Debate-Based Learning and Its Impact on Students’ Critical Thinking Skills

1Bagus Shandy Narmaditya, 2Intan Marfarrina Binti Omar

DOI: 10.17977/um013v3i12010p001

1Faculty of Economics, Universitas Negeri Malang, Indonesia
2Department of Educational Management, Planning & Policy, University of Malaya, Malaysia

Abstract
This study aims at understanding the implementation of debate-based learning models on critical thinking skill of economic students in senior high school. This research was conducted in a senior high school in Malang particularly in SMA Laboratory UM. The study applied a classroom action research by comparing students’ critical thinking skills during research period. The level of critical thinking skill adopted Structure Observed Learning Outcome (SOLO) Taxonomy which consisting of Prestructural, Unistructural, Multistructural, Relational, and Extended Abstract Thinking Skills. The findings showed that a remarkable change of students’ critical thinking skills during cycles. The average of post-test score between cycles increased by 11.9 percent. In addition, the level of students critical thinking skill was dominated by Prestructural, Unistructural, Multistructural then it move noticeably to the greater level which is Multistructural, Relational and Extended Abstract. From these results, it can be concluded that the implementation of debate-based learning can stimulate students’ learning activities and critical thinking skills.

How to Cite
INTRODUCTION

Economics lesson plays an important role in enhancing students’ understanding on their daily activities. It examines the human behaviours in fulfilling their various needs and wants in the form of production, consumption, and distribution activities. In the economic theory, it teaches an individual to confront their needs and existing resources. However, in fact, the economic issues have dynamically changed. Consequently, it leads to several activities that are more likely tend to meet their wants.

There are numerous factors affecting students’ behavior particularly related to their consumption behaviour such as lifestyle, peer group, advertisement, e-commerce and so forth (Narmaditya, 2013; Enrico et al., 2014; Nasab et al., 2016). Therefore, the economics lesson should be addressed to the current economic issues especially related to students. These matters could be supported from teacher or lecturer in using various learning models in enhancing students’ critical thinking skills (Dilekli, 2017; Narmaditya et al., 2018; Kharismawati et al., 2018). Surprisingly, most Indonesian economics teachers, they tend to use conventional learning models in teaching economics such as face to face. However, It does not mean the use of conventional learning models are not effective in regarding students achievement (Wren, 2015).

In fact, in conventional learning, teachers are more likely teach about concepts rather than competencies. In this case, students only listen to information given by the teacher. This condition will cause the students activities particularly in their critical thinking skills about the current issues. Critical thinking is clear, problem-solving, decision-making, persuading, analyzing assumptions, and scientific inquiry. Critical thinking is the ability to reason and organized way. Critical thinking is the ability to systematically evaluate the weight of personal opinions and opinions of others.

In addition, Ormrod (2009) remarked that critical thinking is one of the high-level cognitive skills, namely the process by which people do something more complex to what they learn, for example actively learning it, applying it to new situations or problems, using it when creating new products, or evaluating it critically. Dealing with the issues, debate-learning model is forecasted could improve students more active. Debate is a learning model with students divided into two groups then sitting face to face, students read teaching material to be observed by each group, the presentation of the reading results by representatives of one group then responded by the other groups in turn, the teacher guides the conclusion and adds it necessary. Likewise, according to Istarani (2010) learning with the debate model is the delivery of teaching material by reviewing from two sides, namely the pros and cons to find the truth of an event that exists. In the world of education, the debate can be a valuable method for increasing thought and reflection, especially if students are expected to be able to express opinions that basically conflict with themselves.

From preliminary observations, it showed various activities of students in the classroom. However, in fact, students are more likely less actively participate in the classroom. It was showed by students’ activities in the classroom such as, some students in the backseat look engrossed in playing cellphones, operating laptops to do other subject assignments and so forth. When there is a presentation session and question and answer session, it turns out that only certain students are
actively asking while others remain passive. Furthermore, when they are given the
task to analyze economic problems, their answers are more likely surface answer
instead of deep answer. Based on the existing condition, the researcher tried to
provide a solution by trying to apply debate-learning models with the aim of being
able to improve critical thinking skills of students in economics subject.

Numerous prior studies have carried out to enhance students’ critical
thinking skills (Dilekli, 2017; Narmaditya et al., 2018; Kharismawati et al., 2018).
Dilekli (2017) applied gifted students’ learning style and its affect on students’
critical thinking skills. While both Narmaditya et al. (2018) and Kharismawati et
al. (2018) revealed that problem-based learning lead to greater critical thinking of
students. However, in fact, little attention of researchers who conducted research
using debate-learning especially in social sciences in their affect to increase
students’ critical thinking skills (Ana, 2017; Iman, 2017) Therefore, the study
addressed to implement the debate-learning model and its impact on students’
critical thinking skills.

METHOD

This study follows class action research combined with a qualitative
descriptive approach. This study was conducted in two cycles consisting of four
stages namely planning, implementation, observation, and reflection. The research
was performed in senior high school classes in Malang. In more detail, it was
directed to SMA Laboratory UM in XI student grades class of economic subject.
In addition, the considered courses in this study are related to difficulties themes
in economics such as unemployment and fiscal and monetary policy.

<p>| Table 1. Criteria of Critical Thinking Skills |</p>
<table>
<thead>
<tr>
<th>Score</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Students propose a solution, explain an argument, or state problems referring to the particular given issue. Further, students have more relevant answer or idea in acquaintance with received problems and several facts to provide a sufficient explanation and interpret in a comprehensive, coherence and concise language.</td>
</tr>
<tr>
<td>3</td>
<td>Students propose a solution, explain an argument, or state problems referring to the particular given issue in the assignment. Students could provide more solution or idea with several relevant examples. Moreover, students also explain their work in clearly language.</td>
</tr>
<tr>
<td>2</td>
<td>Students propose a solution, explain an argument, or state problems referring to the particular given issue in the assignment then they are provide in a systematic language.</td>
</tr>
<tr>
<td>1</td>
<td>Students propose a solution, explain an argument, or state problems referring to the particular given issue in the assignment but they are cannot to make a connection between received information well and cannot provide their work properly.</td>
</tr>
<tr>
<td>0</td>
<td>Students propose a solution, explain an argument, or state problems referring to the particular given issue in the assignment or they provide a wrong answer.</td>
</tr>
</tbody>
</table>

Source: adapted by Asyari et al. (2015); Narmaditya et al. (2018)

This matter aimed to cope students’ understanding and increasing their
activities particularly on students’ critical thinking skills. In order to obtain
comprehensive data, this study followed several methods data such as direct observation, questionnaires, interviews, field notes, and documentation. The level of critical thinking skill adopted Structure Observed Learning Outcome (SOLO) Taxonomy which consisting of Prestructural, Unistructural, Multicultural, Relational, and Extended Abstract Thinking Skills. Furthermore, it was analyzed by comparing the test results using criteria in Table 1.

RESULTS AND DISCUSSION

The implementation of debate-based learning models was conducted in two cycles. The first meeting was performed on 15 May 2018, 18 May 2018 and 21 May 2019, respectively with the courses materials related to unemployment and economic growth. Meanwhile, in the next cycle, it was conducted on 2 July 2018, 5 July 2018 and 9 July 2018 following topics about fiscal and monetary policy.

At the glance, teacher provided a pre-test question related to unemployment which consisting of different level of difficulties. Furthermore, the class was divided into six groups consisting of 4-6 students. The teacher provides the tasks and problems on given topic then they are need to seeking out the information from various sources such as the internet, economics book and other relevant sources. In the second meeting, students started to present their works in the front of class following with question and answer session. Furthermore, in the next meeting, students conduct debate sessions with economic issues that have been approved by the class to be debated. In the section, the teacher provided post-test questions in order to compare with the results of the pre-test whether there was an increase in critical thinking during the first cycle.

During the learning process, researcher and observers present an observation using instruments related to critical thinking skills. In more detail the comparison between cycles were illustrated in Table 2.

<table>
<thead>
<tr>
<th>The Number of Observer</th>
<th>Student Learning Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Cycle</td>
<td>2nd Cycle</td>
</tr>
<tr>
<td>4</td>
<td>74.1%</td>
</tr>
</tbody>
</table>

Table 2 provides information about the implementation debate-based learning on students’ critical thinking skills. In general, it showed an increasing during cycles. In the first cycle, approximately 74.1 percent of students actively participated in the learning process while the rest they are more likely did some activities out of the lesson. Some of them also looked sleepy during the lesson. Therefore, in the next cycle, after debate-based learning implemented, the students are more likely active and propose greater ideas in the classroom. It can be seen from the result of observation by four observers, it increased to the level about 86 percent. It implies that debate-based learning successfully in enhancing students’ critical thinking skills. This findings in line with previous studies by Arung & Jumardin (2016) which mentioned that debate instruction enhanced students ability in speaking.

Figure 1 compares the students’ critical thinking skills between first and second cycle. From the table, it showed an upward trend during the cycles. In
more detail, from the previous cycles students had various types of critical thinking skills including Prestructural, Unistructural, Multicultural, Relational, and Extended Abstract Thinking Skills. However, it was dominated on prestructural, unistructural and few students on category multistructural and relational thinking skills. However, after debate-based learning implemented, there is a remarkable change during research period. In more specifically, the level of structural thinking skill rose slightly but relational thinking skill rocketed to approximately 42 percent.

![Graph of critical thinking skills](image)

Figure 1. The Comparison of Students’ Critical Thinking Skills

Based on the analysis, in the first cycle, the number of students who completed it still did not meet the standard of completeness in a classical manner. This is because students are not used to being faced with problems that are happening. During this time the subject matter teachers only taught concepts and less associated with the real world. In addition, the lack of motivation for students to actively ask is also one of the causes of students’ low critical thinking skills. Furthermore, the condition of students who always dominate group discussions leads to other students only mentioned that they agree without thinking critically. It has consequences that students are not to develop and enhances their critical thinking skills. In addition, these results were caused by students’ nature that only focuses on given economics book instead of seeking out the other sources. By having a lot of information from many sources it will lead to unilateral thinking skills. This condition aggravated by the level of awareness in reading books.

In the second cycle, the implementation of debate-based learning increased on students’ critical thinking skills. This is because students are always accustomed to researchers to be faced with economic problems that are happening. This finding is accordance with Mumtaz & Latif (2017); Pramesswari et al. (2016); Pudjantoro (2016) that debate-based learning stimulates critical thinking skills. In addition, the improvement of critical thinking skill in the second cycle is caused by motivation given from teacher to students to actively ask and argue. Furthermore, reduced activity dominating other group members also contributed to the results of students' critical thinking skills. Consequently, all group members to improve their understanding of the material.
Finally, researchers always assign students to seeking out for problems on the internet, newspapers, magazines, journal and others relevant sources. This is a way for researchers to familiarize students with reading from many sources so that their knowledge is broad and the information they can also vary. Thus, students can think critically and be able to access whether the information is correct or incorrect. This is consistent with the theory of Ormrod (2009); Halpern (2013), critical thinking consistently evaluates information or arguments according to accuracy, logic, credibility, rather than just taking it.

Another thing that causes low participate is because students cannot work well together with group members when discussing. Their social attitudes are still lacking, so if there are other group members who do not understand, they are reluctant to share knowledge. In the second cycle, researchers provided several improvements from the results of the first cycle, hence there was an increase in the results of the affective aspects of students. When compared with the first cycle, there is a considerable increase in this critical thinking and activities aspect. This is because, in the second cycle, students have been able to follow the learning path using the debate-learning model.

An increasing in students’ critical thinking is because most students have been able to work together in the group discussions. They are no longer dominated and embraced other group members who have not mastered the material. Group discussions run effectively, all groups collect assignments on time and they are responsible for each task given. At the stage of material delivery, most students pay close attention to the teacher’s explanation. Active students ask things they do not understand. Students are also very obedient to follow each teacher’s instructions.

CONCLUSION

This study addressed to implement the debate-based learning on economics subject and understand its impact on students’ critical thinking skills. From these results, it can be concluded that the implementation of debate-based learning showed an increasing trend between cycles. Previously students are more likely passive during learning process. In addition, the level of thinking skills are dominated by Prestructural, Unistructural, Multistructural then it move noticeably to the greater level which is Multistructural, Relational and Extended Abstract. Lastly, debate-based learning can be considered as learning model in improving students’ critical thinking skill. However, in its implementation, researchers should considered several aspect such as students characteristics, themes, learning environment and so forth.

REFERENCES


