

# Implementation of Case Based Method (CBM) Learning on Students in Improving Problem Analysis Ability and Problem Solving

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## ABSTRACT

Problem analysis and problem-solving are two essential things in learning public organizations, especially public organization theory courses. Students who take this course are forged to be able to master theory as well as be able to analyze problems in public organizations and solve them. The use of appropriate learning methods that are effective and dynamic involving students is essential to note. For this reason, the teacher center learning method is no longer effective and dynamic because it cannot touch aspects of students' analytical and problem-solving abilities. Application of method Case-based method (CBM) is a solution that can be applied. Students are honed with various public organizational problems through this learning method and must find solutions. Through the classroom action research method, the CBM learning method on students in improving analytical and problem-solving skills will be a test tool that the variation of student-based learning models is the right choice.

**Keywords:** Case-Based Method, Problem Analysis, Problem Solving

## 1. INTRODUCTION

Public administration is a study of how cooperation is carried out by various stakeholders/actors in the state in achieving state goals. Expanding the meaning of administration from administrative activities into a cooperative activity requires studying public organizations and their theories because organizations are a forum for such cooperation. Through the study of public organization theory, students are expected to have the ability to manage public organizations. So in the Department of Public Administration, the subject of public organization theory is a compulsory subject in the Department given to students in semester 3 with the course code ISN 302. The Organizational Theory course is at the same time a compulsory subject in every department of public administration set by the Indonesian Public Administration Association, namely the Indonesia Association Public Administration (IAPA).

Public Organization Theory is a course that explains public organization as a static and dynamic container. This course offers several subjects which analyze the meaning of organization, organization evolution theory, organizational environment, structure and design of an organization, performance and leadership in an organization, technology in organization innovation, pathology of organization, learning organization, relations, and communication organization, network organization and culture, and ethics of a public organization. This course aims to train students' sensitivity, activeness to the dimensions and problems faced by public organizations, particularly how to analyze and solve problems in the form of problem-solving.

The learning outcomes of the public organization theory course are a) able to explain organizational theories and concepts, b) able to analyze conditions of an organization both internal and external, c) able to analyze the structure and the design of an organization, control technology organization, and pathology organization, d) able to measure the performance of an organization, e) master the techniques of leadership and f). able to analyze the change in an organization and have an innovative attitude in mastering the learning organization, relations and communication organization, network organization and culture and ethics organization. The learning outcomes of study program graduates are a) have an attitude that can internalize academic values, norms, and ethics in an organization, work and have social sensitivity to the environment and society, independent, have fighting power and entrepreneurial attitude. Responsible for working in their field independently, professionally, and with integrity. b)

Have and master the knowledge of theories, organization, and communication techniques in an organization. c) Have general logical, critical, systematic, and innovative skills. Independent, quality, and measurable. Able to assess the implications of the development and implementation of science and technology. Able to maintain and develop work networks both inside and outside the institution. d) Able to generate ideas and ideas in a development organization.

Previously, the learning approach in this course was the Student Center Learning (SCL) method in the form of discussions and presentations of discussion results and Teacher Center Learning (TCL). It is done because lectures must explain some materials related to basic organizational concepts and theories, especially at the beginning of the course. Meanwhile, group discussions were held for the materials after the UTS to stimulate student activity and creativity. This learning concept was carried out before the pandemic through the face-to-face class. This method is also believed to make students more active in reading and looking for reference sources. During the implementation of online lectures, the learning media is carried out using a mixed-method between synchronous and asynchronous. The synchronous method applied is virtual synchronous, namely virtual synchronous in a video conference. Furthermore, for asynchronous foreign use the independent asynchronous method can be done with learning videos and also power points. As for foreign chronological collaboration, it can be done with discussions online through ilearning using forums and can also be done with the group assignments via zoom. According to Gagne in Arif (2011), media are various components in the student's environment that can stimulate them to learn. The presence of learning media facilitates the delivery of material, in this case, from lecturers to students.

The use of various learning media implemented does not make all students learn well. The use of video is also not enough to attract students' interest because many do not watch the video. Students are also not enthusiastic if lectures and discussions are held even during face-to-face lectures. Activeness is only seen in a few students. The role in group discussions is also uneven because some sit without contributing during class presentations. Assignments in this course are carried out in several forms, such as making individual or group papers by sharing the topics to be discussed. In addition, students can also be assigned to review several organizational theory books. However, this assignment is still considered ineffective.

The implementation of blended learning lectures has several problems. Students who have graduated from this course are expected to understand the courses in the following semester because understanding public administration is based on understanding entities from public organizations. In this course, students are expected to have organizational skills and understand organizational problems in terms of problem analysis and problem-solving skills. However, in the implementation of learning, there are still students who are not interested in attending lectures, such as sleepy, not responding by asking or answering questions. The interest and activity of students are meager, and only a few people are actively involved. It is evident when the discussions were implemented in Ilearn using forums. Students are only actively involved in discussions if required. In comparison, the forum on ilearn is a medium to measure their problem analysis and problem-solving skills in understanding empirical organizational phenomena. In Law number 20 of 2007 concerning the National Education System, it is stated that: Education is a conscious, planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious-spiritual strength, self-control, personality, intelligence, noble character and skills that necessary for himself, society, nation, and state.

This phenomenon prompted the team to research the implementation of the Case-Based Method to create an atmosphere and active learning process to hone the analysis and problem-solving skills of students who have been more passive and unproductive in discussing. The implementation of this method will make all students involved in learning and have a role in every case discussion that will be discussed. Students will be more active in searching for references and practicing working in a productive team. The choice of CBM is because the public organization theory course is theoretical and conceptual. In this course, students are expected to have the ability to master the theory and use these theories and concepts to dissect the problems of public organizations and formulate problem-solving. Based on the public organization theory course phenomenon, the team formulated the problem in this study "how to implement the Case-Based Method (CBM) learning method for students in improving problem analysis and problem-solving skills in public organizations in the public organizational theory course."

### 1.1 Literature Review

The case-Based Method is a student-centered learning method ( Student Center Learning). This

method focuses on students as the center of learning to hone case analysis and solve skills. This method is considered more effective in fostering student activity and participation, where everyone has their role in discussing cases and solving them. This method has the advantage of closing the distance between students and the natural world that they will later encounter. Students act as subjects of active learning, so students need to be provided with simulations for them to train themselves as real professionals. Helms (2006) that case learning is a method that involves authentic learning and investigating current issues in everyday life. So the current issues or problems and opinions that develop in public organizations are formulated to be analyzed and solved using various learning resources.

According to Barnes et al. (1994), the case is an account of events that seem to include enough imaginative decision points and provocative undercurrents to make a discussion group want to think and argue about them. The case can be an actual event, and it can also be fictitious as a simulator. The cases raised are complex and information-rich cases that describe events that give various interpretations. Things like this will encourage students to ask questions rather than answer questions, stimulate students to solve problems, form shared intelligence, and develop various perspectives, and as Generation Z students are problem solvers.

Various researchers have researched CBM, especially those focusing on classroom learning research through classroom action research. Wospakrik et al. (2020) about the effect of the application of CBL on student motivation and learning outcomes. Sulistyoningrum and Luciana (2018) regarding CBL improving clinical reasoning on blocks of tropical infectious diseases for medical students at the Islamic University of Indonesia. Puspita and Dwi Koranto (2020) on the validity of CBL learning tools to train students' problem-solving in simple harmonic vibrations. Kusumawati et al. (2019) about the effect of integrating the 5E cycle learning model with CBL on students' critical thinking tendencies. Many research is being carried out focusing on CBL or CBM, but more is done in the exact sciences, especially medicine and health sciences. Other research developed at the secondary school level, such as SMP and SMA, focused on students learning in various subjects.

Research on this case-based method is still rarely carried out in social sciences and compulsory subjects. This research needs to be encouraged to continue to be developed, especially in social science departments, because this method is more appropriate to be developed in the social sciences,

where spaces for discussion and contemporary critical thinking that occur in the social world need to be analyzed. The CBM method is student-centered which can encourage collaboration and collaboration between participants/students in groups in analyzing cases that occur in the real world/public organizations such as local government, district, city, province, and even central.

In this CBM method, the lecturer acts as a facilitator by stimulating the emergence of thoughts to explore cases and consider problem-solving. Lecturers can also ask questions that encourage students' thinking for the better. Lecturers need to encourage the implementation of individual contributions in each group to see patterns of class participation and activity. The criteria for cases that can be raised in CBM are factual, complex cases to stimulate class and discussion groups.

Telsa (2012), the principle of the Case-Based method is student-centered learning by prioritizing a problem-solving approach. Students need to be provided with appropriate and sufficient material so that case discussions can run smoothly and students achieve their learning objectives. The provision of material can be made by providing the main points.

The public organization theory course is a compulsory subject in the department of public administration whose material contains organizational concepts and theories and their implementation in today's public organizations. For this reason, this course covers organizational theory and cases. Unfortunately, as a compulsory subject, students are less enthusiastic in every lecture. The course is considered boring, so students are not active and critical in discussing contemporary organizational issues. For this reason, a learning case-based method is needed with the aim of students playing an active role and connecting between theory and its implementation in reality, namely public organizations such as local governments. Through this CBM method, students are given material as an introduction and then given cases to be analyzed and solved. After each CBM session, the lecturer as a facilitator will provide feedback and give his views as a closing.

### 1.2. Action Hypothesis

Based on the literature review and the framework described previously, this classroom action research hypothesizes that implementing the learning case-based method can improve the ability of problem/case analysis and problem-solving of students in public organizations in the subject of public organization theory.

## 2. RESEARCH METHODS

### 2.1. Research Setting

#### 2.1.1 Place

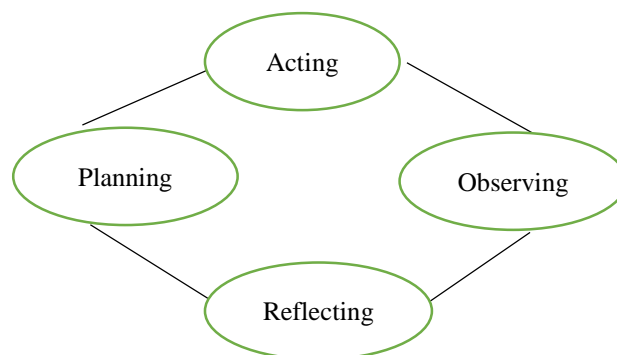
This research was conducted in the Public Organization Theory class at the Department of Public Administration. As a compulsory subject, theory courses are always considered dull and uninteresting to discuss, so students are not interested and passive in class. It makes this research very appropriate to do.

#### 2.1.2 Research Time

This research was conducted in the odd semester of the 2021/2022 academic year from July to December 2021.

#### 2.1.3 Types of Research

Research This research is classroom action research using Kurt Lewin's model as shown below:



**Figure 1** Model Kurt Lewin, Lewin in Afandi (2011)

Kurt Lewin's model starts from planning, action, observation and reflection. The implementation of this research is a process that occurs in a continuous circle. For this research, 2 cycles were carried out.

### 2.2 Research Subjects

This research was conducted in the Public Organization Theory class with a total of 2 classes, where each class consisted of male and female. Each is:

Class A has many as 43 people. Men as many as 8 people. As many as 35 women,

Class B has many as 42 people. There are 8 men and 34 women.

### 2.3 Techniques and Data Collection Tools

The collection was carried out using an observation format to implement action scenarios from time to time and their impact on students' analytical and problem-solving abilities. The data collected are in the form of test results, assignment scores, student activity, enthusiasm, and quality of the discussions. The instruments used include test questions, observation sheets, and field notes.

For the validity of the data, data triangulation techniques are used by comparing the data obtained with other data or specific criteria that have been standardized.

### 2.4 Class Action Research Implementation Procedures

1. Determination of Problem Focus
  - 1) Is the initial competence of students taking courses adequate
  - 2) Is the learning process that has been carried out effective enough
  - 3) Are the learning facilities adequate
  - 4) Is the learning method appropriate and interesting
  - 5) Is the learning time adequate
  - 6) Are learning resources adequate?

From various problems, identification is carried out, namely problem selection. The selected problem is the problem that occurs the most, or from mild to severe. The problem in this research is the lack of students' analytical skills and problem solving.

2. Action Planning
 

From the problem, action plans are prepared

  - 1) Determine problem-solving strategies through CBM for students
  - 2) Arrange learning stages in class every week by dividing students into groups based on learning materials
3. Implementation of Actions
  - 1) Opening material by the lecturer
  - 2) Presenting cases and dividing students into working groups
  - 3) Students analyze cases by sharing the roles of each individual
  - 4) Presentation of the results of analysis and problem-solving in front of the class/forum
  - 5) Invite other groups to respond
  - 6) Draw conclusions and close the material by the Lecturer.
  - 7) Lecturer collects student assignments
  - 8) Lecturers review learning outcomes through written tests

#### 4. Observation

This activity takes place simultaneously with the implementation of the action. Lecturers observe the activeness and enthusiasm of students in learning and collect data through discussion tasks that have been done and quizzes. At the observation, the lecturer made notes on the observation sheet as research data.

#### 5. Reflection

At this stage, an evaluation of the results of observations on the actions is carried out. This evaluation is for the improvement of the following action. If a problem occurs, it can be repeated starting from the action plan.

## 3. RESULTS AND DISCUSSION

Classroom action research in the subject of Public Organization Theory was carried out in 2 learning classes, namely Class A and Class B, with 85 people. Research activities are carried out starting on August 31, 2021. Organizational Theory Lectures are carried out online and use learning media such as Zoom Meetings and ilearn.

### 3.1 Early Stage.

At the first meeting, the researcher and the lecturer pinned several important documents to be read by students first so that students could understand what they would study for one semester. In the first week of ilearn and zoom meetings, an RPS and a lecture contract are mutually agreed upon, as shown in appendix 2 of this report. At the first meeting, the lecturer and the researcher conducted a question-and-answer session to determine how deep the students' understanding was when starting this course material. Some actively answered, but most were silent. Some even turned off the camera and did not answer when asked.

As a compulsory subject, students who take organizational theory courses actually have initial competence because they have studied management principles in the previous semester. However, when evaluating the mastery of the previous material, many students could not answer. Before the lecture material begins, students are asked to put forward their suggestions and ideas for future lectures to maximize the results, including references that should be used or studied. At the initial meeting, information was obtained that students did not have good preparation/competence to study this course because they did not master the previous courses closely related to this course. The implementation of this lecture in terms of time is quite maximal

because the learning time that the faculty have arranged is in the morning so that the students' physical condition is still fresh.

From the data above, the problem for students in the first week of attending this organizational theory course is that they need to be honed in their activeness in class to express opinions with the suitable method so that everyone is involved.

### 3.2 Action Planning Stage

From the problem, an action plan is prepared with team decisions and commitments to determine problem-solving strategies through learning methods using CBM for students even though they are still in online learning. It starts with arranging the stages of learning in class every week by dividing students into groups automatically through a breakout room using zoom so that students will have a different group from the previous week. The choice of using a breakout room automatically is so that students can work with anyone.

### 3.3 Implementation of Actions

Every week, lectures opened the class with a bit of introductory material or a video related to the material during the first 1-hour lesson. After that, the students were divided into small rooms to discuss the cases given related to the material that day. Previously, students were reminded to divide each individual with their respective roles to have a responsibility. After finishing for approximately 1 second hour, students gathered again in the main room, and the lecturer randomly chose the order of group presentations for each room. It is done every week. After finishing the presentation, the lecturer closed the material and sometimes held a person-to-person question and answer to ensure that the material was well received by students. The form of the opening material can be seen in the attachment. After the discussion is over, students are welcome to upload their assignments in ilearn for 10 minutes to 30 minutes where the uploaded assignments are ilearn. The review of assignments will be discussed next week before the lecture with the next material begins.

The following are organizational theory materials for one semester.

1. Able to understand the meaning of organization (CPMK1 Lecture 01).
2. Evolution of organizational theory, (CPMK 1 Lecture 02-03).
3. Organizational environment, CPMK 1 Lecture 04)
4. Organizational structure and design (CPMK 1 lecture 05).
5. Organizational technology, (CPMK 1 Lecture 06).
6. Organizational pathology, (CPMK 1 Lecture 7).
7. Organizational performance (CPMK 2 lecture 08).
8. Organizational leadership. (CPMK 3, lecture 09).
9. Organizational learning, (CPMK 4 Lecture 10).
10. Organizational relations and communication, (CPMK 4 lecture 11).
11. Organizational networks (CPMK 4 Lecture 12)
12. Organizational culture and ethics. (CPMK 4, Lectures 13 and 14).

### 3.4 Observation

This activity takes place simultaneously with the implementation of the action. Lecturers observe the activeness and enthusiasm of students in learning and collect data through discussion tasks that have been done and quizzes. At the observation, the lecturer made notes on the observation sheet as research data. If the method used is not CBM, the active students are always the same people. However, when divided into groups in a breakout room, everyone feels responsible and actively participates. Although it cannot be ignored that some people are still not enthusiastic and turn off the camera. If there are students who look unenthusiastic, the lecturer will review their assignments directly on zoom so that their attention is awakened.

### 3.5 Reflection

At this stage, an evaluation of the results of the actions implemented is carried out. This evaluation is for the improvement of the next action. If a problem occurs, it can be repeated starting from the action plan. The form of reflection is carried out as described previously. After the discussion is complete, the lecturer will see the roles of each individual in the group and whether there are people who do not carry out their roles well. If there is, it will be asked directly to the person concerned about the obstacles he faces. If students look unenthusiastic about zooming in, the lecturer will immediately ask the extent of their understanding of the material that day. If the person concerned cannot answer, the lecturer will remind him to be more active next week.

## 4. CONCLUSION

The case-Based Method (CBM) is a case-based learning method that students solve to get the knowledge afterward. This classroom action research found that this method is much more effective than the Teacher Center learning method or the group discussion method that has been used

previously. Here the student is an individual who has a role in a group with a problem to be solved. However, this method needs to be developed and created related to the discussion method and after the discussion. The significant difference between this method and the previous group discussion is only in the case being discussed, which is related to the learning material. In group discussion sessions, it is necessary to ensure that the leader in the group must have good communication competence so that students who are not accustomed to expressing opinions want to speak in groups. So, in addition to science, everyone in the group gains skills in speaking, analyzing, and working in teams in a short time. In addition, this method can be developed with a further assignment to publish their writings in the media so that they can be read by more people and become useful scientific articles.

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