DISCOVERY LEARNING IN LESSON STUDY

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Abstract
The use of models, approaches, methods, strategies, and techniques in teaching English have been being conducted since the language is claimed to be taught in all of countries. Besides, the ever-changing policy in curriculum in Indonesia makes the educators decides to adopt or adapt some unique ways of teaching English as a Foreign Language especially in reading class. However, the problems of acquiring knowledge and skills in English still happened in MKU Bahasa Inggris in achieving learning outcomes in reading. Based on the need analysis, we started to conceptualize the ways how to teach reading based on lesson study. In Lesson Study, educators discuss the learning process together so that they can increase their professionalism and the result will impact the production of high-quality students. This article explains the how teachers discuss about the planning, Implementing, and evaluating. It is expected that the procedures impact students to discover knowledge critically and collaboratively, and also later, evaluate their competency individually in reading.

Keywords: Discovery Learning, Teaching Reading, Lesson Study, E-Learning

Introduction
In globalization era, all of higher education, university, in Indonesia put English as one of the compulsory courses to be learnt by college students called English as a general course. The purpose of this course is to equip the students’ skills in English, reading, writing, listening, and speaking. In Universitas Negeri Padang, English as a general course called MKU Bahasa Inggris is intended to assist students in understanding everything related to their resources in English like books, scientific references published in scientific journals or magazines. To reach the aim, this course should provide some activity to make them able to master the receptive skill particularly in reading. According to Lee (2014) good reading ability is also a capital for life-long learning (lifelong learning). It is the activity “to build their mental activity to understand the messages by analyzing, synthesizing, and evaluating what is read” (Arianto, 2007: 2).

According to Arianto, Sari, and Wahyuni (2018: 126) the implementation of English general lectures using teaching materials that have been developed by lecturers MKU English proficiency based on established RPS. However, based on the initial analysis, the teaching materials used in the learning process of General English Language Course is still far from what is needed by students. One of the lecturers of English general subjects said that the teaching materials used are still not able to achieve the purpose of learning English. Good teaching materials are teaching materials used by lecturers and students to help the learning process become more effective and efficient. Therefore, the development of teaching materials must be in accordance with their needs. But in the teaching of English MKU in UNP, because of the unavailability of standard teaching materials, lecturers sometimes adopt teaching materials that are also used for the level of students of English Department. This has an impact on the ineffectiveness of the learning process because the teaching materials do not match the needs and abilities of MKU English language students. Furthermore, initial observations have been made about the condition of the English class of MKU.

It was found that the number of students taking the General English Course is more than 50 to 60 students (large classes). According to Bahanshal (2013), a large class in the context of ELT (English Language Teaching) is a major impediment to effective English teaching and learning. This is exacerbated by the diverse background of student fields as well as very short study time, only 100 minutes for one meeting and only once a week. Lecturers do not have much time to guide students who have different skills intensively so it is difficult to ensure that all students achieve the learning objectives in each meeting. On the other hand, lecturers also can not provide tasks and follow-up evaluation to the students due to time constraints. This problem is in line with Qiang and Ning’s (2011) theories that list some of the major issues of teaching English in large classes, namely (1) how to manage classroom activities in accordance with time constraints,
how to facilitate students fairly to participate in class, and (3) how to provide evaluation and feedback to students effectively.

Based on the above explanation, the researcher tries to develop the teaching material that is suitable with the student's requirement and suitable for use in the class which the number of students is big scale and Blended Learning will be integrated into the teaching materials that will be developed. Here's the roadmap of the study.

**Discovery Learning**

The focus of teaching in social science such as English language teaching is not merely about the construction of language. Teachers should create the atmosphere of learning become more active and involve the activities in which the students find out their knowledge by themselves. As Balim (2009: 2) claimed that teachers do the activities in teaching and learning process in which the students active in discovering, critical thinking, questioning, and problem solving skills.

The discover learning allows students to learn the language and find the knowledge by taking some examples from their environment. Similar with Matthews (2002) who said that the process of inquiry demand the students relate their knowledge and make the examples from their daily life, do hypothesis, and test the hypothesis to increase their cognitive. Hanafiah and Suhana (2009: 77) also added that in discovery learning, students are asked to do several sequence of learning activities which involve them to inquire the knowledge systematically, critic, and logic so that they can discover the knowledge, attitude, and skills. Besides, the activities that are done to discover the knowledge can be in the form grouping or several students do collaboratively.

The patterns of doing discovery learning in class are started from giving problems, finding out the solutions collaboratively, and concluding by showing the knowledge discovered. Alma (2010: 61) has formulated the steps in doing discovery in details; those are setting the problems, formulating the hypothesis, collecting and analyzing the data, and concluding. But, if we bring the steps into the discovery learning, the steps are stimulating, identifying the problems, collecting the data, processing the data, verifying, and generalizing (Widyastuti, 2015: 36). Mushtoza (2016: 60) also said that in stimulation, students are encouraged to identify the topic. Then, in problem statement, students are asked to find out the knowledge. After that, students are given the opportunity to explore as could as possible in data collection step. Next, in data processing students are given the opportunity to process the data that they find to solve the problems. In verification, students do the correction (may be in peers or feedback from teachers). Finally, the students find the new concept.

**Lesson Study**

Lesson study gets many attentions in several countries especially in Indonesia to improve teachers quality in teaching and learning process. This philosophy was derived from several educators in Japan. Besides, it appears in all curriculums in Japan (Doig and Groves, 2011: 77). The philosophy first was developed in small team and it was happened in elementary education in Japan. As Cerbin and Kopp (2006: 250) said that the teaching improvement and knowledge building called lesson study has origins in Japanese education in elementary level. But, nowadays, it can be used in every level started from elementary to higher education.

Lesson study is done in a small team of teachers who decide to improve their quality of teaching by doing discussion. Cerbin and Kopp (2006: 250) added that the teachers discuss in a small group and work to plan, teach, observe, analyze, and refine its lesson. It is also called as research lesson where they try to plan the steps of teaching in groups collaboratively, experiment what they have planned, analyze the problems after conducting it in teaching. It seems like classroom action research that includes planning, implementing, observing, and reflecting in a cycle. As Khasinah (2013: 108) said that the action research is a kind of research that focuses on the process of designing a research question, finding out the techniques, methods, strategy, or models which are appropriate to the problems faced, collecting the data, analyzing, and writing the findings.

However, the differences between the lesson study and classroom action research were located in the process of planning and implementing. In lesson study, teachers sit in a small group and discuss the problems that they have in teaching and learning process. Besides, the sense of collaborative is also appeared in Lesson Study. The activities in collaborative can be face-to-face conversations or talking by using computers to conduct discussions such as online forums, social media, or many other social networks (Hernandez, 2012: 804). They together find out the steps of teaching and write down to the lesson design. They also free to make the steps as far as the steps are logic and able to be implemented. Suyanti and Purba (2017: 2) claimed that in lesson study, teacher can “freely improve performance and his professionalism which can ultimately
improve the quality of learning and produced the high-quality students.” The further explanation of the steps can be seen as follows.

**The phases of Lesson Study**

Lesson Study can help students professional development because they corporate with their peers on a shared learning goal before they go to their students. Their peers are also invited to observe the students in class called open class by focusing on students’ learning not on teacher performance. Lesson study has several phases to be done by the lesson study community. There are several phase done in doing Lesson Study; Plan, Do, See.

Plan phase is done by focusing on the discussion among teachers on designing teaching procedures. They set a goal first by working on several concrete explorations to achieve the goal. The procedures are based on their identification of students’ problems, needs, and styles. Fernandez (2002: 394) added that the product of discussion toward the planning done by them collaboratively is described on a written lesson design.

Do-See phase include several activities apart. Those are briefing, open class, and debriefing. In briefing activity, teacher with their peers plan the tools such as camera, note taking given to the teachers who observe the class, and learning materials that have been planned in plan phase before. In Open class, the teacher who teaches the class focuses on the teaching procedures done in plan phase. The other teachers as the observers see atmosphere of the class, take some notes while the students are in learning process, and help the teacher manage the class while some students are intervened by some obstacles such as cheating with their friends, do some things unimportant during learning process, and many others that may be happened.

In reflection phase, teacher and their peers meet together to discuss the improvement of teaching procedures after conducting open class session. In this phase, teachers focus on the quality of teaching process only and not getting blame to the teacher who was applied the steps before. The summarizing that can be improved for the further teaching may be understanding students’ learning styles, needs, and problems found by the observers.

**Conclusion**

The implementation of discovery learning in lesson study gives contributions to students and teachers. The elements of teaching discovery learning in lesson study require the teacher to encourage each other when preparing and determining what activities that can help students to achieve learning goals independently. The college students are indeed required to be actively creative in finding and formulating knowledge individually and in groups. With lesson learning based on lesson study philosophy and combined with activities included in discovery learning, it will create continuous learning where teachers and colleagues work hand in hand starting from the preparation process, observation, and evaluation the activities that have been done.

**References**


