

STUDENTS' CREATIVE THINKING IN SOLVING ECONOMIC PROBLEMS DURING THE COVID-19 PANDEMIC

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ABSTRACT

This study aimed to describe students' creative thinking in solving economic problems during the Covid-19 pandemic. This study was a qualitative research with phenomenological approach. The subjects were selected with purposive technique. The subjects consisted of 2 high ability students. The data were collected using test, interview, and field notes. The research instruments were in the form of students' creative thinking test on economics actors' roles material and an interview guideline. Triangulation technique was employed to test the validity of the test. The results showed that high ability students had a level 3 of creative thinking. They were able to meet indicators of fluency and flexibility. The fluency indicator was characterized by students' ability to provide diverse and correct answers. On the other hand, flexibility indicator was marked by students' ability to use correct and different ways or approaches in solving economic problems.

Keywords: creative thinking, economic problems, covid-19

INTRODUCTION

Creativity has an important role in solving problems involving students to think creatively in which they are expected to innovate new ideas different from their usual ideas in analyzing and solving economic problems (Rahmatina, et al, 2014). This ability is in line with the objectives of economic learning to train students to think critically, systematically, logically, creatively, and have the ability to work effectively (Minister of National Education Regulation No. 22 of 2006). Therefore, creative thinking is one of the abilities developed in economics.

Siswono (2018) stated that creative thinking is students' ability in understanding problems and finding solutions using varied (divergent) strategies or methods. This can be interpreted that creative thinking is the ability to find possible answers to a problem, where the emphasis lies on the efficiency and diverse answers. Hence, the higher

someone's thinking ability, the more diverse the answers will be.

Students' creative thinking skills were still considered low (Saefudin, 2012; Arifani, 2015). This was due to teacher's lack of attention in developing students' creativity. Teachers were not used to teaching economic problems that have more than one correct answer (Oktariani, 2020).

This situation caused students' insufficient interest in solving economic questions that require a lot of answers and strategies. They only relied on the examples given by the teacher. Therefore, it is important to analyze students' creative thinking skills. The ability to think creatively will emerge if there is an effective learning.

Learning is regarded to be effective if there is an active interaction between teachers and students. However, almost all the countries in the world are still affected by Covid-19 pandemic. Covid-19 is an infectious disease caused by a newly discovered type of Coronavirus. The new

virus and the disease caused by the virus were not known before the outbreak in Wuhan, China began in December 2019. Moreover, Covid-19 is now a pandemic in almost countries in the world. This virus brought all life sectors to standstill which affected education in Indonesia.

To avoid such rapid transmission, students were encouraged to study at home. Therefore, this condition required distance learning. Online learning or distance learning was chosen as one of the solutions for providing education during the Covid-19 pandemic. However, online learning still had many drawbacks compared to conventional learning in class. There were still many obstacles during online learning, namely teachers and students' limited mastery of technology, inadequate facilities and infrastructure, and limited internet access (SyahAji, 2020; Yensy, 2020).

These obstacles resulted on less effective online learning since not all students can access online learning. In addition, the interaction between teachers and students was not optimal. In line with the aforementioned opinion, Kusuma & Hamidah (2020) also stated that distance learning using the online method was still considered not better than conventional or offline learning in Economics subject.

The reason behind this was that people must be able to understand concepts and able to apply economic concepts appropriately to solve an economic problem, while the thinking process could not be obtained by distance learning in studying economics, (Fuady, 2017).

Moreover, there were still many obstacles in implementing online learning resulting in new problems for students to learn effectively. Therefore, it is important to analyze students' creative thinking skills during the Covid-19 pandemic.

Based on the description above, the purpose of this study was to determine students' creative thinking skills in solving

economic problems during the Covid-19 pandemic.

RESEARCH METHOD

This study was qualitative descriptive study with phenomenological approach. It aimed to describe the phenomenon of creative thinking of SMA Pasundan 2 Cianjur students in solving economic problems during the Covid-19 pandemic.

This study was conducted on February 23, 2021 at SMA Pasundan 2 Cianjur. The subjects of the study were purposively selected. They were four students of class X.IIS SMA Pasundan 2 Cianjur who had high cognitive ability and were recommended by the Economics teacher.

The data were collected from two sources, namely primary data sources and secondary data sources. The primary data were in the form of students' creative thinking test result and the result of interviews with students. On the other hand, the secondary data were in the form of field notes, photos and videos as documentation, and the result of Odd Semester Final Assessment.

The main instrument in this study was the researcher himself since the researcher collected the data directly. The test instrument used in this study was students' creative thinking open ended questions. The researcher used the supply and demand material because the material was delivered in the odd semester during grade X and the material was obtained by students using the online learning method.

An interview guideline was prepared as a guideline for conducting interviews with the subjects to acquire data which were not revealed from the creative thinking test answers. The data acquired were validated through triangulation technique by comparing the result of creative thinking test, interview result, and field notes result. The data analysis of this study was carried out in three steps, namely (1) data reduction, (2) data presentation in the form of narration,

and (3) conclusion of students' creative thinking in solving economic problems during the Covid-19 pandemic.

FINDINGS AND DISCUSSION

Creative thinking indicators were used to assist the researcher to measure the creative thinking skill of every student. Researcher used fluency, flexibility, and novelty indicators. The creative thinking indicators are presented in Table 1.

Table 1. Creative Thinking Indicators

No	Creative Thinking Indicators	Student's activities
1	Fluency	a. Writing information contained in the questions b. Answering questions with correct and various answers
2	Flexibility	a. Giving many kinds of solutions b. Using different approaches
3	Novelty	Giving different solution from other individual

Based on the results of the written test, creative thinking, interviews, and field notes, there were two identical answers and they had the same data saturation, namely students with initial C-06 as the first subject and students with initial C-21 as the second subject. The result summary from the analysis of creative thinking for each subject will be explained as follows

1. The first subject (C-06)

Based on the results of the written tests, interview, and field notes, subject C-06 were able to achieve fluency and flexibility indicators. The subject was able to provide various answers and able to use different

approaches or ways in solving a economic problem. However, he was not able to reach the novelty indicator.

The first step followed by C-06 in solving the test was writing the information contained in the question. C-06 answer can be seen in Figure 1 below.

0. → Pembuat Sepatu
Peranaya sebagai pembuat produk yg akan dijual ke kalangan anak-anak sekolah.

→ PLN
Peranaya sebagai penyedia bahan listrik dasar mesin operasional pembuat sepatu bisa berjalan dengan baik sehingga bisa menghasilkan produk yg maksimal.

→ Bank BNI
Peranaya sebagai penyedia jasa untuk proses jual beli dan penilitir modal yg diperlukan dan si pembeli.

→ Petani
Peranaya sebagai penyedia bahan bahan baku.

Figure 1. C-06 Writing the Information from the Question

After C-06 knew the information contained in the questions, he looked for the economic actors. This revealed that the student could understand the meaning of the question. The information contained in the questions needs to be written to make them easier to understand and solve a problem.

Subject C-06 wrote the information contained in the questions indicating that C-06 was able to show fluency indicator. Moreover, he was able to answer problems with correct and various answers.

Furthermore, subject C-06 was capable to design a diagram of the relationship between economic actors from the analysis that had been created in the previous problem. The C-06 subject chose to draw a diagram and it was numbered to indicate every relationship. Subject C-06 was also able to perform flexibility indicator. The result of the subject's work can be seen in Figure 2.

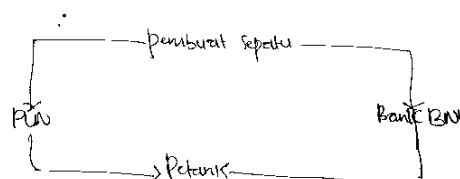


Figure 2. C-06 Writing the Information from the Question

In addition, the subject was also competent to use several approaches to make diagram related to economic actors. However, he used the common ways to solve the problems. This revealed that C-06 subject were not able to reach novelty indicator.

2. The second subject (C-21)

According to the subject's answer sheet, interview result, and field notes, the C-21 subject was able to show fluency and flexibility indicators. The subject could provide a variety of answers and use different ways of solving economic problems. On the one hand, the C-21 subject was not capable to reach the novelty indicator since the method used was still prevalent. The first step that the student took in solving the test problems was noting down the information acquired from questions. The result of the C-21 answer is presented in Figure 3.

- 1) Pengusaha sepatu: Sebagai produsen yang memproduksi sepatu dan sebagai pembeli factor produksi, mengagaji karyawan, dan membayar uang balas jasa terhadap fasilitas yang telah diberikan kepada Bank BNI, PLN dan PDAM
- 2) Mahasiswa dalam negeri: Sebagai konsumen, yang membeli sepatu dan menyerahkan uang sebagai balas jasa
- 3) Mahasiswa luar negeri: Sebagai konsumen, yang membeli sepatu dan menyerahkan uang sebagai balas jasa
- 4) Masyarakat Singapura dan Jepang: Sebagai konsumen, yang melakukan impor terhadap sepatu yang diproduksi oleh pengusaha
- 5) Bank BNI: Memberikan fasilitas berupa pemberian kredit modal kepada pengusaha
- 6) PLN: Memberikan fasilitas berupa listrik yang diperlukan dalam proses produksi sepatu
- 7) PDAM: Memberikan fasilitas air bersih yang diperlukan dalam proses produksi sepatu
- 8) Karyawan: Memberikan faktor tenaga kerja kepada pengusaha

Figure 3. Fluency Indicator in C-21 Answer

After C-21 obtained the information contained in the questions, he looked for economic actors and their roles. This demonstrated that he was able to understand the meaning of the question. Moreover, it was necessary to write down the information contained in the questions to make them easier to understand and solve.

After writing down the information contained in the questions, C-21 was able to show fluency indicator. He was capable of answering problems with correct and various answers. C-21 was able to make 8 economic actors and their respective roles contained in

the questions. C-21 identifies the actors and the roles of economic actors, starting from internal and external factors, namely shoes entrepreneurs as producers, university students, foreign university students and Singaporean and Japanese citizens as consumers, National Bank of Indonesia (*Bank Nasional Indonesia*) as creditor, state-owned electricity company (*Perusahaan Listrik Negara*), and regional water supply company (*Perusahaan Daerah Air Minum*) as production facilitator and all the employees as the production executor.

The result of the C-21 answer can be seen in Figure 3. Furthermore, C-21 determined the relationship diagram between the economic actors from the analysis made in the previous problem. The C-21 chose to diagram and was numbered for each relationship. The C-21 subject was able to show flexibility indicator. The indicator shown in the subject's answer can be seen in Figure 4.

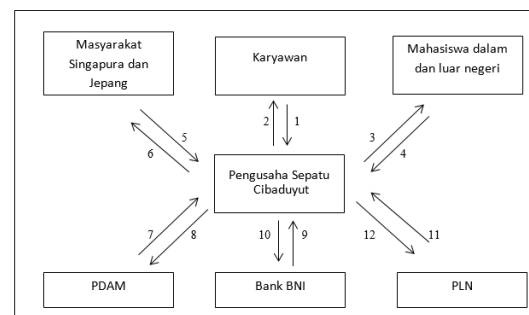


Figure 4. Flexibility Indicator in C-21 Answer

Although the subject was able to write down many economic actors with their roles and make complete and good diagrams, the C-21 subject did not provide various solutions from varied points of view to solve the problems. The subject only solved the problems using familiar methods. This signified that the C-21 subject was not able to show the novelty indicator.

3. High ability students' creative thinking result

The achievement of both subject C-06 and C-21 is presented in Table 3.

Table 3. Students' Creative Thinking Indicator Achievement

Student	Fluency	Flexibility	Novelty
C-06	√	√	-
C-21	√	√	-

Table 3 shows that the indicators achieved are fluency and flexibility. Students' fluency indicator was considered achieved when they were able to understand the information on the questions so that they could design two shapes having the same volume correctly. This indicated that high-ability students were able to administer correct and varied answers to an economic problem. Novianti & Yuniarta (2018) argued that students fulfill the fluency aspect when they are able to understand the meaning of the problems, mention information contained in the problems, and explain the steps in solving the problems. In addition to students being able to write down information in questions, students were also able to explain the steps of solving the problems. This revealed that students were able to meet fluency indicator.

The flexibility indicator is achieved when students are able to produce many ways to solve a problem. C-06 was able to present four economic actors and their roles according to the cases in the problems. On the other hand, subject C-21 was able to write down 8 economic actors and their roles in economic activities respectively by referring to existing cases. This was in line with Munandar in Siswono (2018) who stated that someone's creative thinking ability was considered high if he could show many possible answers to a problem.

The novelty indicator was not found in both subjects. They did not show any novelty indicators on the answer sheet, interview, or field notes. Even though they were able to answer problems in many ways, the methods used were really common. Moreover, they could not exhibit their skill to show a new and different way from other individuals.

The students' inability to present a new and different way from other individuals was supported by several studies conducted by Lisliana, et al (2012); and Novianti and Yuniarta (2018), which revealed that subjects with high abilities could only reach the fluency and flexibility indicators. They still depend on the knowledge they already acquired. Moreover, they had not been able to develop their abilities into something new.

CONCLUSION

Based on the results of the study and the discussion aforementioned before regarding students' creative thinking in solving economic problems during the Covid-19 pandemic, it can be concluded that students with high abilities had level 3 of creative thinking (creative). They were able to meet fluency and flexibility indicators. The fluency indicator was characterized by the students' ability to give various and correct answers. Meanwhile, the flexibility indicator was identified by the students' ability to use different approaches in solving an economic problem and the answers should be correct.

Regarding the preceding conclusions, there are three recommendations proposed: (1) the teacher should improve the facilities and infrastructure to support online learning, (2) the students should further improve their creative thinking skills by practicing more non-routine questions or open ended questions, and (3) other researchers are recommended to develop further studies related to the learning model used during the Covid-19 pandemic to support students' creative thinking skills.

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