

Strengthening Teacher Competence Through Lesson Study

An Indonesian Elementary School Experience

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Abstract: Lesson Study is a collaborative action research approach which aims to improve the effectiveness of student learning by enhancing the professional competence of teachers. Lesson Study in Indonesia evolved since 2004 in junior high schools. Until now developing in various levels of education ranging from elementary school to college. The purpose of this study focused on: (1) the competence to lesson planning; (2) the competence of the implementation of learning. Collecting data in this study using observation, interview and test. The results of this research are: (1) competence of learning plan has strengthening, especially making learning objectives, subject matter, learning activities and assessment; (2) competence to implement learning experience strengthening, especially introductory activity, demonstration, and guidance.

1 INTRODUCTION

The pattern of teacher development undertaken by the Ministry of Education and Culture of Indonesian Republic (Kemdikbud) began to shift from training in the ministries towards mentoring in schools. That is with the optimization program teacher learning community (KKG) in elementary school and teacher learning community of subject matter (MGMP) in junior school in the form of financial aid and mentoring.

Universities participate in the study and implementation of School-Based Lesson Study (LSBS). Lesson Study as a model of teacher professional development through collaborative learning and continuous learning based on the principles of collegiality and mutual learning to build learning communities. Lesson Study activities are developed learning that can encourage students to learn actively, creatively, effectively, and fun through hands-on dan mind-on activity, daily life, dan local materials (Hendayana, 2007). Cheng and Ling (2012) explained that lesson study is a collaborative effort in conducting action research to improve the effectiveness of learning.

Presumably Lesson Study is in line with the program of KKG and MGMP optimization which was launched by Kemdikbud. In Lesson study, there is a study of learning and improving the

effectiveness of learning. Then what about teacher competence? whether the lesson study can provide empowerment to teachers, especially primary school teachers.

This study focuses on issues: (1) how is the competence of teacher planning lesson? (2) how is the competence of teachers in implementing learning? Based on the problem, the purpose of this research is: (1) to describe teacher learning planning competence; (2) describe the competence of teachers in implementing learning.

2 METHODS

This research use case study method. Case study is an empirical process of seeking knowledge to investigate and examine phenomena in real-life contexts (Yin, 1999). This research is conducted in the context of school and teacher development programs. This program is a collaboration between schools and universities.

Participant in this research is a teacher at two elementary schools in one city in Indonesia. The participant profile as follows:

Table 1: Participants.

School/ Participant	Specialist	Education Degree	Start Teach ing
School A			
Headmaster	Civic Edu- cation	Bachelor	2011
Teacher	Class VI	Bachelor	2003
Teacher	Physical Edu- cation	Bachelor	2004
Teacher	Class II	Bachelor	2004
Teacher	Class VI	Bachelor	2008
Teacher	Class V	Bachelor	2013
Teacher	Class V	Bachelor	2004
Teacher	Class IV	Bachelor	2009
Teacher	Class III	Bachelor	2008
Teacher	Kelas IV	Bachelor	2008
School B			
Headmaster	Civic Edu- cation	Master	2006
Teacher	Physical Edu- cation	Diploma	2011
Teacher	Class V	Bachelor	2010
Teacher	Class IV	Bachelor	2010
Teacher	Class VI	Bachelor	2010
Teacher	Class I	Bachelor	2002
Teacher	Computer Edu- cation	Bachelor	2008
Teacher	Class II	Bachelor	2005
Teacher	Class III	Bachelor	2009
Teacher	Class II	Bachelor	2006

Data collection in this research is done by observation, questionnaire and interview. Observation is done with in order to obtain a picture of the implementation of learning. Questionnaire to get a picture of the ability of learning planning. Meanwhile, the interview was conducted in order to deepen the information based on observation and questionnaire, also used in the framework of verification of observation data and questionnaire.

Data analysis took the form of constant comparative analysis whereby themes were identified and coded as they surfaced across all interview questions.

3 RESULTS AND DISCUSSION

3.1 Competence of Knowledge about the Concept of Learning

Based on the results of questionnaire data analysis, there is a strengthening of the competence of

knowledge about the pursuit, as in the following table:

Table 2: Development of knowledge.

Component of Knowledge Competency	Before	After
Learning Strategies	50%	70%
Learning Objectives	40%	60%
Learning Methods	40%	60%
Learning Assessment	80%	80%

With regard to the components of learning strategies, teachers experience strengthening of knowledge. Initially teachers of some teachers answered did not know about learning strategy, finally after lesson study program know the concept of learning strategy. Most responded that learning strategies are the way teachers choose to deliver learning materials.

With regard to learning objectives, most do not know the concept of learning objectives. After the lesson study program, the teacher explained that the purpose of learning is the translation of basic competencies in the form of affective and psychomotor cognitive.

With regard to learning objectives, most do not know the concept of learning objectives. After the lesson study program, the teacher explains that the learning objective is a basic competence of cognitive, affective, and psychomotor. Strengthening is in line with the results of research Gutierrez (2016) that with lesson study can improve knowledge content science and learning strategies.

3.2 Competence of Learning Planning

The development of learning planning competencies, seen from the four main aspects of lesson plan (RPP) is good, namely:

- a. Teachers pay more attention to basic-competence (KD) hierarchy in order to determine the material and develop indicators of achievement of competence
- b. Teachers pay more attention to the structure of each KD in order to prepare materials and indicators of achievement of competence
- c. Teachers pay more attention to the structure of learning objectives in the form of audience-behavior-condition-degree (ABCD) in order to develop learning objectives
- d. Teachers pay more attention to indicators of achievement of competence in order to

arrange learning activities and evaluation tools.

Some of these impacts related to learning planning reinforce the results of research conducted by Dotger (2015) and Marsigit (2009). Dotger and Marsigit suggest that lesson study allows teachers to collaborate- discussions in curriculum and learning. In fact, with lesson study teachers can conduct teaching research in order to achieve teaching objectives (Lewis, 2009).

3.3 Competence of Learning Implementation

The development of competence of learning implementation, seen from the pattern of activities and time management, namely:

- a. Teachers have implemented learning sequence patterns of introduction, demonstration, practice and mentorship, and presentation
- b. Teachers pay more attention to the larger portion of time for demonstration, practice and mentoring activities.

These results prove that lesson study can have a reflective effect on teachers' thinking to improve their learning (Myers, 2013; Grant and Kline, 2010).

4 CONCLUSIONS

The results of this research are: (1) competence of learning plan has strengthening, especially making learning objectives, subject matter, learning activities and assessment; (2) competence to implement learning experience strengthening, especially introductory activity, demonstration, and guidance.

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