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Analysis of Department of Elementary School Students' Critical Thinking Abilities through Case Based Learning in the Classroom Action Research Courses

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Abstract: The aim of this research is to describe the results of the analysis of PGSD students' critical thinking abilities in studying the Classroom Action Research course. This research is descriptive qualitative research. The subjects of this research were PGSD students in collaboration classes between lecturers and teacher practitioners in the teaching practitioner program. The collected data is then analyzed using interactions between components systematically between data reduction, data presentation (*data display*), and Conclusion (*conclusion drawing*). The results of this research show that PGSD students' critical thinking abilities are through*Case Based Learning* increases as shown by the student's ability to formulate*gap* problem while analyzing the root of the problem in learning, offering a relevant literature review, as well as PTK planning that fits the existing model.

Keywords: classroom action research, case based learning, critical thinking skills

INTRODUCTION

The quality of education is influenced by two things, namely the quality of input and the quality of the process. Input quality education in Indonesia is still low, showing the readiness of students to obtain 46% of educational opportunities are at a low level, while the quality of the process includes: 1) educators and educational staff whose quality, quantity and welfare are still lacking; 2) inadequate facilities and infrastructure; 3) education funding is still insufficient; and 4) learning that is not yet effective and efficient (Suryana, 2020). Four things

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about the quality of the educational process These are interrelated and influence each other, for example low learning quality is related to quality educators need to be improved. Learning quality is the main target in implementing the learning process. Teacher be the spearhead in improving the quality of learning. Only teachers have creativity and continuous innovation that is able to improve the quality of learning. Efforts that teachers can make to improve the quality of learning are by doing PTK. Teachers who carry out PTK can identify and detect deficiencies or weaknesses occurs in the teaching and learning process and then looking for the right solution.

Apart from improving the quality of learning, implementing PTK also supports teachers develop the profession. A professional teacher is a teacher who carries out activities Continuing Professional Development (CPD). In the Regulation of the Minister of National Education of the Republic of Indonesia No. 16 In 2007 it was explained that professional teachers have a core competency, namely being able to improve teaching and learning through reflection on learning by carrying out PTK. PTK has a role important in improving the quality of learning and supporting teacher professional development, then PTK needs to be taught and practiced in universities. The fundamental problem at the moment is teachers don't know how to carry out PTK that can be accepted by the assessment team to increase the credit score in order promotion (Supriyanto, 2017; Widana et al., 2019). Classroom Action Research has very important benefits for teachers and prospective teachers. In PTK learning can be used to improve teachers' ability to self-reflect, improving school progress and fostering a professional culture among educators. Study This is one type of teacher professional development where a teacher can conduct research Class action is called a teacher's scientific activity in developing innovation during learning such as using methods and using learning media for the sake of improve professional competence (Fitria et al., 2019). The ability to think critically is wrong a high-level ability that is a competency needed to solve problems problems that occur in everyday life (Nugraha et al., 2017).

Classroom Action Research learning is learning that requires a high level of understanding. No just understanding the concept, but students are also expected to be able to analyze problems that occurs in classroom learning. Based on observations in learning, students have not been able to identify the problems that occur and have not been able to offer innovative actions in solving problems that occur. Therefore, a method is needed to improve it student abilities. One way is by using case-based learning (Case Based Learning). Case-based learning (Case Based Learning) is learning centered on students by using cases as topics in learning (Safitri & Purbaningrum, 2020). Case-based learning is worth implementing because it

provides two advantages, namely (1) can develop students' speaking skills based on direct learning experiences, and (2) Students have the opportunity to develop critical thinking skills through solving activities a case (Ulfiani, 2018). Case-based learning offers action learning innovative which will have a good impact on learning. Learning design will determine the quality of learning (Nurhusain & Hadi, 2021). The better the quality of learning, the better will contribute to improving the quality of education in Indonesia.

Universitas Sarjanawiyata Tamansiswa is a tertiary institution whose graduates are expected to be ready to meet the needs of the world of work in the field of Education. Classroom Action Research (PTK) is one of the mandatory subjects for the primary educational study program study in Universitas Sarjanawiyata Tamansiswa. The learning outcomes stated in the Learning Implementation Plan (RPS), namely Students are expected to be able to identify problems, develop a framework or paradigm and formulation of action hypotheses, identifying data collection procedures and techniques, and identify the steps of data interpretation and synthesis. By collaborating with practitioners and through various strategies implemented, students are expected to have the ability to achieve learning that has been determined. Students' critical thinking abilities have not been measured and the importance of PTK learning for prospective teachers so this research aims to find out students' critical thinking skills by using Case Based Learning.

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METHOD

This research is descriptive qualitative research. The subjects of this research are PGSD students totaling 40 students in a collaboration class between lecturers and teacher practitioners in the practitioner program teach. The data collected is then analyzed using interactions between components systematically between data reduction, data display and withdrawal conclusion (conclusion drawing). To test the validity of the data, triangulation collection techniques were used data which includes interviews, observations and documentation.Observations are carried out during the learning process by observing implementation of learning carried out by practitioner teachers. Documentation is done with document student learning outcomes, while interviews are conducted after learning completed to ask questions regarding students' understanding of PTK by using Case Based Learning which has been passed in the learning process.

Indicators of critical thinking ability used are adapted based on aspects of thinking ability consisting of interpretation, analysis, evaluation, inference, explanation, and self-regulation (Qohar & Sulandra, 2021) which is described in the following table.

Table 1. Indicators of Students' Critical Thinking Ability

No	Indicator of Critical thinking ability	Information
1	interpretation	Students are able to write down the results of interviews orinitial data observations
2	analysis	Students are able to carry out problem analysiswhat happens in class
3	evaluations	Students are able to provide alternative solutions toproblems that occur
4	inference	Students are able to use the appropriate 5 PTK models
5	explanations	Students are able to carry out literature reviews
6	self-regulation	Students are able to double-check

The procedure for this research is that the lecturer provides a Learning Implementation Plan (RPS) to practitioner teachers, practitioner teachers prepare teaching materials, implement learning using Case Based Learning, oobservation during the learning process, documentation of student case study results, and unstructured interviews with several students taking part in the study.

RESULT AND DISCUSSION

The subjects of this research were 40 PGSD students at Universitas Sarjanawiyata Tamansiswa including in semester 6 class D. Class 6D was selected to be the class implementing collaborative learning lecturers together with practitioners in a teaching practitioner program. In implementing the teaching practitioner program, The lecturer provides an RPS (Learning Implementation Plan) which is the result of discussion by the team Prodi developer. RPS is developed according to student needs referring to the curriculum applicable, description of the

specific study program, and outcomes study program graduates (Sitepu & Lestari, 2018). Learning with practitioners is carried out online using a combination system synchronous andasynchronous through webmeeting and the Sipedar Learning Management System (LMS). The implementation of online learning is because practitioners come from outside the Special Region Yogyakarta. Implementing online learning makes learning easier because time and place are no longer a barrier (Khotimah et al., 2022).

In implementation learning, teacher practitioners carry out learning using Case Based Learning with the help of the Padlet application which was distributed in the chat column during the web meeting. Cases are prepared by practitioners in the form of problems that often occur in learning. Based on the results research data obtained that around 76% of students participated in the implementation of learning which is shown by student participation in completing cases given by educators. Students' critical thinking abilities can also be seen from the analysis of each indicator. Based on students' critical thinking abilities seen from interpretation indicators, students are capable write down the problems written in the case given by the educator. Problems presented are problems that can be found in the classroom. Problems are realistic and problematic problems that are important to resolve and resolve that rely on various internal parties the solution (Machali, 2022). The problem identified in the case study is that there are no students dare to answer the teacher's questions, in learning groups of students rely on the work of their friends, students do not participate in group work, students do not do assignments correctly, teacher dominantly uses lectures in learning, and the average class score is only 54.

The problems written by students are problems that contain benefits for improvement learning processes and outcomes. However, there are students who write about problems that are not within reach teacher handling. This problem is related to the problem of implementing the independent curriculum in school. In fact, in PTK the problems presented should be everyday problems experienced by teachers and students in the classroom as an effort to meet established educational standards in the learning process (Purnama et al., 2022). The results of the analysis of students' critical thinking abilities are seen from the analysis indicators, namely that students are capable carry out an analysis of problems that occur in the classroom. This ability is visible when students are capable create a line of thinking that comes from the facts of the problems found in class at once identify the type of problem, find the impact of the problem that occurs and identify the cause. The student's ability to carry out this analysis is the ability to connect existing problems with other problems or experiences relevant (Rohmah et al., 2023).

The next indicator related to students' ability to think critically is that students are capable carry out evaluations which are demonstrated by providing alternative solutions to the causes of

problems happen. Students provide solutions by offering innovative learning models that are capable improve learning outcomes and activate students in learning. Selected innovative model students to activate students namely models Problem Based Learning (Hastuti et al., 2022; Nurrohim et al., 2022), while the inquiry model was chosen by students to improve student learning outcomes (Suryaningsih, 2023; Tamalene & Wilujeng, 2022). Students' critical thinking ability is seen from the next indicator, namely inference ability, namely Students are able to choose the right PTK model according to their needs. Use of models in PTK will help researchers carry out learning systematically and measurably. Selected PTK model students are model Kurt Lewin and Model Kemmis and Mc Taggart. Kurt Lewin's model is model that first appeared (Machali, 2022). The choice of these two models is due to the models It has simple steps and cycles compared to other models.

The ability to explain is an indicator of students' critical thinking abilities. This ability seen from the students' ability to select relevant literature in research. Besides Students are also able to carry out studies based on the literature they have obtained. But deep conducting a literature review, there are weaknesses experienced by students. Students are not yet capable do quotes well. This is because students have not been able to take advantage of the program which can help generate citations and bibliography automatically. Administration of articles from Students must use various scientific journals in preparing their final assignments (Iksan et al., 2022). Based on these findings, it becomes a recommendation for educators to teach students automatic reference management methods such as using Mendeleye or Zotero software.

The next critical thinking ability of students is the ability to self-regulate. This ability is seen from the student's ability to double-check the case resolution. This re-check is carried out after the confirmation stage from the teacher practitioner. Very confirmation stage help students recognize the advantages and disadvantages of solving the cases carried out student. From the double-check, additional input was obtained that was necessary in implementing PTK involvement of class teachers in conducting research. This is because the class teacher recognizes it better student characteristics in more detail so that learning planning can adapt to needs student. The function of PTK for teachers is not only to improve learning processes and outcomes but also to help promotion of credit scores in professional development (Machali, 2022).

CONCLUSION

The results of this research are the results of an analysis of students' critical thinking abilities through learning with use Case Based Learning that is, it increases with demonstrated ability students in formulating gap problems while analyzing the root causes, offering innovative Actions, being able to conduct relevant literature reviews, as well as PTK design in accordance with existing models. The recommendations from this research are necessary there is training in using software for students that can be used for management reference.

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