



THE INFLUENCE OF PROBLEM BASED LEARNING METHODS ON STUDENTS' CREATIVE THINKING ABILITIES IN ENTREPRENEURSHIP PRACTICE SUBJECTS IN THE COVID-19 ERA

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ABSTRACT	ARTICLE INFO
<p>The aim of this research is to determine differences in students' creative thinking abilities using the Problem Based Learning Method in craft and entrepreneurship subjects. The object of this research is class X SMA Plus Merdeka Soreang students. The method used in this research is a quasi-experimental method or Quasi Experiment. The results of this research show differences in students' creative thinking abilities using the Problem Based Learning Method in craft and entrepreneurship subjects in the Covid-19 Era.</p> <p>© 2021 Kantor Jurnai dan Publikasi UPI</p>	<p>Article History: <i>Submitted/Received 05 Nov 2021</i> <i>First Revised 10 Jan 2022</i> <i>Accepted 12 Feb 2022</i> <i>Available online 18 Mar 2022</i> <i>Publication date 01 Apr 2022</i></p> <hr/> <p>Keyword: <i>Problem Based Learning, Creative Thinking, Covid-19.</i></p>

1. INTRODUCTION

Creativity is one of the pillars of entrepreneurial values that must be possessed by every student at every level. In line with the goals of national education which originate from the cultural roots of the Indonesian nation contained in the National Education System Law, No. 20 of 2003 states that: "National education aims to develop the potential of students to become human beings who believe and are devoted to God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens. answer" (Sukardjo & Komarudin, 2013)

However, Indonesia's creativity is at the lowest level compared to other countries in the world. The 2015 Global Creativity Index (GCI) ranked Indonesia 115th out of 139 countries. Student creativity is still low because learning is currently dominated by teachers and does not give students the freedom to develop their creativity. Learning approaches or strategies are formed according to student needs by considering the needs of different students in order to achieve the desired learning goals and produce different results. One learning method that can improve students' creative thinking abilities during the Covid-19 period is Problem Learning (PBL). The problem based learning method was developed on the basis

of constructivist learning theory so that students can improve thinking skills in the learning process by using real world problems as a background for creative thinking in solving problems and applying learning concepts. Through the problem based learning model, cognitive learning outcomes will increase, such as the ability to know, understand, evaluate and interpret a particular object (Mardiana, Irawati, & Sueb, 2016).

2. METHODS

Research methods are scientific methods used to conduct research to achieve a goal. The method used in this research is the experimental method. Experimental research can be understood as research that looks at the effect of treatment on behavior that emerges as a result of treatment (Alsa 2004). The method used in this research is a quasi-experimental or quasi-experimental method. Quasi Experiment is a type of study that compares the effects of manipulation on subjects (experimental group) and looks at its impact on procedures that are not randomly included by students in the research process (Sugiyono 2013). The design used in the research is "Design Before Testing Before a Group". Arikunto (2010) states that the pre-test will be applied before treatment, after treatment the final post-test will be given.

Hamdani (2002) states that creativity is a skill, namely the skill to imagine or create something new, to construct new ideas by combining, modifying and applying existing ideas. This creativity is very important for students to have because one of the characteristics of talent that is most sought after and most superior in the 21st century is creativity. According to (Guilford 1994) there are four indicators of creativity achievement, namely: 1) Fluency (fluency), fluency is the ability to produce many ideas or ideas. 2) Flexibility, flexibility is the ability to propose various solutions or approaches to problems 3) Originality, originality is the ability to generate ideas in ways that are original, not cliché 4) Elaboration, Elaboration is the ability to describe something in detail.

One way to be successful in teaching and learning activities is to choose the right teaching method. (Hasmianti, Jumadi, and Rachmawaty 2016) One learning method that can improve students' creative thinking abilities during the Covid-19 period is problem-based learning. The problem based learning model was first introduced by Prof. Howard Barrows at McMaster University Canada in the 1970s. Problem based learning is a learning model that can be applied to develop structure at the curriculum level by placing students in an active role as problem solvers who believe in real world problems similar to Savery, (2006). Problem based learning not only improves students' creative thinking abilities, but can also improve student learning outcomes. The Problem Based Learning model has several stages that enable students to improve their creative thinking abilities and academic achievements.

Stage 1: Orient students to the problem. The teacher explains the learning objectives, explains the logistics required, and motivates students to engage in problem solving activities.

Stage 2: Organizing students to learn. The teacher helps students define and organize learning tasks related to the problem.

Stage 3: Guiding individual/group experiences, teachers encourage students to collect appropriate information, carry out experiments to obtain explanations and solve problems.

Stage 4: Developing and presenting the results of the work the teacher helps students in planning and preparing appropriate work such as reports, and helps them to share assignments with their friends.

Stage 5: Analyzing and evaluating the problem solving process the teacher helps students to reflect or evaluate their investigations and the processes they carry out.

3. RESULTS AND DISCUSSION

In this chapter, the data management process using descriptive statistical analysis will be presented. Descriptive analysis is useful for presenting and describing research data, including the amount of data, maximum value,

minimum value, average value and so on.

Table 1. Descriptive Statistical Analysis

	N	Minimum	Maximum	Mean	Deviation
Pre-Test Eksperimen	22	59	75	69.32	4.824
Post-Test Eksperimen	22	78	95	87.00	5.765
Pre-Test Kontrol	22	51	78	66.82	6.773
Post-Test Kontrol	22	67	89	76.23	6.362
Valid N (listwise)	22				

Source: Processed Data (2022)

Table 1 shows that there are 22 students each in the experimental class and control class. In the experimental class, the pretest score for students' creative thinking abilities was obtained with the highest score being 75 and the lowest score being 59 with an average score of 69.32 and a standard deviation of 4.824. then after giving the treatment the posttest questions were given again to the experimental class and the highest score was obtained for students' creative thinking abilities with a score of 95 and the lowest score was 78 with an average score of 87.00 and a standard deviation of 5.765. And in the control class, a pretest score was obtained for students' creative thinking abilities with the highest score being 78 and the lowest score being 51 with an average score of 66.82 and a standard deviation of 6.773. then after giving the treatment the posttest questions were given again to the control class and the highest score was obtained for students' creative thinking abilities with a score of 89 and the lowest score was 67 with an average score of 76.23 and a standard deviation of 6.362.

3.1 The Influence of the Problem Based Learning Method on Students' Creative Thinking Ability

Based on the results of descriptive statistical analysis and parametric statistical analysis tests carried out in the experimental class, it shows that the Sig. (2-tailed) is $0.000 < 0.05$, so it can be concluded that there is a difference in the average of students' creative thinking abilities for the experimental class pretest and

the experimental class posttest using the Problem Based Learning learning method. These differences can be

This can be seen from the average creative thinking ability between using the two methods below.

It was found that the group of students who used the problem based learning method had a higher average than the group of students who used the discovery learning method. This means that the problem based learning method is more effective than the discovery learning method in improving students' creative thinking abilities. It is a natural thing when there is an increase after the learning process has been completed. Both classes that use problem based learning methods and classes that use discovery learning methods both experience an increase in creative thinking abilities. This can be seen from the increase in the average value of students' creative thinking abilities. Before the learning activity, the average score of the experimental class (class X IPS 2) was 69.32 and the average score of the control class (class X IPS 1) was 66.82. Both classes experienced an increase in creative thinking abilities because both classes received the same learning time allocation, namely 10 hours of lessons (5 meetings).

4. CONCLUSION

Based on the discussion of the research results, the following conclusions can be drawn:

1. Creativity is one of the pillars of entrepreneurial values that must be possessed and needs to be internalized in every student during the learning process in class. The use of the problem based learning model in the learning process makes students become more active participants, including developing brave, creative attitudes and developing a more enjoyable learning atmosphere. Apart from that, students can show the application of creativity in everyday life, so students can gain new and enjoyable experiences, so that they can improve students' creative thinking abilities as a source for developing aspects of personal development.

2. Students' creative thinking abilities after implementing the problem based learning method, by looking at the results of the posttest scores in the experimental class, it can be seen that there are differences in students' creative thinking abilities. The experimental class obtained a posttest score with the highest score for students' creative thinking abilities with a score of 95 and the lowest score of 78 with an average score of 87.00. So based on the results of this research, it can be concluded that there are differences in students' creative thinking abilities using the Problem Based Learning Method in craft and entrepreneurship subjects in the Covid-19 Era.

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