

Good Practices of Case Method-Based Learning in Elementary Schools

Faisal^{1*}, Lala Jelita Ananda², Masta Marselina Sembiring³, Yusra Nasution⁴
{faisalpendas@gmail.com¹, ljananda.84@gmail.com², mastamarselina@unimed.ac.id³,
yusranasution@unimed.ac.id⁴}

Faculty of Education – Universitas Negeri Medan, Medan, Indonesia

Abstract. The purpose of this research is to describe the good practices of case method-based learning in elementary schools. This research is a continuous classroom action research using the Collaborative Nested Action Research (C-NAR) approach. In this case, in addition to teachers continuing to make continuous improvements in learning, lecturers make continuous improvements in mentoring. Data collection techniques were carried out through conference-based observation and reflection. The instruments used in collecting data are observation sheets and reflective journals of the results of the conference. The collected data were then analyzed using a flow model qualitative data analysis technique by following the stages of data reduction, data presentation, and drawing conclusions. The results of the analysis of the effectiveness of case method-based good learning practices in elementary schools obtained an average value of 3.52 in the Very Effective category. Based on this data, it can be concluded that learning using the case method with the C-NAR approach is effective in improving the learning processes and outcomes of students in elementary schools.

Keywords: case method, C-NAR, elementary school

1 Introduction

The face and color of education, especially in elementary schools, in the future will be influenced by adequate teacher competence and skills. One of the important skill components that should be possessed by teachers in elementary schools is the skill of developing learning, so that they are able to present innovative, interactive, interesting, meaningful, and fun learning implementations for students. The implication is that teachers in elementary schools today should be able to improve competence systematically and continuously in developing each lesson in class [1,2].

Meaningful learning as stated above is something that every teacher should strive for. When students learn something and find meaning, that meaning can be a reason for students to continue learning. Therefore, one of the elements that causes the success of meaningful learning is strongly influenced by the teacher's ability to develop learning. Thus, increasing teacher competence in teaching students meaningfully is absolutely necessary [3].

Learning development skills are the essence of competence which must be mastered and measurable through learning development practices, because they are seen as part of efforts to form a teacher's professional attitude. Under these conditions, a supporting learning model is needed so that elementary school teachers can develop their learning development skills.

Therefore, to develop teacher learning development skills, a learning process is needed that integrates these development aspects into learning, both theoretically and practically. The hope is that the learning that is carried out can inspire teachers to innovate learning in carrying out sustainable development [4].

Learning innovations are currently focused on building students' 21st century skills. There are four competencies that students in the 21st century must have which are commonly referred to as 4C skills, namely critical thinking and problem solving abilities, creativity, the ability to communicate with others, and the ability to work in teams. In an effort to create learning that is able to accommodate 21st century skills, a learning model is needed that is able to develop students to think critically and solve problems, have creativity, communication skills, and the ability to work together in groups. One model that can accommodate this need is the Case Method model [5,6].

The Case Method is seen as a relevant model for developing students' skills, because it allows students to learn from real situations. This view mandates that teachers be able to develop learning innovations that integrate the Case Method model in learning so as to be able to improve students' 21st century skills, namely: critical thinking and problem-solving skills, creativity, the ability to communicate with others, and the ability to work together in teams [7,8].

Case Method is a constructivism learning model in which the problems presented in case-oriented learning. Defining the Case Method further is a learning model that requires students to be actively involved in participating in real problem situations and based on real experience experienced in accordance with the material being studied [9,10].

The situations presented in Case Method-based learning must be directly related to the daily experiences of students, so that the relationship between the problems studied and their use in the lives of students is real [11]. Thus, it can be seen that the Case Method is a learning model that builds students' analytical skills related to real situations contextually which are complex and relevant to the material being studied. Based on some of the opinions above, it can be concluded that the Case Method is a learning model that builds students' analytical skills in problem situations or case-based and is directly related to students' daily experiences.

The case method is a learning paradigm that is closely related to Problem Based Learning (PBL)-based learning. The difference is that PBL does not require previous experience or knowledge regarding the material presented, whereas the Case Method requires prior knowledge or experience which is of course needed to support case resolution. Although PBL and Case Method have almost the same objectives, in principle these two models have unique characteristics. The PBL model, the problem directs learning while the Case Method requires students to use prior knowledge to solve cases. Therefore, the problems presented in the PBL model do not have to be case-based related to the experience and environment of students. Teachers can use a variety of other problems so that students gain new knowledge outside their environment. On the other hand, selecting cases in the Case Method begins with searching for actual problems that exist around the student's environment and these problems students might face in the future [12].

The success of Case Method-based learning in the classroom must pay attention to the characteristics of Case Method-based learning. The characteristics of the Case Method are described as follows: (1) Case: is an educational instrument presented in the form of a narrative. Narration brings real-life situations into the classroom/learning. Classes and teachers work on these real-life problems collectively. The characteristics of good case selection include: good ideas, focus on controversial matters, new things for students, creating empathy with a central character, in the form of quotes relevant to the reader, has pedagogic

utility, compelling decisions, and brief . (2) Study Questions: contains a list of questions presented at the end of each case submitted. Study questions introduce understanding because they encourage students to implement what they know in analyzing data and provide alternative solutions rather than just remembering facts, names, labels, formulas, definitions, and so on. In the disconnected method, each section has its own discussion question. (3) Small Group Work: students discuss and provide responses to study questions in groups. Students are given the opportunity to discuss cases and questions with each other before conducting the whole class discussion. (4) Group Discussion: directing students to be actively involved in learning activities. The "big idea" of the case analysis is examined and the teacher assists students to further elaborate meaning. (5) Follow-up Activities: further, students need to know more from the results of the previous discussion. Follow-up activities can be carried out individually or in groups and the activities used are the teacher's assessment of the needs of students after learning. In this case, teachers can use textbooks, tables, data graphs, research reports, articles from newspapers and magazines, videos, written and other visual information as follow-up sources [13].

The advantages of case-based learning include: (1) Practicing the Application of Theory in Real Life: Case-based learning trains the application of theory in real life. The case method does not only explain concepts about the material discussed in learning, but also trains students to relate their application to everyday life. (2) Practicing Higher Order Thinking Skills (HOTS): The case method trains students to think at a higher level in their learning and evaluation. Students try to think of the best solution that can be chosen based on the cases presented to students. (3) Practicing 21st Century Skills (Communication, Collaborative, Critical Thinking, & Creativity): With the case method, students are trained to think critically, develop creativity, work in groups, and communicate their work in front of the class. (4) Encouraging Active and Independent Learning Habits: The case method not only facilitates students learning in groups, but also trains students to actively learn and work independently in carrying out the tasks given [14].

Applicative steps for applying the case method in learning can be described as follows: (1) In-depth Material/Concept: At the beginning, the teacher presents in-depth material in the form of videos, images, or text which contains cases in everyday life. The cases raised are adjusted to the theme of learning or learning topics. (2) Presentation of Cases: Students are given triggering questions based on the videos, images, or text presented. With the questions asked, students can understand cases appropriately according to the videos, images, or text presented. (3) Group Formation (If Necessary): The next activity is to divide students into heterogeneous groups. (4) Solving Cases: Students in groups discussing solving cases include the following activities: (a) searching for data, information, theory, materials, tools, resources; (b) submission of ideas; (c) discussion and validation; (d) formulation of solutions; and (e) writing of work results. (5) Presentation of Work Results (Group/Individual): After discussing in groups, students present the results of their respective group work to the front of the class. (6) Class/Group Discussion: At this stage, each group responds to the presentation of each group that appears. With the teacher's guidance, students can determine the most effective solution based on the cases discussed. (7) Assessment and Feedback: At this stage, the work results of each group are given an assessment and feedback by the teacher. Based on the feedback provided, students know the level of correctness or success of problem solving in each group [15,16].

The importance of Case Method-based learning in building 21st century skills for students in the explanation above, teachers should be able to apply it effectively in elementary schools. This condition is the background to the need to be given treatment in the form of

good practices implementing Case Method-based learning in elementary schools. It is hoped that the good practices presented will serve as examples or references for teachers in implementing the Case Method effectively in elementary schools.

2 Research Methods

This research is a collaborative classroom action research using the Collaborative Nested Action Research (C-NAR) approach. C-NAR is a collaborative classroom action research approach that focuses attention on the implementation of actions not only on teachers, but also focuses on mentoring actions by lecturers in the mentoring process. In practice, besides teachers carrying out classroom action research to improve the learning process, lecturers also conduct mentoring action research to improve the mentoring process. In short, lecturers carry out guiding action research in teacher classroom action research. The research procedure follows the D-I-O-R (Design, Implementation, Observation, & Reflection) stages. In detail, the description of activities can be described as follows:

- a. Design Stage (D), the teacher is given directions to design learning tools based on an analysis of students' needs, the readiness of facilities and infrastructure in schools, and the latest learning developments in schools. Meanwhile, the lecturer designs a mentoring pattern that will be carried out in the mentoring process.
- b. Implementation (I), the teacher carries out the learning process according to the designed learning device. Meanwhile, the lecturer as a supervisor carries out the mentoring process in accordance with the guidance plan.
- c. Observation (O), the teacher records the conformity of the learning plan that has been prepared with the implementation of learning. At the same time, the lecturer records the success rate of the mentoring process by relating it to the teacher's success in teaching.
- d. Reflection (R), teachers and lecturers reflect together regarding the success of the learning process and the guidance process carried out [17,18].

Data was collected using observation and reflection techniques based on 2-way conferences between teachers and lecturers as supervisors. The instruments used in collecting data are observation sheets and reflective journals of the results of the conference. The collected data were then analyzed using a flow model qualitative data analysis technique by following the stages of data reduction, data presentation, and drawing conclusions.

3 Result and Discussion

3.1 Research Result

Good practice of implementing Case Method-based learning is carried out following the stages/syntax in the Case Method model, including: (1) Deepening of material/concepts; (2) Presentation of cases; (3) Group formation; (4) Case Solving; (5) Presentation of work results; (6) class/group discussion; and (7) Assessment and feedback. Implementation of the Case Method model is carried out in 2 learning cycles by following the D-I-O-R pattern (Design, Implementation, Observation, and Reflection).

Trials of the implementation of learning using the Case Method model were carried out in 2 learning cycles. An overview of the implementation of learning using the Case Method model cycle 1 and cycle 2 can be seen in detail in the following description.

3.1.1 Cycle 1 Case Method

The implementation of Case Method-based learning in cycle I can be described in Table 1.

Table 1. DIOR-1 Case Method (Cycle 1)

<i>Design (D)</i>	:	Designing learning tools based on the Case Method on the material: Benefits of Plants for Humans.
<i>Implementation (I)</i>	:	<ul style="list-style-type: none"> • Stage 1 (Material/Concept Deepening): Introducing the problem using learning videos in the form of cases of forest destruction in Indonesia. • Stage 2 (Presentation of Cases): At this stage, the teacher presents cases briefly as students' initial understanding based on video shows. • Stage 3 (Formation of Groups): Students are divided into several groups heterogeneously and explain the work process and the purpose of the case-solving discussion. • Stage 4 (Solving Cases): Students in groups work on LKPD related to the causes of cases of forest destruction in Indonesia and solving cases from various perspectives or points of view. • Stage 5 (Presentation of Work Results): Students present the work results of each group's LKPD to the front of the class. • Stage 6 (Class/Group Discussion): Students classically discuss the results of each group's presentation which is then given reinforcement by the teacher. • Stage 7 (Assessment and Feedback): Students individually work on evaluation questions in the form of the quizizz application. In addition, the teacher provides reinforcement and feedback on the process of solving cases in general in the form of success in solving cases and the obstacles encountered.
<i>Observation (O)</i>	:	(1) Group discussions during investigations were dominated by only 1 or 2 people, (2) There were some students who were not actively involved, and (3) Practitioners had not used instruments when guiding case investigations in groups.

<i>Reflection (R)</i>	:	<ul style="list-style-type: none"> • 3 successes obtained by the practitioner as follows: (a) Being able to achieve the learning objectives, (b) the results of solving cases for each group are quite accurate, and (c) Students are able to present case analysis and solutions in detail to the class. • 2 learning failures/weaknesses: (a) The active participation of the participants was not seen evenly (only dominated by a few people) and (b) The trainees had not used instruments to guide group investigations so that it was not clear which ones had succeeded and which had not. • 1 suggestion/alternative solution for improvement in the next cycle, namely: it is necessary to strengthen the active participation of each student when carrying out group investigations so that they can analyze cases and solve them with good cooperation.
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3.1.2 Cycle 2 Case Method

The implementation of Case Method-based learning cycle II can be described in Table 2.

Table 2. DIOR-2 Case Method (Cycle 2)

<i>Design (D)</i>	:	Designing learning tools based on the Case Method on the material: Efforts to Preserve Plants
<i>Implementation (I)</i>	:	<ul style="list-style-type: none"> • Stage 1 (Material/Concept Deepening): Introducing the problem using learning videos in the form of forest fire cases. • Stage 2 (Case Presentation): The teacher presents the initial case as a trigger according to the video showing a forest fire. • Stage 3 (Formation of Groups): Students are divided into several groups heterogeneously and explain the work process and the purpose of the case-solving discussion. • Stage 4 (Solving Cases): Students in groups work on LKPD related to the causes of forest fire cases and solving cases from various perspectives or points of view. • Stage 5 (Presentation of Work Results): Students present the work results of each group's LKPD to the front of the class. • Stage 6 (Class/Group Discussion): Students classically discuss the results of each group's presentation which is then given reinforcement by the teacher. • Stage 7 (Assessment and Feedback): Students individually work on evaluation questions in the form of the quizizz application. In addition, the teacher provides strengthening and evaluating the process of solving cases in general in the form of successful case solving and the obstacles encountered.
<i>Observation (O)</i>	:	(1) The active participation of students in groups is increasing from the previous learning process, (2) The results of the case solving analysis for each group are very varied because they are analyzed from different perspectives.

<i>Reflection (R)</i>	:	<ul style="list-style-type: none"> The 3 successes obtained by the practitioner are as follows: (a) Being able to achieve the learning objectives, (b) The results of the analysis of each group are very varied because they have been conditioned to do analysis from different perspectives, and (c) The active participation of students in the group is increasing increased from the previous learning process. 2 failures/weaknesses of learning: (a) There was 1 group which had not yet completed the discussion results in the LKPD, even though in general the case findings and analysis had been obtained. (b) The evaluation process was slightly disrupted due to network disturbances so that it was not done on time. 1 suggestion/alternative solution for improvement in the next cycle, namely: Time adjustments and adequate network conditioning are needed when the digital-based evaluation process is in the next lesson.
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The results of the analysis of the level of effectiveness of learning using the case method model with the C-NAR approach in cycle I can be described as follows.

Table 3. Learning Effectiveness Using the Case Method Model

No	Component	Score	Category
1	Stage 1 (Material/Concept Deepening)	3.33	Effective
2	Stage 2 (Case Presentation)	3.67	Very Effective
3	Stage 3 (Group Formation)	3.33	Effective
4	Stage 4 (Case Solving)	3.67	Very Effective
5	Stage 5 (Presentation of Work Results)	3.67	Very Effective
6	Stage 6 (Class/Group Discussion)	3.33	Effective
7	Stage 7 (Assessment and Feedback)	3.67	Very Effective
Average		3.52	Very Effective

Based on the data distribution in Table 3 above, the effectiveness of the Case Method trial in learning can be seen in Figure 1 below.

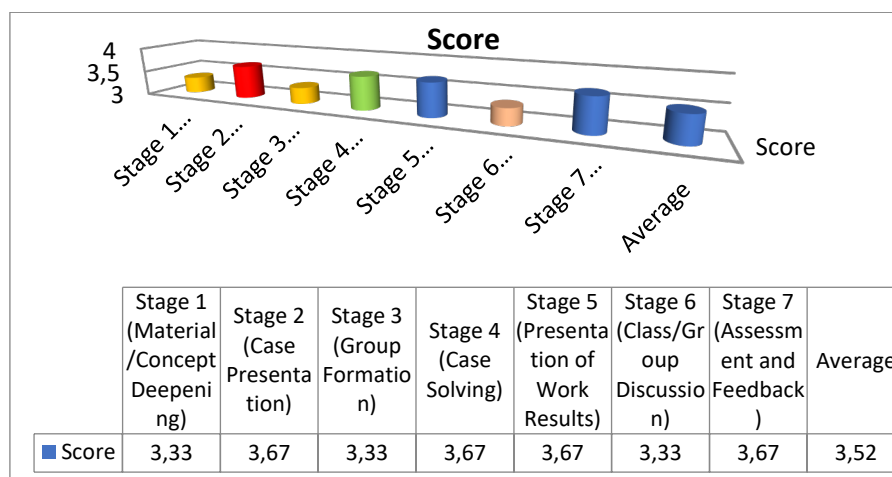


Fig. 1. The Effectiveness of Case Based Learning Method

Based on the data in Table 3 and Figure 1 it can be explained as follows: (1) the effectiveness of stage 1 (deepening of the material/concept) obtained an average of 3.33 in the Effective category; (2) the effectiveness of stage 2 (presentation of cases) obtained an average score of 3.67 in the Very Effective category; (3) the effectiveness of stage 3 (group formation) obtained an average score of 3.33 in the Very Effective category; (4) the effectiveness of stage 4 (solving cases) obtained an average score of 3.67 in the Very Effective category; (5) the effectiveness of stage 5 (presentation of work results) obtained an average score of 3.67 in the Very Effective category; (6) the effectiveness of stage 6 (class/group discussions) obtained an average score of 3.33 in the Effective category; and (7) the effectiveness of stage 7 (assessment and feedback) obtained an average score of 3.67 in the Very Effective category. The overall average score reached 3.52 in the Very Effective category. Based on this data, the good practice of implementing Case Method-based learning with the C-NAR approach has been implemented effectively in elementary schools.

3.2 Discussion

The level of effectiveness of using certain models in learning activities is at least in the good category [19,20]. In addition, it is expected to be able to improve the process and learning outcomes well [21,22,23]. The findings of the research related to the C-NAR approach used in the good practice of implementing the Case Method model obtained an average of 3.52 in the Very Effective category and fulfilled the minimum criteria required.

The description above provides an implication that good practices with Case Method-based learning that have been implemented successfully and effectively are implemented in learning in elementary schools. Other implications, apart from being able to effectively improve learning processes and outcomes, are able to produce reflective teachers through the C-NAR approach that is being carried out. Where, teachers can improve the learning process by continuing to make continuous improvements in each cycle. In addition, this activity illustrates that lecturers continue to make continuous improvements in mentoring.

The explanation above provides a view that the good practice of learning using the Case Method model is worth considering as an alternative to effective learning in elementary schools. The good practices that have been given can be used as initial references which can then be improvised and developed according to the needs in the field.

4 Conclusion

Good learning practices using the Case Method model can improve student learning processes and outcomes. This is illustrated by the success rate of learning achieving an average score of 3.53 in the Very Effective category. Based on this data, the good practice of implementing Case Method-based learning with the C-NAR approach has been implemented effectively in elementary schools. Not only that, a point that is no less important is that besides being able to improve the continuous learning process by the teacher, it can also illustrate the improvement of the continuous mentoring process by the lecturer. Thus, the applied C-NAR is truly capable of producing reflective teachers and mentors in learning.

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