

Implementation of Lesson Study-Based Integrative Learning to Improving Students' Pedagogical Competence



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ABSTRACT: This action research was carried out with the aim of observing and improving students' pedagogical competence as prospective educators through learning activities in the classroom. The research was conducted in a class consisting of 21 3rd year students from various social backgrounds. This research uses an action research method based on lesson study and was carried out for 4 months with a total of 32 lesson hours. The integrative learning approach is carried out using lesson study equipped with learning observation data, interviews and questionnaire instruments in each cycle. The research results show that there is an increase in students' pedagogical competence at each stage of implementing lesson study with the plan, do and see-evaluation stages. skills in making lesson plans increased from an average of 82 to 93, skills in managing integrative learning increased from an average of 83 to 90. Meanwhile, at the evaluation and reflection stage, students shared their practical learning experiences with practitioners in the classroom. This research has two important implications: firstly, this research shows that student activities have increased understanding in planning before teaching practice, secondly, teacher action research can be carried out to create problem-solving analyzes in pedagogical competence using an integrative learning model.

KEYWORDS: Pedagogical Competency; Lesson Study; Integrative learning, Micro teaching, Team teaching

INTRODUCTION

Education is an important part in providing changes in an increase in human resources, through human quality education can be improved. The world of education is very complex not only talking about students but also educators, the media used, and the learning model used during the learning process is a special concern in improving the 21st Century Competency. Learning activities are designed with the aim of facilitating students to be able to achieve learning goals or competencies, because competencies reflect the skills, knowledge and attitudes shown by someone in the learning process (Pribadi, 2009). The high level of complexity makes the teacher demanded to have quality competence in delivering material in learning. Teachers are required to have competencies that support performance as educators and teachers (Manik et al., 2023). Likewise students who become prospective teachers can have pedagogical science competencies, to achieve the standard of graduation of the Education Study Program in Higher Education Students must be able to become educators and teachers (Prasita, 2022). This Indonesia regulates it in Law no. 14 of 2005 concerning Teachers and Lecturers as well as Government Regulation No. 57 of 2021 concerning National Education Standards that lead to the organization of improving the quality of teachers in Indonesia. The teacher is an important subject in the world of education, the main factor of success in the learning process is the quality of teachers that can be seen from the ability to master pedagogic competencies (Prasita, 2022),(Turmuzi, 2022).

Pedagogic competence is one of the four teacher competencies regulated in Law No.14 of 2005 Chapter IV which states that there are four competencies that must be mastered by an educator, namely pedagogic competencies, personality competencies, professional competence and social competence. Pedagogic competence is the ability to understand the teacher of students including in planning, implementing learning, evaluating learning outcomes and student development to actualize the various potentials possessed (Sulaiman & Ismail, 2020),(Boimau & Mediatati, 2020). In the process of learning pedagogic competencies become an important part in addition to being supported by personality competencies, professional competencies, and social competencies this is because it is a form of indicator of learning success both at the level of student activity, skills, upgrades and attitudes towards the goals to be achieved (Nugroho & Utami, 2023).

Changes in the curriculum require teachers and higher education institutions to participate in facilitating and providing services to learning competencies. Learning activities can foster a spirit of learning for students in the task of teachers who educate, teach, and guide, direct and train and evaluate (Prasita, 2022). To encourage the task of educators, one of them needs to be briefing with microteaching learning. Mikroteacing course is a compulsory course in the Elementary School Teacher Education Study Program,

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before taking the microteaching course, students have to take the basic teaching skills as a prerequisite course in the curriculum Merdeka Belajar Kampus Merdeka (MBKM). Mikroteacing courses are one of the courses that provide briefing and direct practice in the learning simulation of colleagues. Microteaching learning at PGSD Study Program on the STKIP PGRI Trenggalek campus uses the strategy of fostering the lesson study model. Students play a role as teachers who teach peers to gain improved from various knowledge and reflections after evaluating learning approaches to increase self-confidence, teamwork, appreciation in practical organizations, planning and class resources (Crichton et al., 2021b).

Micro learning is a practice learning that is carried out in groups to develop students' skills and abilities. The role between students will be more optimal if in lectures students as teachers and students teach peers in one class. Microteaching learning is a simulation learning activity that can improve interest skills, talents before doing field practice (Sabela, 2021). This is reinforced by the results (Crichton et al., 2021a) which states that there is a development of benefits from the aspect of knowledge after the reflection and evaluation through the microteacing learning approach with peer to peer teachers so that it is effective in providing support for increasing student pedagogic. As tight as that (Halvorsen & Kesler Lund, 2013) concluded that educators can improve their abilities, especially pedagogic competencies in the use of the Lesson Study model with the application of Plan, Do and See as well as the follow-up of the results of reflections in the education of teacher history. Students can develop innovative pedagogic competencies in learning by adjusting the competency of the use of technology related to the needs of the work industry (Chen & Murphy, 2023). In this case students are also given an understanding of the concept of the most common use of the Lesson Study model in peer learning in the microteaching course, especially the Elementary School Teacher Education Study Program at STKIP PGRI Trenggalek.

Lesson Study is considered to be one of the good approaches in the development of teacher professionals, especially teaching skills. Lesson Study is carried out in three stages called the planning stage (plan), implementation (DO), and reflection (see)(Lestari et al., 2023). The main purpose of Lesson Study is to design learning so that students as prospective teachers are involved in the learning process and building new knowledge by exchange opinions and information (Crichton et al., 2021a);(Lestari et al., 2023);(Gall et al., 2014);(Ko, 2019);(Wang et al., 2022)(Halvorsen & Kesler Lund, 2013). Teachers collaboratively improve their teaching skills with the assistance of observers, in this case other students become observers of their colleagues including those who become students in learning simulations to train leadership as prospective educators. Based on the results of (Van den Boom-Muilenburg et al., 2022) research states that learning practices with lesson study can provide leadership practices for sustainable learning, thus schools will also have a positive impact from improving student pedagogical skills that are a place of practice in the field introduction program. Implementation of Lesson Study in Microteaching Learning is carried out in stages by applying the steps of Plan, DO and See through integrative learning. Active and contextual learning models are very relevant to be applied in learning in class (Ramdini et al., 2024).

The intergrative learning used in learning practices is a webbeb model, this model is an integrated learning using a thematic approach (Purwantyo & Tomoliyus, 2018). Intergative learning comes from a paradigm that focuses on learning and the flexibility of activities by involving the learning environment that focuses there is teaching and learning (Joel, 1996)(Joyce & Weil, 2003). By connecting the topic or theme contextually used in student learning can more easily understand the material in accordance with the experiences they got before.

After completing the learning of Mikroteaching courses Students will practice teaching directly through the School of School Introduction Program, this is part of the program implementation Merdeka Belajar Kampus Merdeka or MBKM, Where this program is a form of giving freedom of autonomy to higher education institutions to organize learning bureaucracy outside of lectures on campus (Baharuddin, 2021)(Arifin & Muslim, 2020). Through micro teacing learning that is integrated with the teaching practitioner program will have a further impact and experience for prospective teachers, especially students with a total of 21 students. In the face of the low quality of teachers in teaching it is certainly a tough job for higher education institutions to produce prospective educators (Indriani, 2016).

The existence of microteaching learning in courses must be expected to be able to practice the teaching skills of students as prospective elementary school teachers. This is the basis for teaching in a class of prospective teachers to have basic teaching skills in which pedagogic sciences are contained in learning (Annisa et al., 2023). The basic teaching skills referred to include 1) Skills to open and close learning, 2) Skills to provide reinforcement, 3) Skills, 4) Skills Explain, 5) Skills to hold variations, 6) Skills to guide small group discussions, 7) Class management skills, 8) Teaching skills in small groups and individuals (Madjid, 2019) (Prasita, 2022) (Annisa et al., 2023). Based on the background above the researcher is interested in conducting action research in describing the results of implementing integrative learning based on lesson studies to improve student pedagogical competencies.

STATEMENT OF PROBLEM

Elementary School Teacher Education Study Program or often known as PGSD Study Program is one of the educational study programs in STKIP PGRI Trenggalek that produces educators or elementary school teachers. In the face of the low quality of teachers in teaching it is certainly a tough job for higher education institutions to produce prospective educators, Therefore it is

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necessary to have an effort in improving teacher competencies. Competence is a set of knowledge, skills and behaviors that must be possessed by teachers in carrying out professional duties (Sulaiman & Ismail, 2020), In this case teacher competencies can be maximized as a complete accumulation of knowledge, skills and attitudes that are tangible in intelligent actions, full of responsibility in carrying out the tasks of the education agent (Dari wulan sri, 2019). One of the competencies that must be possessed is pedagogic competence as a science in educating and teaching children in elementary schools which is certainly very different from education in tertiary institutions. Therefore, through the LESSON Study -based micro teaching course, students are given exercises and further simulations of the basic teaching skills courses to prepare them to become professional personnel.

PURPOSE OF THE STUDY

The purpose of this study is to find the level of the results of increasing student pedagogic competencies in learning and microteaching courses with the lesson study approach. Specifically this study seeks to develop valid instruments to map each stage of Lesson Study starting from Plan, Do and See as a basic effort in improving the quality of human resources in educational institutions STKIP PGRI Trenggalek, east java Indonesia.

RESEARCH QUESTION

This research is guided by research questions as follows:

1. How is the completeness of students able to prepare a learning plan at the planning stage?
2. How do students use learning models/strategies in the practice of microteaching courses?
3. How are the results of learning reflection at the Microteaching course stage?
4. What are the suggestions and enter to achieve good practice in learning, especially in microteaching courses?.

SCOPE OF THE STUDY

This study prioritizes topics that discuss pedadogical competency studies from the results of student learning perceptions supported by supporting facilities from practitioners regarding learning practices in micro teaching classes using the lesson study approach to prospective teacher students at STKIP PGRI Trenggalek East Java with 21 students with a total of 21 students and 2 practitioners used to explore the increase in pedagogic competencies in this study.

METHODOLOGY

This study uses the action research model (AR) which is one of the paradigms of qualitative research because the implementation of research occurs in the study group environment to become material to research in realistic and holistic research (Johnson, 2008). Action research aims to describe the implementation in a predetermined theoretical framework called AR Technical (Mckernan, 1991). This research was conducted for four months, with a total of sixteen effective weeks used for Lesson Study starting from the Plan, Do and See stages with two learning cycles. The following is the AR Adaptation Cycle Design Image from (Erdem & Belgin Özeydinli, 2023) used in this study.

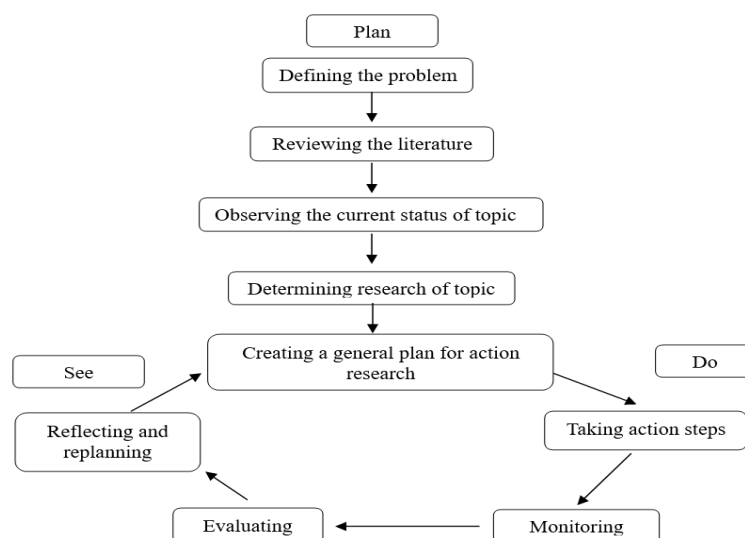


Figure 1. Action Research Cycle

ANALYSIS RESULT AND PRESENTATION OF FINDINGS

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Completeness of student assessment at the PLAN stage adjusts from the graduation standard of Mikroteaching courses at the STKIP PGRI Trenggalek Higher Education Institute is by conversation to a range of 81-85. The following is the accumulation of student completeness results at the plan stage in the Lesson Study Phase I.

Table 1. The results of the accumulation of the planned plan and do students

No	Student Name Kode	Plan	Do	Average	Predicate
1	SNS	66	78	71	Non-complete
2	NAN	75	81	77	Complete
3	AYP	79	84	81	Complete
4	SMA	82	79	80	Non-complete
5	SDR	92	87	89	Complete
6	SDU	94	87	90	Complete
7	RDA	93	91	92	Complete
8	DM	85	86	85	Complete
9	IKP	83	87	85	Complete
10	AF	86	89	87	Complete
11	RKS	82	83	82	Complete
12	RDE	88	90	89	Complete
13	MA	89	88	88	Complete
14	DRP	89	82	85	Complete
15	DMA	89	87	87	Complete
16	HDB	66	75	70	Non-complete
17	RTA	84	84	84	Tuntas
18	PA	78	78	78	Non-complete
19	ADF	77	68	72	Non-complete
20	DW	78	84	80	Non-complete
21	AAN	71	74	72	Non-complete
Average total score and completeness				82	Complete 66,7%

From the table data above it can be said that there are 7 students who are not complete in the stage of preparing learning planning and the simulation phase of learning implementation as a model teacher. The number of student participants involved in the Lesson Study learning simulation was 21 students with an average score of 82.4, and for the percentage of completeness of 66.7%. This is an important part of the SEE and reflection stages together after the first cycle has been carried out. SEE and reflection stages are carried out at the end of each learning simulation session that is accumulated in the middle of the Lecture Time of the Center for Semester Examination and for the second cycle is conducted at the end of the simulation session that was accumulated at the end of the semester evaluation at the final examination time of the semester, so that the research time conducted by the researcher in the study This is even for four months.

After planning, implementation, evaluation and reflection is carried out the next stage enters the second cycle. At the PLAN stage, DO and See second stage is carried out based on providing opportunities for students who have not been completed in the first cycle and provide strengthening and enrichment together for students who have been completed in the first cycle. The following simulation results in the second lesson study cycle are shown in Table 2 as follows.

Table 2. Lesson Study Simulation Results Cycle II

No	Student Name Kode	Plan	Do	Average	Predicate
1	SNS	95	89	92	Complete
2	NAN	96	91	94	Complete
3	AYP	96	86	91	Complete
4	SMA	90	88	89	Complete
5	SDR	90	90	90	Complete
6	SDU	91	93	92	Complete
7	RDA	94	91	93	Complete
8	DM	88	87	87	Complete
9	IKP	92	90	91	Complete

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10	AF	93	89	91	Complete
11	RKS	93	88	91	Complete
12	RDE	92	88	90	Complete
13	MA	93	94	93	Complete
14	DRP	93	87	90	Complete
15	DMA	90	87	89	Complete
16	HDB	92	93	92	Complete
17	RTA	96	96	96	Complete
18	PA	95	95	95	Complete
19	ADF	91	93	92	Complete
20	DW	97	95	96	Complete
21	AAN	88	88	88	Complete
Average total score and completeness				91	Complete 100%

From the table data above, it can be seen that all students at the learning planning stage and simulation implementation phase as a model teacher have been completed in the microteaching course with a minimum value of 81. The number of student participants involved in the lesson study learning simulation is 21 students with an average accumulation acquisition -That in the second stage is 91, with a total completeness of 100%. This is due to the joint evaluation and reflection in the first cycle stage, so that both students who become model teachers and model students have direct experience and good opportunities in giving each other criticism, suggestions and constructive entering, so that in the second stage of the lesson study cycle experienced Increasing a significant accumulation score.

The results of the learning simulation with the Lesson Study model approach in the Mikroteaching course get an increase in the basic teaching skills of students. This is shown an increase in the second simulation cycle. With the input and evaluation with students get direct experience from the learning simulation of peers. Below is the accumulation of increasing the achievement of student skills can be seen in Figure 2. As follows.

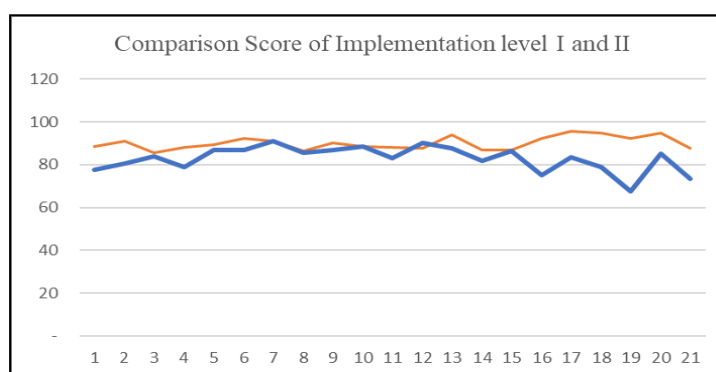


Figure 2. Comparison of the results of the DO stage scores at level I and II

Diagram The graph above shows the results of the learning simulation with the lesson study approach in the microteaching course. The assessment of the learning simulation is indicated by the implementation of OR DO in the first cycle and cycle II as a result of the implementation of the preparation of the learning implementation plan that has been reviewed together at the stage I stage of the student understanding value in preparing the lesson plan to get an average score of 82.4 with the percentage of completeness of 66.7%. Whereas in Plan II shows an increase in pedagogical competencies assessed from the element of assessment of the preparation of the learning implementation plan with an average score of 91 and the percentage of completeness of 100%. This shows the pedagogical competence of students in the preparation of learning implementation plans there is an increase, especially in aspects of writing the format of the Lesson Plan identity, determining the steps of the learning model used in learning, learning achievements, learning objectives, determining teaching materials, time allocation and assessment of learning outcomes formulated in the learning implementation design.

The SEE stage is carried out based on the results of the discussion and reflection of the non -complete student learning simulation caused by various factors such as 1) Not focused on simulations, 2) nerfs or grogy that arise during the learning simulation, 3) lack of mastery of the material to be delivered, 4) lack Understanding the preparation of the Lesson Plan that he has prepared, 4) there is no teaching experience, 5) low public speaking. Based on these weaknesses students are given one opportunity to prepare and re-improve on the occasion of the Lesson Study Cycle II simulation. Lesson Sudy results cycle II showed an increase in the implementation stage (DO) with an average value of 88.6%. This is influenced by the evaluation and reflection on every model

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teacher who has carried out the simulation, so that students who will appear in the second cycle are more mature preparing themselves in the preparation of learning devices and in the material and mentality. The evaluation and reflection process is assisted and accompanied by practitioners who are netted by teaching practitioners that are part of the program merdeka belajar kampus merdeka (MBKM) and consultation with the lecturer of the course.

The teaching practitioner program provides an extraordinary opportunity for students by providing teaching simulation experience accompanied by experts in their fields, namely a practitioner and lecturer supporting the microteaching course. In addition, in the technical matters of the model teacher, students who appear in the simulation get a joint reflection of the observer in charge consisting of two students and one laboratory operator who is involved in monitoring each learning process in the simulation carried out by the model teacher. By using practical learning demonstrations directly can be felt to help the facilitator see the learning process (V. Nnaka, 2024). This is an important part of measuring the quality of improving students' teaching skills which will later become prospective educators in elementary schools. The teaching skills assessed include 1) Skills to open and close learning, 2) Skills to provide reinforcement, 3) Question skills, 4) Explaining skills, 5) Skills to hold variations, 6) Skills to guide small group discussions, 7) Class management skills, 8) Teaching skills of small and individual groups.

DISCUSSION OF FINDINGS

Based on the results of observations in the implementation of learning practices found a fairly clear mapping of the quality of learning carried out by students in measuring pedagogic competencies by referring to teaching skills assessed including 1) Skills to open and close learning, 2) skills to provide reinforcement, 3) questioning skills, 4) Skills Explain, 5) Skills to conduct variations, 6) Skills to guide small group discussions, 7) Class management skills, 8) teaching skills in small groups and individuals. With the Lesson Study activity during learning can be well described and practitioners and model teachers can help the simulation participants overcome difficulties (Lestari et al., 2023). The stages in the observations and analysis of the learning simulation process with the Lesson Study model are as follows.

Stage Plan. The plan stage is the planning stage carried out by all learning simulation participants in the Mikroteaching course, namely the sixth semester student of the PGSD STKIP PGRI Trenggalek Study Program. The planning stage begins with understanding the concepts and technical lectures including the content of lecture contracts between students, practitioners and lecturers in courses. Furthermore, students are asked to prepare a learning implementation plan that will be used in the learning simulation process. This stage students and colleagues develop innovative learning designs accompanied by practitioners (Lestari et al., 2023). From the stage of preparing the Student Lesson Plan accompanied by the practitioner to provide notes and enter the lesson plan that are arranged by students. Mistakes that tend to be made more by students in the preparation of the lesson plan are not writing the time allocation in the steps of the activity, students tend not to include the learning model used, the lack of understanding of concepts between strategies, models, methods and learning techniques, not sorting based on model syntax learning used.

Stage Do. This level is the stage of implementation of the learning simulation process implemented in microteaching lecture points. The level of implementation is observed with a video camera to become a researcher's documentation material. According to (Schoen et al., 2024) states that Every corner of the room is observed the learning simulation process and students as an observer recording video outside the camera's view. This is done to get authentic observations and can provide input and suggestions when conducting joint evaluation and reflection.

Stage See. This stage is a stage of reflection with the learning simulation process that has been carried out. Reflections are carried out by means of each simulation participant observing the recording of the learning video recording. By turning back the results of the learning video recordings that have been carried out, the simulation participants will conduct an analysis with other participants. The results of the analysis will contain weaknesses and advantages of student learning experiences in the microteaching learning simulation. So that student pedagogical competencies can be observed and measured together. In addition, observations made by the observer are an important part of providing reports on the development of notes agreed upon during the arrangement of the compilation of the observer sheet by presenting comments and input filling related to planning and implementation, the assessment of the Lesson Plan report that has been prepared at the plan stage (planning).

The results at the reflection stage show that there are still unpopular simulation participants in mastering the material. The following is a descriptive data table resulting from conclusions that cause students' performance to be less optimal both technically and student personal pedagogical competencies.

Table 3. Findings in the Lesson Study reflection

No	Findings of Phase I Reflection	Findings of Phase II Reflection
1	Lack of understanding of the measures of learning models used	Student confidence increases, with a calmer indication in delivering material,

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		voting voices vary
2	Lack of body movements, personal management, blackboard have not been used, language use, teacher mobility is lacking	Explaining skills and classroom management are more conducive and interactive.
3	Model teachers and students look less relaxed when starting a learning simulation	Implementation of the learning model in accordance with the syntax in the Lesson Plan text
4	The size of the learning media used is less proportional	The media used is more effective Like the use of a more varied blackboard
5	Apperception and motivation in the initial activities need to be considered eight teaching skills are less than optimal.	Learning readiness is more organized
6	The media used is less effective	Students not only focus on Power Point media but also do well interaction
7	Sound intonation is lost, lack of understanding of the material, fixed on power points, nervous nervousness, lack of interaction with students. Utilization of blackboard.	Personal Competencies Students have developed well
8	Lack of interaction with students behind, the final prayer does not exist, the class lives when there is a game. Sound intonation, systematic learning steps.	The learning environment is pleasant with the presence of Ice Breakeing in learning
9	The material in a lot of power points is passed, the material has not been delivered, motiavasi, the unclear task of technical instructions	The material presented can be clearly received

Based on the results of the results of the accumulation of reflexology, it can be concluded that the obstacles faced by students when the learning simulation becomes a model teacher is when it starts to emerge in pedagogical competencies with teaching skills relationships to be less balanced. Students tend not to enjoy the learning simulation flow at the beginning of the first cycle. A feeling of lack of confidence is seen when students tend to only focus on reading on the power point media used, so that attention to the core of learning to students is not optimal. In addition, the results of the reflection of the media used by the model teacher (students) tend to be less proportional, small size and use that is less in accordance with learning objectives makes the media function not optimal. At the beginning of the learning becomes the initial determinant of how far the level of class mastery, but on average of sixteen students experience a situation that is lacking confidence. Another important part of eight basic teaching skills is less than optimal, this is seen by changes in the teaching style of students starting from the skills to open and close learning. In the results of the reflection of the second cycle there was an increase in the performance of students in the learning simulation as a model teacher, this can be observed on the recording of learning video, all students experience confidence increases. With the delivery of more calm material, clear and firm sound intonation makes the role of the model teacher can be done well by students. Of course in this case they learn from the mistakes that have been made during the simulation in the first cycle. The results of the reflection are very effective in arousing the skills of students in learning simulations in the Mikroteaching course. In addition, understanding in using the learning model used by students is carried out well and in accordance with the learning steps that exist at the Lesson Plan. Other carrying capacity is seen a new innovation in using learning media. According to the observer in the model of learning teacher learning simulation tends to use more power point media combined with concrete media with varying sizes, so that the media used helps the model teacher in achieving learning goals. Like a teacher in general the use of blackboard media becomes more interactive as well. Students are more interested when the teacher uses learning models that are integrated with the game. The classroom atmosphere in the second cycle is better than simulation learning in the first cycle. This is evidenced by improving the basic teaching skills of teachers modeling, as a form of mastery of pedagogical competencies in lesson study. The results of descriptive analysis are as follows:

Description of the results of improving basic student teaching skills

1) Skills to open and close learning

Based on the results of the analysis of the skills opening and closing learning students have good competence. This is because students can provide attractive learning for students model played by colleagues. In addition they also use learning media and tools to show enthusiastic attitude. According to (Prasita, 2022) the purpose of opening lessons is to focus on the material delivered in learning so that students can concentrate. Whereas efforts to close the lesson to provide a picture of the overall

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learning outcomes of what have been learned by students, knowing the level of understanding and the level of success in the learning process.

2) Skills provide reinforcement

Skills to provide reinforcement carried out by the model teacher have been effectively carried out in a good category. This is indicated by the verbal strengthening given by the model teacher to the model students through sentences and words. In addition, the skills to provide reinforcement are also carried out non-verbally through expressions, gestures, improvisation in providing strengthening subject matter, giving touch and attention to students through fun activities and giving reinforcement in the form of statements. The purpose of providing reinforcement in learning to foster student attention, foster student motivation, minimize negative behavior and foster positive behavior by providing good strengthening motivation. With an increase in skills in providing direct reinforcement will have an effect on students' confidence in providing answers.

3) Question skills

The results of the analysis of asking skills in the second cycle in Lesson Study also had a positive impact. Model teacher carried out by students goes well. In this case students (model students) are able to ask questions so that in the learning process the teacher model can develop learning. Questioning skills are very important to be mastered by the model teacher, so that questions to students become more meaningful. Questions given are told or sentences that demand students' responses. In addition, questioning skills can measure the extent of students' understanding of the material taught by the teacher. In addition the teacher will also get information from students. The teacher's role becomes very important in giving answers to student questions so that as a whole other students can understand the material taught by the teacher.

4) Explaining skills

The skills to explain the lessons obtained by students are quite evenly distributed. Students simply master how to deliver material in the contents of the learning content to students model, so that the interaction of information obtained can be understood by students model. In this skill the teacher model or student who becomes a teacher needs to understand the material and concepts first before carrying out the learning simulation process, teaching materials and media used must also be mastered in their use. Explaining skills can increase the number of active students in learning activities and provide curiosity about the topic of the material delivered by the teacher.

5) Skills to hold variations

Variations in holding students' skills as model teachers have been carried out well. This can be seen when the model teacher applies a teaching style like an educator. In addition, variations in using learning tools and media are more varied to help teachers achieve learning objectives. The results of students can also be seen from a more lively learning process, more interesting learning, and teachers are more active in providing motivation to students. Other aspects in the pattern of model teacher interaction and students model have been achieved well, this can be seen from the loss of students' boredom in receiving subject matter so that the learning delivered by the teacher becomes pleasing and active students are more creative in accordance with the achievement in accordance with the learning objectives in the learning implementation plan.

6) Skills to guide small group discussions

The skills to guide discussions in small groups carried out by the model teacher are well carried out. This is very miserable to the results of the second stage of SEE reflection analysis. Group discussion is a form of strategy that can enable students to master the concept of problem solving through giving a place to think, interact with colleagues, and have a positive attitude, of course this aims to guide group discussions can run effectively and efficiently.

7) Class management skills

Managing the class is a form of skills that must be carried out by the teacher. In the simulation cycle II the model teacher can carry out the skills in managing the class well. Good classroom management can create and maintain the condition of student learning situations well. This is done to encourage students to develop individual responsibilities. The teacher can show a responsive attitude, pay attention, and give instructions clearly, including giving a reprimand for students who are less conducive. Good or not in managing class can have an impact on student learning outcomes. Therefore, students as prospective teachers are required to have class management skills so that the learning situation can be controlled so that the classroom atmosphere is more conducive and the learning objectives to be done can be achieved.

8) Teaching skills of small and individual groups.

Teaching small groups and individuals to be challenging that must be done by the model teacher. In the results of the analysis of the second cycle reflection obtained by the model teacher can carry out the teaching skills of small and individual groups properly and comprehensively. The main purpose of this skill is to provide guidance to students to be able to solve problems democratically and can increase mutual assistance between colleagues. In this case, of course the model teacher must know in detail the students being faced.

Based on the results of the lesson study-based learning simulation analysis conducted by students as a model teacher is a) Improved pedagogical competencies naturally by applying the plan, DO and see reflection by showing the existence of 1) Feasibility in the learning implementation plan that has been prepared and jointly evaluated, 2) The ability to apply the learning

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model in accordance with the text of the lesson plan that has been prepared, 3) The results of the ability to carry out learning evaluations can be carried out properly. b) Students as a model teacher are able to carry out eight basic teaching skills well. This is an important note that through the pedagogical competency analysis of students as prospective teachers in following the Mikroteaching course is expected to be able to develop capacitation and further skills to be their basic capital in carrying out the learning process as a teacher in elementary school.

CONCLUSIONS AND RECOMMENDATIONS

Implementation of Integrative Learning based on Lesson Study in Micro Teaching courses can improve student competencies, this can be seen from the results of the assessment contained in the plan, do and see stages. There is a need for good communication in assisting students who learn to become model teachers in showing their appearance in teaching peers in learning simulations. The role of practitioners and supporting lecturers becomes an important part of students' facilitators to increase their creativity and teaching styles in showing their pedagogic competencies. Although in the first cycle there are students who do not meet the standards, but the problems found can be trained and found how to solve the problems faced by students, so that in the second cycle stage all show their best appearance in preparing better learning planning, the media Used, the readiness of understanding of the material to be delivered is the key in delivering students to get completeness values above the score 81.

Based on the findings in the study of the main obstacle that prevents the increase in student pedagogic competencies is the readiness in the plan stage that needs to be prepared in full, besides the duration of time provided for learning practices becomes one of the factors students tend to want to quickly complete the learning process, so it is not focused on quality learning that is carried out. There are recommendations for similar research in learning practices as follows:

- I. At the PLAN stage the researcher should pay attention to the results of learning planning between students and practitioners or courses to find problems to be solved, find literature study material, and determine the topic to be studied.
- II. Analysis of the theme topics used by students should be adjusted with the understanding of the integrative learning model used, there is a need for synchronization between the lesson plan and the implementation of learning practices.
- III. Implementation in Lesson Study needs to pay attention to the measurement instruments for the observer used needs to be included in the planning stage, so that practitioners, lecturers and students also understand each other to provide input openly as part of the validity and assessment.

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