

Improving Pedagogic Competence and Process Skills through Lesson Study Learning

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Article Info

Abstract

Keywords:

Lesson Study, Pedagogic Competence, Process Skills

This research aims to improve pedagogic competence and process skills through lesson study learning. The qualitative descriptive method focuses on pedagogic competence and process skills through lesson study for teachers at an elementary school in Langsa. The type in this research is action research conducted in the classroom or School action research (School Action Research). The results of this study are; (1) the stages of the lesson study learning activity process with the average value obtained from the plan, do and see learning activities of 0.39% can be concluded to be good for implementation in learning activities; (2) the stages of teacher pedagogic competency assessment using the lesson study learning process with an average value of 0.64% is declared high, so it can be concluded that there is an increase in teacher pedagogic competence before and after; and (3) the stages of assessing process skills with an average value of 0.62% are declared good, meaning that it can be concluded that process skills before and after an increase occur.

Abstrak

Kata kunci:

Lesson Study, Kompetensi Pedagogik, Keterampilan Proses

Tujuan dari penelitian ini adalah untuk meningkatkan kompetensi pedagogik dan keterampilan proses melalui pembelajaran *lesson study*. Metode deskriptif kualitatif yang berfokus kompetensi pedagogik dan keterampilan proses melalui pembelajaran *lesson study* guru di salah satu SD Negeri Langsa. Rancangan penelitian yang telah dilakukan dengan menggunakan jenis penelitian tindakan sekolah (PTS). Hasil penelitian ini adalah ; (1) tahapan proses kegiatan pembelajaran *lesson study* dengan nilai rata – rata di peroleh nilai dari kegiatan belajar plan, *do* dan *see* sebesar 0.39% dapat disimpulkan baik untuk di implementasikan dalam kegiatan pembelajaran; (2) tahapan penilaian kompetensi pedagogik guru dengan menggunakan proses pembelajaran *lesson study* dengan nilai rata – rata sebesar 0.64% dinyatakan tinggi, maka dapat disimpulkan terjadi peningkatan kompetensi pedagogik guru sebelum dan sesudah; dan (3) tahapan penilaian keterampilan proses dengan nilai rata – rata sebesar 0.62% dinyatakan baik, berarti dapat disimpulkan keterampilan proses sebelum dan sesudah terjadi peningkatan.

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INTRODUCTION

The professionalism of a teacher in planning, implementing, and evaluating learning in the classroom also plays a role in determining the quality of learning. Quality learning is always evaluated and improved on an ongoing basis (Kemal & Setyanto, 2017). One of the efforts to achieve this is through learning assessment. Good teachers must plan, implement, and reflect on their learning activities to achieve quality learning (Sato, 2012).

Quality of Education reflects a competent educator. However, the reality is that the quality of education in Aceh has decreased. This causes teachers who have not met the competency standards as expected. The low quality of teachers can be seen from the 2013 Teacher Competency Test (UKG) results that teachers in Aceh only get a score of 40.66. It is still below the national average, which has reached 47.84 (Bakri, 2014). One of the competencies teachers in learning management must possess is pedagogic competence stipulated in Government Regulation of the Republic of Indonesia Number 74 of 2008. Based on Government Regulation of the Republic of Indonesia Number 19 of 2005 concerning Standards for Educators and Education Personnel, it is stated that pedagogic competence is the ability to manage student learning which includes an understanding of students, designing and implementing learning, evaluating learning outcomes, and developing students to actualize their various potentials.

Improving the quality of education can be done by improving the quality of teachers through Lesson study. Based on the research results conducted by Listyani (2008), lesson study in improving teacher pedagogic competence can make teachers manage classes better, plan well, and develop better media so that students learn more interestingly and students participate more in learning. Carrying out learning activities, teachers must implementing them using various models, methods, and strategies to deliver material about learning. In the professional improvement of teachers in learning activities, by implementing Lesson study. This is by the opinion of White & Lim (2008). A lesson study is an activity where teachers can develop learning and professional skills in improving student learning outcomes. Meanwhile, according to Susilo (2006), lesson study is a learning activity carried out by teachers to improve teachers' quality of learning and professional development. The process of learning activities as a teacher lesson study model, there are several stages according to Lewis (2002), describing the process as collaborative steps with teachers to plan, observe, and reflect on learning. The lesson study stages are the basis for improving the professionalism of teachers as model teachers to deliver material to students.

According to Nudji (2014), the results of the research state that lesson study can increase student learning independence. According to Rozak & Fauziah (2013), the implementation of lesson study has a positive impact on the development and improvement of the pedagogical competence of Indonesian language teachers. Meanwhile, Farida (2016) stated that through lesson study, mathematics lecturers are expected to improve the performance of lecturers and ultimately have an impact on the quality of learning and students. Furthermore, it is related to the results of research which show that in the first cycle using the process of lesson study activities at the planning (plan), implementation (do), and reflection (see) stages with a value of 81.66%, which is categorized as good (Nursamsu et al., 2018).

Dionisius's (2017) research says that Lesson Study helps teachers design quality learning programs (RPP). Another reason that strengthens the choice of this alternative is the statement of Lewis (2002) in Susilo et al. (2013) related to teacher coaching to improve teacher competence in designing lesson plans saying that Lesson Study contributes eight teacher professional development experiences, one of which is point 5 which states provide the experience of designing collaborative learning. Another research was finding states that the increase in teacher professionalism occurred in the Lesson Study team (Arsy et al., 2014). Difference from the previous study, this research focuses on lesson study to improve pedagogic competence and process skills.

METHOD

The research was conducted at SD Negeri 10 Langsa, which was carried out in the odd semester of the 2021/2022 Academic Year, namely in July 2021. Before the research was conducted, socialization activities and workshops (plans) were first carried out for two days, namely 14 and 15 July 2021. The social studies material agreed on the subject matter between the model teacher and the researcher.

The research instrument was used in the form of teacher observation sheets, namely: Observation sheets for pedagogic competence of social studies teachers in the implementation of learning and questionnaires for social studies teacher process skills. The type in this research is action research conducted in the classroom or School action research (School Action Research). School action research is research conducted by teachers in their class by (1) planning, (2) implementing, and (3) reflecting on collaborative and participatory actions to improve their performance as teachers to carry out learning activities. The design of classroom action research in this study refers to the Kemmis & Taggart model, where each cycle in this study consists of four stages, namely, (1) planning, (2) action, (3) observation, and reflection. The four stages are one cycle or round, meaning that after the 4th stage, they return to the first stage.

To measure process skills, the N-Gain Formula (Mingguana, 2010) is used as follows:

$$N\text{-Gain} = \left[\frac{N_B - N_A}{N_{MAX} - N_A} \right] \times 100\%$$

where:

NA = starting score

NB = final score

NMAX= ideal score

FINDINGS AND DISCUSSION

The results of implementing research activities regarding lesson study learning are carried out. Where lesson study learning is applied to social studies subject teachers with lesson study learning stages which consist of three stages as follows.

Plan

The planning stage in Lesson study is making a plan for the learning process observed in class. Plan activities as the initial stage of lesson study implementation are carried out with joint discussions among social science subject cluster teachers. At this stage, the teachers will carry out the steps of implementing activities designed by the research team. So, in this case, what is discussed is a concept of planned student learning activities. Making lesson plans and teaching materials oriented to active student learning activities, learning from each other, and fostering creative thinking skills. The discussion activities in this planning stage to design the RPP in the first round started from scratch, meaning that the discussion was carried out based on the RPP that had just been prepared at the beginning of the Lesson study activity (do and see).

Implementation

The implementation stage of learning in the classroom (open class) is a critical stage in Lesson study activities. At this stage, the learning scenarios prepared are tested for their effectiveness. Therefore, it is necessary to prepare everything before learning begins. The process of implementation and observation in the first lesson study can be narrated as follows. After the initial preparation is sufficient, the model teacher (as the implementer) begins learning by applying the lesson plans designed in the planning stage.

This activity involves all teachers at SD Negeri 10 Kota Langsa Baraka according to the schedule that has been prepared by the Lesson study team that has been formed. Those who attended were immediately invited to observe directly act as observers of open class activities and at the same time post-learning reflection (see). Before the implementation time arrives, the model teacher does several things, including re-checking whether the lesson plans and worksheets have been reproduced to be distributed to all participants (observers). Likewise, the observation sheet has been distributed to the observers present in the open class stage.

Thus, observers can observe students' learning activities from various sides and ideal distances to clearly see all activities carefully and accurately. In this open class activity, the observers observed the learning carried out by the model teacher in the classroom. By using the observation sheet and model teacher lesson plans, the observers observe learning by focusing on observing the activities of students after receiving treatment from the model teacher. The observers took notes on the observer sheet, and some of them documented with cellphones or camcorders about learning activities. The results of observations of student activities are used as the basis and discussion material in reflection activities.

Reflection

At the reflection activity stage (see), the model teacher evaluates the results of activities at the planning and implementation stages. If the implementation has weaknesses and shortcomings at this stage, it becomes a reference for improvement and as a guide for further learning. The results of the lesson study stages are shown in Figure 1 below.

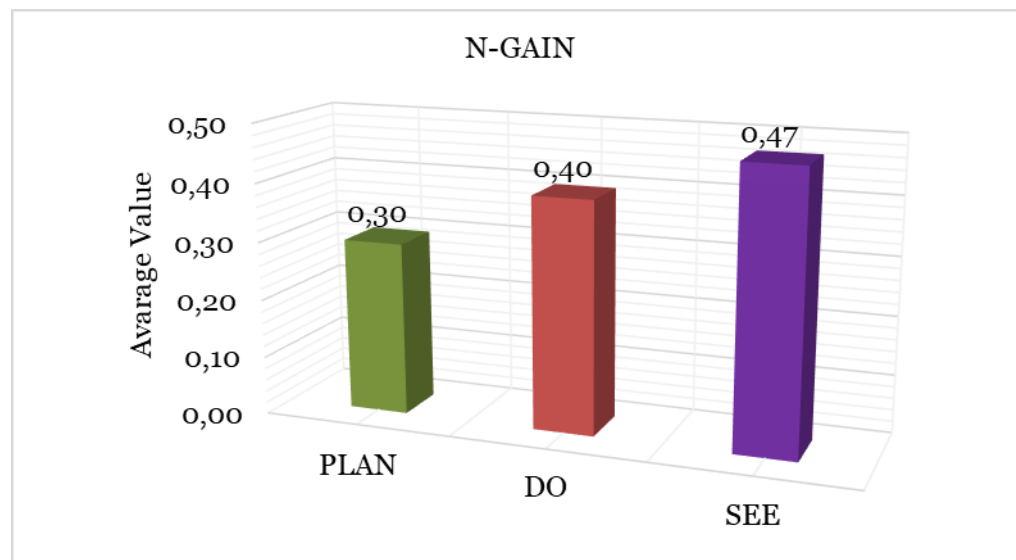


Figure 1. Lesson Study Activities

Pedagogical Competency Assessment Stage

After implementing lesson study learning, the process of measuring the competence of teachers will be carried out as shown in the image below.

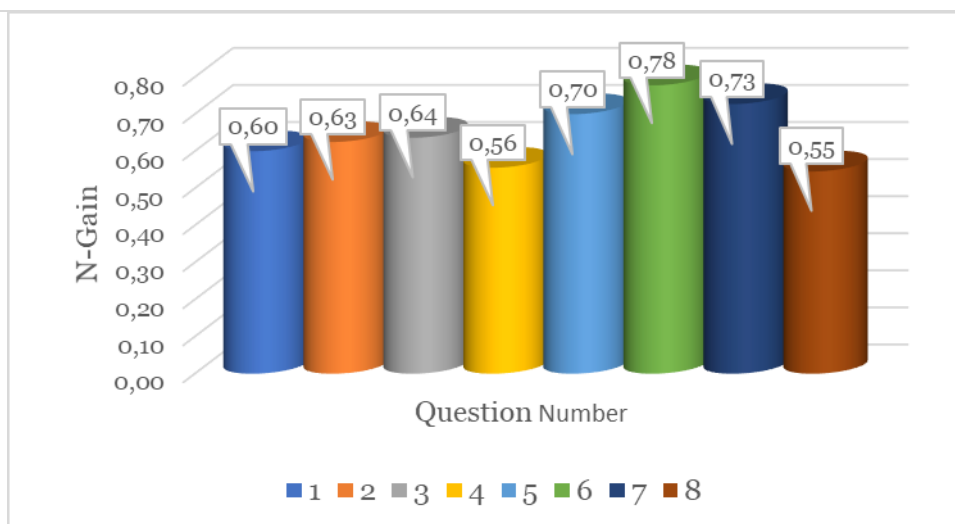


Figure 2. Pedagogical Competency Assessment Results

Based on the description of the results of the teacher's pedagogical competence assessment with lesson study learning which consists of eight questions measured using the N-Ngain formula, namely (1) understanding the principles of designing educational and fun development activities of 0.60% categorized as moderate; (2) Develop the components of the design of development activities that are educational and fun, 0.63% are categorized as moderate; (3) Develop a comprehensive educational development activity plan, both for activities in the classroom and outside the classroom, with 0.64 categorized as medium; ; (4) Implementing play activities that are holistic, authentic, and meaningful by 0.56% in the moderate category; (5) Creating a fun, inclusive, and democratic playing atmosphere by 0.70% categorized as moderate; (6) Utilizing media and learning resources in accordance with the play while learning approach of 0.78% is categorized as high; (7) Implementing the stages of children's play in development activities in elementary schools of 0.73% categorized as high; (8) Making transactional decisions in development activities in SD in accordance with the developing situation of 0.55% is categorized as moderate.

Master Process Skill Stage

To find out the results of the assessment at the stage of the teacher's process skills in implementing lesson study learning, it can be seen in Figure 4 below.

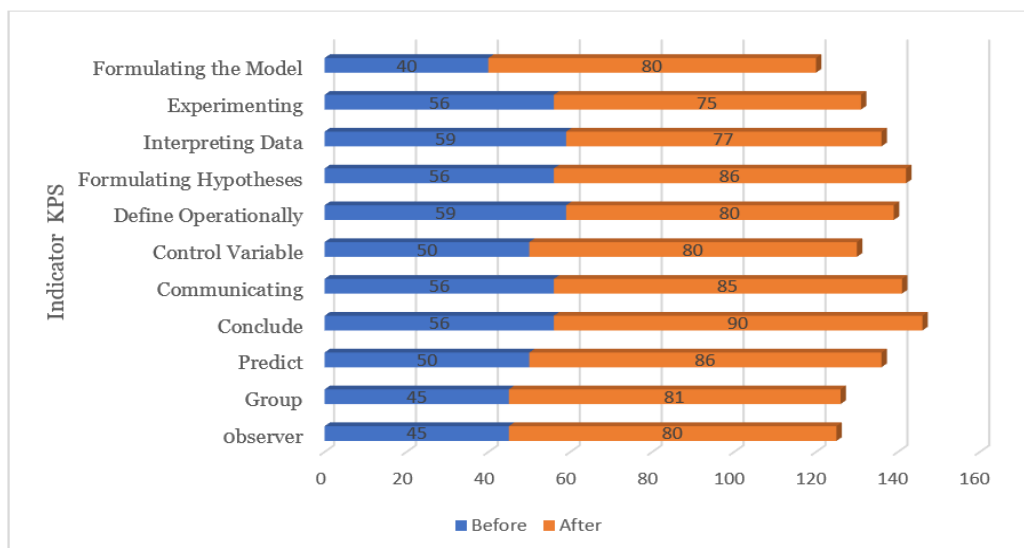


Figure 3. Teacher Process Skills Assessment Results

Based on the graph above is an assessment of process skills indicators in implementing lesson study learning. The results obtained consist of two cycles, namely cycle 1, get a value of 52.00%, which is categorized as sufficient, while cycle 2, with a value of 90.00% is categorized as very good. It can be concluded that there is an increase in process skills in the implementation of lesson study learning in teacher process skills with an average score of 0.71% in the high category. The results of this study are related to the research of Trisnayanti et., al (2014) which states that the teacher's pedagogical competency score after the implementation of lesson study-based training is good with the average academic score of students (Santoso & Waluyanti, 2010; Marhamah, 2015; Sulistiani, 2014; Azizah, 2013). Learning activities designed with the lesson study model have improved the pedagogic competence of teachers (Andriani et al., 2016). Lesson Study learning can improve teacher readiness in carrying out the learning process (Supranoto., 2015).

CONCLUSION

Plan, implement, and reflect are the three stages of lesson study learning, which are carried out at regular intervals of once a month and do not interrupt the learning process, as is the case with traditional lesson plans. A lesson study team led by SD Negeri 10 Langsa City's administrator has organized an open class exercise. Each of the school's four groups takes turns serving as a model instructor. The outcomes of lesson study activities with an average value of 0.39 percent can be judged to be suitable for implementation in learning activities. Pedagogical competence includes the ability to develop learning programs, to master the subject matter, implement/manage the learning process, and assess the progress of the learning process, which are all measures of good pedagogic competence. Results obtained with an average value of 0.64 percent are considered high. Hence, instructors' pedagogic ability has increased before and after the questionnaire data were calculated. In addition, eleven assessment indicators are used to calculate the learning process skills in these activities. This examination yielded an average of 0.62 percent, which means that the process skills before and after an increase can be judged good.

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