and how Lesson Study was implemented, lecturers could consider the importance of applying lesson study in the learning process.

Keyword: *cooperative learning, grammar mastery, jigsaw, learning technique, lesson study*

INTRODUCTION

Many approaches and methods have been tried by English teachers and instructors on teaching English as a foreign language. They do such efforts in order to improve their students mastering English. As we know, English has four basic skills; they are listening, reading, speaking, and writing. To master all of the four basic skills, students must learn the other skills such as vocabulary and grammar as the basic skills. Both vocabulary and Grammar are the two important things that should be mastered by students in learning English. This assumption arises because vocabularies are very significant on one's mastery of such a language. Besides, grammar is something which cannot be ignored on learning English as stated by Argawati (2017) that learning

English is not dealing only on vocabulary but also on grammar. Strumpf and Douglas (2004, p. 14) also say "we study grammar so that we may speak and write in a clearer and more effective manner." Grammar covers many themes that may confuse students on memorizing and understanding them. However, since grammar is important to their development of English mastery, they have to study it well.

Many difficulties are faced by English teachers during the process of teaching grammar since grammar need to be not only memorized but also understood by the students. It relies more on the concepts. Once the students comprehend the concept, they will easily develop their ability on solving problem concerning grammar. To

deliver the concept, teachers must put their effort to seek for a suitable learning technique for the students.

To cope with the problems mentioned above, teachers may refer to the cooperative language learning (or simply cooperative learning) approach. This is an approach to teaching that makes maximum use of cooperative activities involving pairs and small groups of learners in the classroom. As stated by Slavin (1995) that cooperative language learning in which students work in small groups help students learn academic content more easily. In cooperative learning situations, there is a positive interdependence among students' goal attainments: students perceive that they can reach their learning goals if and only if the other students in the learning group also reach their goals. Therefore, the success of cooperative learning highly depends on the nature and organization of group work. According to Slavin (1995, p. 5), there are several specific models teachers can use to set up cooperative learning groups: 1) STAD (Student Teams Achievement Divisions), 2) Team Accelerated Instruction (TAI), 3) Jigsaw Technique, 4) Reading and Composition (CIRC), 5) Teams Games Tournaments (TGT), and 6) Cooperative Integrated.

From those six models, jigsaw is selected to be proposed as a solution in this research.

Jigsaw is a technique belonging to cooperative approaches which enable students to work in group discussion. The jigsaw technique is a method of organizing classroom activity that makes students dependent on each other to succeed. It breaks classes into groups and breaks assignments into pieces that the group assembles to complete the (jigsaw) puzzle. It was designed by social psychologist Elliot Aronson to help weaken racial cliques in forcibly integrated schools.

There are nine steps considered to be important in the implementation of the jigsaw classroom. Aronson (2008) describes them as follows.

1. Students are divided into a 5 or 6 person jigsaw group. The group should be diverse in terms of ethnicity, gender, ability, and race.
2. The day's lesson is divided into 5-6 segments (one for each member)
3. Each student is assigned one segment to learn. Students should only have direct access to only their own segment.
4. Students should be given time to read over their segment at least twice to become familiar with it. Students do not need to memorize it.
5. Temporary experts groups should be formed in which one student from each jigsaw group joins other students assigned to the same segment. Students in this expert group should be given time to discuss the main points of their segment and rehearse the presentation they are going to make to their jigsaw group.
6. Students come back to their jigsaw group.
7. Students present his or her segment to the group. Other members are encouraged to ask question for clarification.
8. The teacher needs to float from group to group in order to observe the process. Intervene if any group is having trouble such as a member being dominating or disruptive.
9. A quiz on the material should be given at the end so students realize that the sessions are not just for fun and games, but that they really count.

The application of this method, jigsaw, itself will not be effective if it is only used without any appropriate arrangement. Therefore, the researchers put this method into several cycles which belong to lesson study. Lesson study is a major form of quality improvement of learning and teacher professional development. It was first developed by elementary teachers in Japan (Susilo *et al.*, 2011, p. 2). It provides a process for collaborating and designing lessons and evaluating the success of teaching

strategies that have been implemented in an effort to improve students' learning and learning process itself (Santayasa, 2009). Lesson study has three main sections in every cycle; they are (1) *plan*: planning an instruction or action in the classroom, (2) *do*: doing an action which had been planned, and (3) *see*: evaluating and revising the action done. Teachers feel free to determine how many cycle they want to conduct on this study. The more the cycle conducted, the better the effect would be.

Lesson Study (LS) is a highly specified form of classroom action research focusing on the development of teacher practice. It has been used in Japan since the 1870s. LS therefore pre-dates action research as we know it in the West, by some 70 years. LS involves groups of teachers collaboratively planning, teaching, observing and analyzing learning and teaching in 'research lessons'. They record their findings. Over a cycle of research lessons, they may innovate or refine a pedagogical approach that will improve pupil's learning and which will be shared with others both through public research lessons, and through the publication of a paper outlining their work.

Taking part in collaborative enquiries into improving teaching and

learning is the most impactful action a school leader can take to improve educational outcomes for pupils (Robinson, Hohepa & Lloyd, 2009). LS only started to become popular in the west this century, following the success attributed to it by US researchers in developing deep teacher knowledge of both pedagogy and of subject amongst Japanese teachers. This leads to high standards of educational attainment by Japanese pupils when compared with those of comparable groups of pupils in the US (Stigler & Hiebert, 1999; TIMSS, 1999).

Another definition for lesson study comes from Rusman (2011, p. 385) who argues that lesson study is one of the coaching efforts to improve the learning process conducted by a group of teachers in a collaborative and continuous in planning, implementing, observing and reporting the results of reflection of learning activities. Moreover, Hendayana (2006, p. 10) argue that lesson study is a model of educational profession development through collaborative learning and continuous learning based on the principle of colleague and mutual learning to build learning communities.

The procedure of research and how the program work in implementing lesson study is showed at figure bellow.

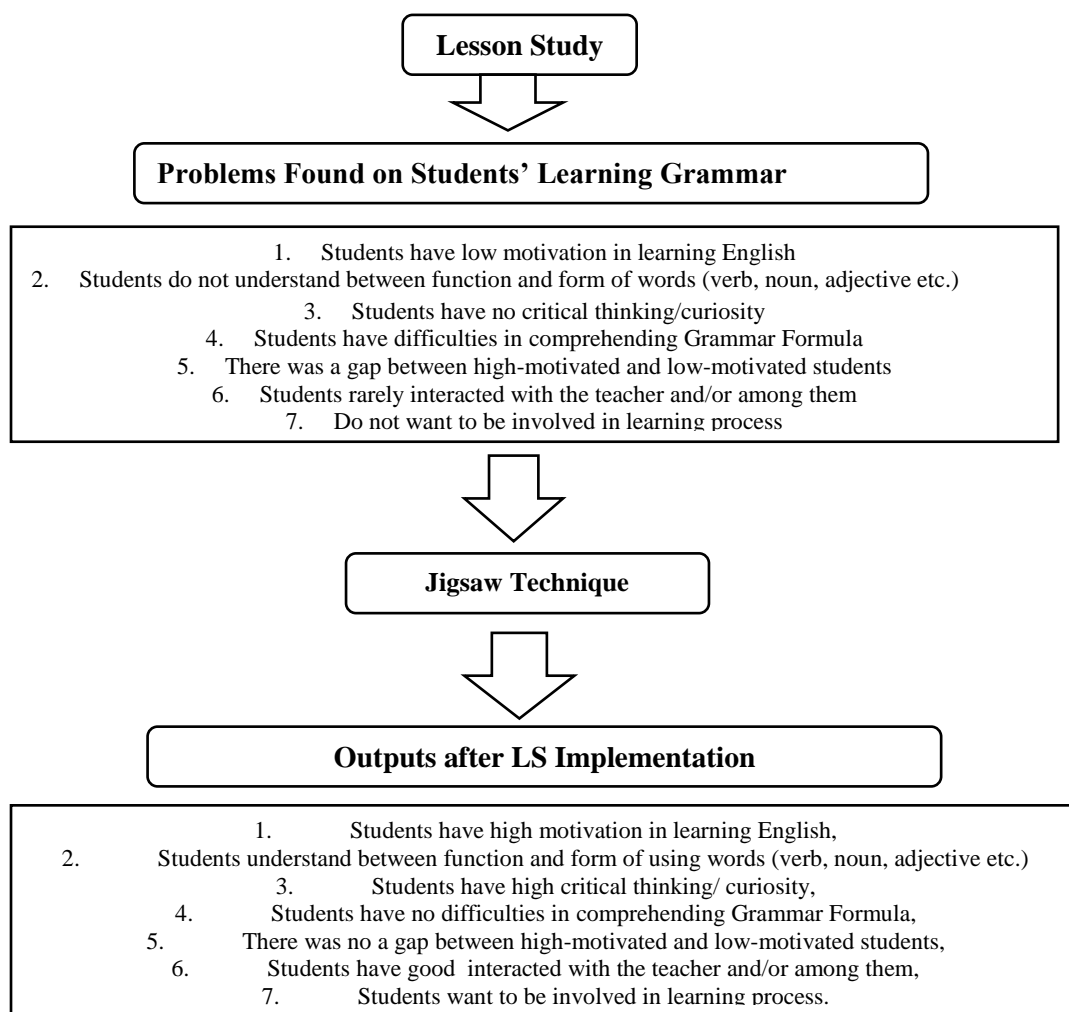


Figure 1. *Problem, solution and output after LS*

METHOD

This study was conducted at IKIP Siliwangi Bandung. Specifically, the study was carried out at Class A3 which consists of 40 students majoring English Education. In this research, lesson study was used to improve the quality of the students covering creativity, critical thinking, ability to collaborate and communicate when they study grammar using jigsaw. Fernandez (2005) as cited in Hartanti (2007) expresses that the goal of lesson study is to improve the effectiveness of the experiences that the teachers provide to their students. In addition, Santyasa (2009) argues that lesson

study provides a process for collaborating and designing lessons and evaluating the success of teaching strategies that have been implemented in an effort to improve students' learning and learning processes. This study relies more on the process of collaboration between student to student, and between students to teacher. In conducting this study, the researchers use procedure as proposed by Putra *et al.* (2010, p. 8). He states that lesson study is supported by three pillars of activities, namely, plan, do and see. Figure 2 below shows the procedure of lesson study used by the researchers.

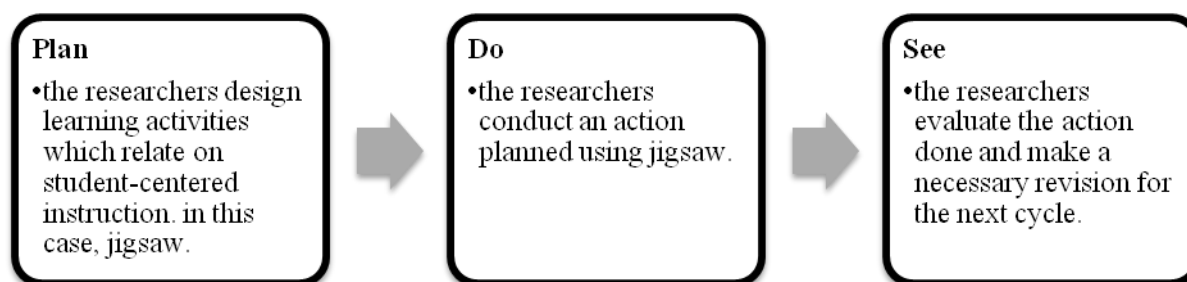


Figure 2. Procedure of Lesson study

Firstly, in *plan* step, the researchers design learning activities which relate to student-centered instruction where students are able to participate actively in the learning process. Secondly, in *do* step, the researchers conduct an action planned by using jigsaw. Here, the students actively follow the learning process given by the researchers. Lastly, in *see* step, the researchers evaluate the action done and make a necessary revision for the next cycle.

RESULTS AND DISCUSSION

Lesson study involves groups of teachers meeting regularly over a period of time (ranging from several months to a year) to work on the design, implementation, testing, and improvement of one or several “research lessons” (Stigler & Hiebert, 1999). Research lessons are actual classroom lessons taught to one’s own students, that are (a) focused on a specific teacher-generated problem, goal, or vision of pedagogical practice, (b) carefully planned, usually in collaboration with one or more colleagues, (c) observed by other teachers, (d) recorded for analysis and reflection, and (e) discussed by lesson study group members, other colleagues, administrators, and/or an invited commentator (Lewis & Tsuchida, 1998).

Lesson study which was conducted by the researchers took place at IKIP Siliwangi, especially to the third semester students which consisted of 40 students. The class was chosen due to the existence of some problems. As mentioned above, many students found difficulties in understanding the concept of grammar. Grammar has a wide discussion and number of points to discuss. Besides, there is also a

psychological factor that affects the students’ difficulties, namely anxiety. Since they do not understand the concept, they mostly could not answer the question correctly. This situation rises their anxiety of being wrong.

To solve the problem, technique of jigsaw was proposed. Jigsaw belongs to cooperative learning which seeks to develop classrooms that foster cooperation rather than competition in learning. Brown (2001, p. 185) defines jigsaw technique as a special form of information gap in which each member of a group is given some specific information and the goal is to pool all information to achieve some objectives. Jigsaw involves two distinct groups in which students will be a part of. Initially, there is a heterogeneous group that the students will temporarily leave to meet with homogeneous group to learn to be an expert on a topic. After students have become “experts” they reconvene with their original heterogeneous group to take turns sharing their “expert” knowledge.

The teaching method used in this research was Lesson study. Lesson study has three main sections in every cycle; they are (1) *plan*: planning an instruction or action in the classroom, (2) *do*: doing an action which had been planned, and (3) *see*: evaluating and revising the action done. On this research, the researchers decided to use two cycles of the lesson study. Each cycle consisted of those three steps.

Action in cycle I began with the application of Jigsaw technique. The implementation of this lesson aims to improve discipline and teamwork. Cycle I is held during the first meeting or 2 hours of

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lesson. The implementation of this learning technique was done by one lecturer model who was assigned to teach and become a learning facilitator, and three observers who were tasked to observe the learning process. In the first cycle, the application of learning is done by collaborative learning method which contains two activities, namely group discussion and group presentation.

1. Plan stage

The first phase of the first cycle is the *plan or planning phase* implemented on April 6th, 2017. The researchers did discussion session to determine the material and the technique applied in the classroom. It

would be delivered by one of the researchers as a lecturer of the subjects of the Foundation of English Grammar who will also serve as the lecturer model in the implementation of this lesson study. The design of learning was made by focusing on the importance of teamwork and student discipline. Based on the draft, the lesson study for *do* in the first cycle requires instructional tools, such as papers containing materials for Jigsaw implementation and lessons learned in group discussions. The researchers should prepare an observation sheet to observe the activities and performance of each group.



Figure 3. Discussion session and material preparation

Figure 3 shows the situation when the researchers discussed about the material which would be delivered in the classroom. The material chosen was about tense covering progressive and simple present tense. The first researcher proposed jigsaw as a technique and some media in the form of cards which contained some problems and their answer sheet. Students would set on group and would get their own task to be gathered on the expert group. After coming back to their first group, they had to share their knowledge gaining from the expert group.

2. Do stage

Do stage or stage of learning implementation in cycle I is executed on April 7th, 2017 where the learning activity starts with the lecturer model. After the lesson was started, the lecturer model then

conducted preliminary learning activities such as checked the readiness of the students in following the lesson, asked students condition, checked the attendance, then leading the prayer. Then the model lecturers did the core activities of learning, delivered learning objectives, materials and indicators to be achieved. After that, the lecturer model divided the students into several groups to further implement Jigsaw as a technique in learning. After the lecturer divided the students into several groups and provided the Foundation of English Grammar material, other lecturers as observers observed the course of the learning process and observed the involvement of each student in the learning process.

Based on the conditions and target achievement of the course, the group formed is a group based on the divisions that exist in

Grammar learning activities. It aims to have good communication and coordination on every student. At the end of the learning activities, the lecturer conducted an evaluation by requesting a brief report on the

results of the discussions that have been carried out by each group. Then, the lecturer concluded and motivated students to work well together.



Figure 4. *The learning condition in the classroom*

The figure shows the process of learning and teaching conducted by the researchers. The first researcher was as the lecturer, and the second researcher acted as the observer. The students were doing discussion and one of them was explaining about the definition and function of present progressive and present simple tense. On the other hand, the other students were paying attention and they had to be ready to give any suggestion or additional information if needed. After the discussion, they came back to their first group and accomplished the exercise given by the lecturer.

3. *See stage*

Phase *see* or evaluation of learning was done immediately after the *do* stage completed on April 7th, 2017. Based on observations, stage *do* that has been conducted has a great impact on students in the learning process, namely:

- a. Students have high motivation in learning English,
- b. Students understand the function and word forms (verb, noun, adjective, etc.)
- c. Students have high critical thinking/curiosity
- d. Students have no difficulties in comprehending Grammar Formula
- e. There was no a gap between high-motivated and low-motivated students
- f. Students have a good interaction with the teacher and among them
- g. Students want to be involved in learning process.

Actually there are three cycles for this research based on Lesson study and Jigsaw as technique, but the researchers only provided one cycle as the representative of LS. To make it clear, the description of final result of Lesson study from cycle 1 to 3 is shown in the table below.

Table 1. *Description of Final Lesson Study Observation Sheet*

No	Aspect of Learning Activities	Score	Note
1	A. Students with Materials	86	Excellent
2	B. Students with Learning Media	85	Excellent
3	C. Student with Teacher	87	Excellent

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4	D. Students with Students	84	Good
5	E. Achievement of Learning Objectives	88	Excellent
	<i>Total Score</i>	430= 86	Excellent
	<i>General Comment</i>	<i>Based on the result, Lesson Study Using Jigsaw as the technique could give Excellent feedback for students in learning Grammar. They had great improvement in joining learning process.</i>	

Scoring Scale:

Excellent	: 85– 100
Good	: 75 – 84
Fair	: 65 – 74
Poor	: < 64

From the table, it can be seen that the four aspects of learning activities, including students' interaction with learning materials, learning media, teachers, and the achievement of learning objectives, categorize as excellent. It means that lesson study with jigsaw technique gives positive impact on students in learning grammar. In terms of students' relationship with other students, it categorizes since the students work well in group activities such as students actively involved in group activities, collaborative learning, etc.

CONCLUSION

From the analysis, it can be concluded that the implementation of Lesson Study lesson study in improving students' ability in mastering grammar materials using jigsaw as a learning technique gives positive impacts on students in which there are good developments on students' learning where the constraints that appear can be minimized. Besides, students understand the function and word forms, they have high critical thinking or curiosity, and they have no difficulties in comprehending Grammar Formula. Moreover, the result also showed that students have high motivation in learning English and there was no gap between high-motivated and low-motivated students. Finally, after knowing what, why, and how Lesson Study was implemented, lecturers could

consider the importance of applying lesson study in the learning process.

REFERENCES

- Fernandez, M. L. (2005). Exploring "Lesson Study" in teacher preparation. In Chick, H. L. & Vincent, J. L. (Eds.), *Proceedings of the 29th Conference of the International Group for the Psychology of Mathematics Education*, 2, 305-312. Melbourne: PME. Retrieved from <http://www.emis.de/proceedings/PME29/P>.
- Hartanti, P. (2007). *Penerapan lesson study dalam pembelajaran statistika sebagai upaya meningkatkan hasil belajar siswa kelas 3 akuntansi 1 SMK negeri 1 Jember*. A paper presented in KGI 2007. Jakarta, 27-28 Nopember 2007.
- Hendayana, S. (2006). *Lesson study: Suatu strategi untuk meningkatkan keprofesionalan pendidikan (Pengalaman IMSTEP-JICA)*. Bandung: UPI Press.
- Putra, Y., et al., 2010. *Belajar dari Pembelajaran: Best practice implementasi lesson study*. Jakarta: Direktorat Tenaga Kependidikan, Dirjen PMPTK Kementerian Pendidikan Nasional.
- Robinson, V., Hohepa, M., & Lloyd, C. (2009). *School leadership and student outcomes: Identifying what works and why best evidence synthesis*. Auckland: New Zealand Ministry of Education.
- Rusman. (2011). *Model-model pembelajaran: Mengembangkan profesional guru*. Jakarta: Rajagrafindo Persada.
- Susilo, H., et al. (2011). *Lesson study berbasis sekolah: Guru konservatif menuju guru inovatif*. Jatim: Bayu Media.
- Santiyasa, W. I. (2009). *Implementasi lesson study dalam pembelajaran*. A paper presented in a Seminar at Universitas Pendidikan Ganesha.
- Strumpf, M., & Douglas, A. (2004). *Golden's concise English grammar*. Kuala Lumpur: Golden Books Centre SDN.