Efforts to Improve Student Learning Activities with Case-Based Learning (CBL) Approach in Introductory Microeconomics Course

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ABSTRACT

Case based learning (CBL) provides opportunities to expand knowledge and develop skills through problem solving and investigation. At CBL, students can practice decision making based on real-life problems. This study aims to see the ability of students through the use of case-based learning models in improving students' abilities to analyze demand supply problems in an introduction to microeconomics. Using the stages of planning, CBL action, observation, and presentation of the output of the introductory microeconomics course, the respondents were all students of the A2 class introductory microeconomics course. The study concluded that by applying the case-based learning model in the Introduction to Microeconomics course, the indicators for understanding the subject matter provided a better understanding of learning to students with good categories. The application of the case-based learning model in the Introduction to Microeconomics course also improves students' critical and effective thinking. The criteria obtained by the indicators of creative and effective thinking are in the good category.

Keywords: Case Based Learning, Blended Learning, Introduction to Microeconomics

1. BACKGROUND

The Introduction to Microeconomics course is very important in economics because it is the basis for understanding the existing theories in producing an economist at the economics faculty of Andalas University. In addition, in the Introduction to Microeconomics course, it becomes a reference in other microeconomics sciences such as Islamic microeconomics courses.

Judging from the distribution of values, it means that there is still a lack of student ability in exploring the Introduction to Microeconomics knowledge that has been given, so that it requires the active role of students and also requires information technology assistance in the learning process. So, by looking at the importance of knowledge of the Introduction to Microeconomics course in economic analysis, the learning method must be a concern (Aliusta, Abrar-ul-hassan, &Cofie) [1].

One of the innovative solutions to this problem is the need for active and contextual learning strategies and outcome-based learning outcomes assessment methods. The case-based method (CBM) is an active and contextual learning strategy whose implementation is the main performance indicator (IKU) of higher education (Krain) [2]. Blended learning models are also used in this CBM method where various learning models are combined (Allen, Seaman, & Garrett) [3]. The blended learning model is a combination of face-to-face conventional classroom learning with virtual classes conducted online. The use of e-learning can also be done, both simultaneously at the same time and in different places (virtual synchronous), or at different times and places (asynchronous) (Aliusta&Özer) [4].

Case study based learning Case based learning provides opportunities to broaden knowledge and develop skills through problem solving and investigation (Mali) [5]. At CBL students can practice decision making based on real-life problems. Students can also develop skills, think critically and then apply knowledge to create a case that will solve the problem presented. Students can gain invaluable experience by doing and actively participating in the learning process, compared to reading the information presented on the course and then taking a test at the end of the course on e-Learning.

Because the material in the Introduction to Microeconomics course is dense and quite heavy, the innovation proposed in this paper is a blended learning system consisting of face-to-face meetings in class and the use of case studies. A case study is a short case that contains an explanation of the material so that it is easy to understand. This case can be explained by the face-to-face method in class and can also be delivered online. So that when in class the lecturer is only limited to providing evaluations and equalizing perceptions about the
material that has been delivered. In addition, interaction with the use of online media is also more widely used. Each submitted assignment is collected online in Ilearn. With this approach, it is hoped that the delivery of material will be more effective and the results will be maximized.

2. **Theoretical Foundation**

Based on research that has been done previously, learning using case based learning has been able to help students understand because they are faced with real situations in the field. Case-based learning (CBM) refers to an instructional approach that teaches curriculum concepts through projects that adhere to the principles of learner-centered teaching, learner autonomy, collaborative learning, and learning through assignments (Mali) [5]. Research shows that the use of case-based PBL shows a high level of student participation in learning, and the innovative teaching practices of teachers, positive trends in the application of PBL in teaching and learning.

The case study framework is a key component of the effectiveness of CBL. Jonassen and Hernandez-Serrano) [6] describe CBL as a method of negotiating and renegotiating meaning that allows entry into the realm of meaning of others through the messages they speak in their stories, helps us find our place in culture, allows us to explain and interpret, and facilitate the attainment of experiences that help us distinguish positive models from negative models.

The application of case based learning to solve problems, and learn from each other along to build their knowledge states that CBL is a broad learning model for students. They can work individually or in groups to investigate a topic. PBL is a systematic learning that involves students in learning knowledge and skills through the investigation of development to obtain a product (Bansal & Goyal) [7].

3. **Methodology**

One form of graduate achievement that will be fulfilled is that students are able to master the concept of demand and supply. Therefore, students' understanding in the simulation means that students are ready to 1). Transactions buying and selling goods and 2). Calculate change or elasticity correctly.

Evaluation of success is seen through the following parameters: (i) learning outcomes at the end of the odd semester; (ii) distribution of final UAS scores; and (iii) student responses to the development of applied learning and/or assessment methods. This is done by research in the form of class observations and questionnaires on student perceptions. The objects in this study are Unand Economics students who take the Introduction to Microeconomics course in the Odd academic year 2021/2022. Data were collected according to the research objectives, namely: (1) implementation of case based learning through observation and (2) students' perceptions of learning through questionnaires.

This research is a classroom action research (Classroom Action Research) which includes the stages: planning, implementation, action, observation, evaluation, and reflection, which is carried out in a cycle. The research subjects were all 37 students who took courses in class A2.

This classroom action research consists of two (2) cycles.

**Cycle I:**

**Planning Stage**

The activities at this planning stage are: 1) Reviewing the curriculum of introductory microeconomics subjects, 2) Making blended learning teaching tools with a Case based learning approach, 3) Making observation sheets to see the conditions of teaching and learning in class 4) Making evaluation tools to find out student learning outcomes, 5) Make a questionnaire to see student responses.

**Action Stage**

Activities at the action stage are: 1) explaining the material in general, 2) explaining the choice of approach and the number of members in the action, 3) planning case based learning and the form of output generated from the CBL, 4) presentation by students

**Observation Stage**

Activities at the action stage are: 1) Observation, used to make observations, 2) Questionnaire, aims to determine student responses to the application of
the Learning Model. 3) The evaluation aims to determine the effect of the implementation of learning actions on the learning outcomes of introductory microeconomics. 4) Reflection to adjust the actions that have been taken from observations.

**Cycle II**

Cycle II is a step to make improvements and refinements or actions in accordance with the reality found in the field. Data collection techniques used are qualitative and quantitative data.

### 3.1. Questionnaire

Questionnaires were used to assess the results of research observations. There are two indicators used in compiling the questionnaire. Indicator 1 is to get answers about students' understanding of introductory microeconomics courses. There are 6 questions on the indicators of understanding this material, namely questions 1, 2, 6, 7, 9, 10. The second indicator has 8 questions, which are indicators of creative and effective thinking, namely questions 3, 4, 5, 8, 11, 12, 13.

### 3.2. Data Analysis Techniques

The data for this study were collected from a questionnaire regarding student perceptions of the Introduction to Microeconomics course on Case Based Learning (CBL), where data were collected from students of the Faculty of Economics class A2 who became the object of research. After the research data is collected, the data is processed using the following techniques and stages:

1. Looking for the percentage of answers to the questionnaire from respondents with the formula:
   \[ P = \frac{F \times 100\%}{N} \]
   
   \( P = \) Percentage, \( N = \) Number of Respondents, \( F = \) Frequency

2. Determine alternative qualifications for the answers to each question item, namely answers with strongly agree (SA) qualifications, are given a weight of 4, agree qualifications (A) are given weights, disagree qualifications (DA) are given a weight of 2, and strongly disagree qualifications (SDA) are given weight 1.

3. Calculate the average with the formula:
   \[ \text{Average Score} = \frac{(4 \times \text{SA}) + (3 \times \text{A}) + (2 \times \text{DA}) + (1 \times \text{SDA})}{\text{SA} + \text{A} + \text{DA} + \text{SDA}} \]

4. Calculating criteria according to category mean
   \[ \frac{\text{-------------------}}{\text{ideal max score}} \times 100\% \]

### 4. RESEARCH RESULT

Based on the questionnaires that have been given to students, the results obtained are student perceptions of the case based learning (CBL) learning method that has been implemented in the Introduction to Microeconomics course. The following is the result of the questionnaire on student perceptions about CBL learning:

**Table 1: Distribution of Student Perceptions Regarding the Implementation of Case Base Learning Methods in the Introduction to Microeconomics Course.**

| No. | Question                                                                 | SS (%) | S (%) | KS (%) | TS (%) | Average of score | Criteria |
|-----|--------------------------------------------------------------------------|--------|-------|--------|--------|-----------------|----------|
| 1   | I feel more active in the Introduction to Microeconomics course with a case base learning (CBL) based learning model in the form of group assignments | 18,9   | 59,5  | 21,6   | 0,0    | 3,0             | 74,3     |
| 2   | I am always enthusiastic about working on group assignments              | 24,3   | 54,1  | 16,2   | 5,4    | 3,0             | 74,3     |
| 3   | With the application of the case base learning (CBL) based learning model, I have become more | 18,9   | 56,8  | 24,3   | 0,0    | 2,9             | 73,6     |
Table 1 is distinguished by indicators: Think critically, effectively and indicators of understanding of introductory microeconomics courses. Questions 1, 2, 6, 7, 9, 10 are indicators of thinking critically, effectively, and questions 3, 4, 5, 8, 11, 12, 13 are indicators of understanding the subject.

4.1. Student Perception Judging From Indicators of Understanding Subject Materials

Results Perceptions of student indicators on improving course understanding with the implementation of case-based learning methods will increase students' understanding of introductory microeconomics courses, especially on Demand and Supply materials, 74.4% stated strongly agree and agree, while 25.6% stated disagree and disagree. However, those who answered that they did not agree and did not agree, this should be the concern of the author and other lecturers as the supervisor of the course.

Based on the frequency distribution table above, it can be depicted in the following graph:
The research data shows that students’ perceptions about the implementation of case-based learning models in introductory microeconomics courses in terms of understanding aspects of student courses obtained an average score (Mean) of 72.4 which is found in the class interval score of 61-80% with good criteria. By calculating the average score percentage as follows:

\[
\text{mean} = \frac{\text{skor max ideal}}{\text{skor}} \times 100\% = \frac{2.9}{4} \times 100\% = 72.7\%
\]

So, it can be concluded that students’ perceptions of the implementation of case-based learning models in introductory microeconomics courses in terms of understanding the subject matter are in the good category with an average score of 2.9 (72.7%).

### 4.2. Student Perceptions From Creative and Effective Thinking Indicators

The results of the creative and effective thinking indicators show that most students (78.4%) stated strongly agree and agree on each indicator with the implementation of case-based learning will make students think creatively and effectively.

Questionnaire data on student perceptions about the application of the case-based learning model (CBL) in introductory microeconomics subjects in terms of creative and effective thinking indicators consists of 6 questions, measured using a Likert scale with a score of 1 to 4 and distributed to 37 respondents.

Based on data processing from the results of the study obtained the following graph:

\[
\text{mean} = \frac{\text{skor max ideal}}{\text{skor}} \times 100\% = \frac{3}{4} \times 100\% = 73.8\%
\]

So, it can be concluded that students’ perceptions about the implementation of case-based learning models in introductory microeconomics courses in terms of creative and effective thinking indicators are in the good category with an average score of 3.0 (73.8%).
5. CONCLUSION

Based on the results of research, analysis and discussion, it can be concluded that by applying the case-based learning model in the Introduction to Microeconomics course, the indicators of understanding the subject matter are to provide students with a better understanding of learning. Case Based Learning (CBL) is a learning approach that pays attention to understanding the subject matter. So that students are required to explore, assess, interpret and synthesize learning information in a meaningful way.

The application of the case-based learning model in the Introduction to Microeconomics course also improves students' critical and effective thinking. So that in its application, the case-based learning model uses problems as a source of learning, so that students are trained to think and develop their potential and personality through existing problems.

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