



THE EFFECTIVENESS OF THE ECOPRINT-BASED PANCASILA STUDENT PROFILE STRENGTHENING (P5) PROJECT IN DEVELOPING STUDENT CREATIVITY

Alpinah Damayanti¹, Imamudin², Munawaroh³

^{1,2,3} Universitas Bina Bangsa

Email: damayantialfina248@gmail.com, imamudin@binabangsa.ac.id,
munawarohmarwan@gmail.com

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Abstract

This study aims to determine the effectiveness of ecoprint-based P5 to develop the creativity of 5th grade students in economic activity material at SDN Banjarsari 02. This study is a quantitative study with a pre-experimental method using a one group pretest-posttest design. The population in this study was all 5B classes of SDN Banjarsari 02, totaling 41 with a sample of only 30 students, data collection techniques used were questionnaires, tests and documentation, sampling techniques used were purposive sampling techniques. Based on the results of statistical analysis of students' creativity skills, the pretest average was 50.17 and the posttest result was 71.83 and an increase after treatment was carried out was as large as 21%, while the results of the normality test for the pretest value of 0.006 were said to be abnormal because they were at a value <0.05 , while the posttest value was 0.090 which means the posttest value was said to be normal. The results of the hypothesis test show that the value obtained is significant $0.000 < 0.05$ which indicates that there is a significant difference between the initial and final variables, based on the results of the N gain test, showing the development of student creativity in the pre-experiment of 0.4393 including the moderate category, this category shows that the P5 ecoprint-based learning shows an increase and development of students' creativity skills which is quite effective.

Abstract

This research aims to determine the effectiveness of ecoprint-based P5 to develop creativity in class 5 students regarding economic activities at SDN Banjarsari 02. This research is a quantitative research with a pre-experimental method using a one group pretest-posttest design. The population in this study was all 5B classes of SDN Banjarsari 02, totaling 41, with a sample of only 30 students. The data collection techniques used were questionnaires, tests and documentation, the sampling technique was carried out using purposive sampling techniques. Based on the results of statistical analysis of students' pretest creativity skills with an average of 50.17 and posttest results of 71.83, there was an increase after treatment, namely 21%, while the normality test results, the pretest value was 0.006, was said to be abnormal because it was <0.05 , while the posttest value was 0.090, which means the posttest value was said to be normal. The results of the hypothesis test show that the value obtained is significant, $0.000 < 0.05$, which shows that there is a significant difference between the initial variable and the final variable. Based on the results of the Ngain test, it shows that the development of student creativity in the pre-experiment was 0.4393, including the medium

category. This category shows that P5 ecoprint-based learning shows quite effective improvement and development of student creativity.

INTRODUCTION

The 21st century is a century of rapid development of knowledge and technology. The challenges of the 21st century are marked by the era of globalization that makes the world seem borderless (*a borderless world*), this is what gives rise to international comparisons including in the world of education (Amin, 2017). The increasingly advanced era and technology of 21st century skills that are more dependent on technology make many people not see the abilities they have, these creativity skills sometimes many people do not realize that they have good creativity, this is a challenge for students, teachers, parents and schools to build student enthusiasm in improving their creativity and 4c skills at school.

Creativity enables people to improve their quality of life. According to Munandar (in Hasanah 2021), it is very important to develop the creativity of elementary school students from an early age because at this age children are in the golden age of growth of imagination and creativity.

In today's era of development, the well-being and prosperity of society and the nation depend on creative input in the form of new ideas, new discoveries, and new technologies. The urgency of creative abilities is unavoidable amidst increasingly fierce global competition. Creative thinking skills will increase the potential of students, one of which is the ability to solve the problems they face. This is in accordance with the goals of national education. In the National Education System Law Number 20 of 2003, Article 3 concerning the goals of national education aims to address these learning problems. (Siti Kholidatur Rodiyah & Badriah, 2024).

The importance of creative abilities is also stated in Government Regulation Number 17 of 2010 concerning the Management and Implementation of

Education, which states that the aim of implementing primary and secondary education is to build a foundation for the development of students' potential to become knowledgeable, capable, critical, creative and innovative human beings (Purwaningrum, 2016) .

However, the facts show that students' creative thinking skills are still low. This is evidenced by the results of Indonesian students who participated in the Trends in International Mathematics and Science Study (TIMSS) in 1999, 2003, 2007, 2011, 2015 and the Program for International Student Assessment (PISA) in 2002, 2003, 2006, 2009, 2012, 2015, and 2018. The results of each participation did not show much change. According to the TIMSS results, the level of creative thinking skills of Indonesian students is relatively low because only 2% of Indonesian students can solve advanced category questions that require creative thinking problem-solving skills (Hasanah, 2021) .

One of the programs that is considered capable of increasing student creativity is the Pancasila Student Profile Strengthening Project (P5) program. P5 is one way to achieve the Pancasila Student profile which provides students with the opportunity to "experience knowledge" as a character building process, as well as the opportunity to learn from the surrounding environment.

According to Mery et al. (2022), the Pancasila student profile is the ideal profile to be realized and developed in Indonesian students with the support of all parties through six competencies as key dimensions. These six dimensions are faith, devotion to God Almighty, and noble character; global diversity; mutual cooperation; independence; and critical and creative reasoning.

The benefits and drawbacks of the government-created program to improve one of the 21st-century skills, namely *creativity*, are discussed. Therefore, this research is important to conduct so that we know the development of this program in improving the quality of thinking, responsibility, collaboration, creativity, and

communication of children, both in terms of project creation and in learning and social interaction. Therefore, the purpose of This study aims to determine the effectiveness of implementing *ecoprint- based P5* to develop the creativity of fifth grade students in economic activities at SDN Banjarsari 02.

RESEARCH METHODS

This study uses a quantitative method with a pre-experimental type, the population of this study is all 5th grade students at SDN Banjarsari 02 Serang City, the 2024/2025 academic year consisting of 2 classes with a total of 81 students, to determine the research sample, purposive sampling is used, namely the sample is selected based on the researcher's criteria so that one class 5B is selected to be a sample of 41 with the researcher's criteria and only 30 students are the actual sample and as an experimental class as well as a control class because this type of research uses a pre-experiment with a one group pretest posttest design research design, this design only has three stages, namely pretest, treatment and posttest using only one class and without a control class, data is obtained through a creative thinking ability test on the material of economic activity science, and a student creativity questionnaire after the P5 Ecoprint treatment, test questions and questionnaires are tested and validated first to experts so that they meet the criteria for valid and reliable results, then the data is analyzed using a hypothesis test using non-parametric, and NGain.

RESULTS AND DISCUSSION

Results

This study aims to determine the effectiveness of the application of *ecoprint-based P5 to develop student creativity, the discussion of the results of this study produces differences in pretest and posttest scores as well as analysis of NGain scores on the results of the effectiveness of P5 on student creativity and analysis of the*

Wilcoxon non-parametric test to determine the significance of the difference between pretest and posttest scores.

1. P5 Program

The Pancasila Student Profile is the embodiment of a lifelong Indonesian student who is competent, has character, and behaves in accordance with the values of Pancasila (Widiyani, in Farhana & Cholimah, 2024). The profile of a Pancasila student with character aims to realize the vision of education reform in Indonesia (Wahyudi in Farhana & Cholimah, 2024).

The results of the effectiveness of P5 in this study are that the researcher stated that the application of P5 using ecoprint learning is capable and quite effective in developing students' creativity, especially by linking material on economic activities. This statement is supported by an increase in value after the treatment, along with data from tests conducted by researchers using SPSS 25.

25. Description of pretest and posttest results

The test was administered to determine the effectiveness of P5 in developing student creativity, and was conducted before and after the implementation of P5 with ecoprint activities. The following data describes the results of the pretest and posttest.

Table 1 Descriptive Results of Pretest and Posttest Results

Descriptive Statistics					
	N	Minimu m	Maximu m	Mean	Standard Deviation
pretest	30	35	85	50.17	12,964
post-test	30	50	95	71.83	12,140
Valid N (listwise)	30				

Based on the results of descriptive analysis with the help of SPSS, it is known that the average pretest score of students' creativity was 50 with a maximum score of 85 and a minimum of 35. After being given treatment in the form of the P5 ecoprint activity program, the average posttest increased to 71 with the highest score of 95 and the lowest of 50. This shows an increase in students' creativity abilities after participating in the P5 program.

After obtaining the average score of the creative thinking ability test, the analysis continued with testing the research hypothesis. Previously, the researcher conducted prerequisite tests, namely normality and homogeneity tests. The normality test used SPSS version 25 with the Shapiro-Wilk test on the creative thinking ability of class VB. The results are shown in Table 2.

Table 2 Wilcoxon test

		Ranks		
		N	Mean Rank	Sum of Ranks
posttest - pretest	Negative Ranks	0 ^a	.00	.00
	Positive Ranks	30 ^b	15.50	465.00
	Ties	0 ^c		
	Total	30		

Test Statistics ^a	
	posttest - pretest
Z	-4.801 ^b
Asymp. Sig. (2-tailed)	.000
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

Based on the results of the Wilcoxon output table, the sig value is 0.000, which means it is smaller than $\alpha 0.05$. Thus, H_0 it is rejected and H_1 accepted .

H_0 = **There was no difference in** student creativity before and after being given the ecoprinting treatment at P5, **which was declared rejected.**

H_1 = **There is a difference** in the results of student creativity before and after being given the treatment of making ecoprints in the P5 activity, **which is declared accepted.**

After the creative thinking ability data was found to be normally distributed using the Wicoxon test, the data analysis continued by testing the validity of

the hypothesis using the t-test statistic. The results of the two-average hypothesis test using SPSS Version 25 can be seen in Table 3.

Table 4 N Gain value test results

Descriptive Statistics					
	N	Minimu m	Maximu m	Mean	Standard Deviation
NGain_score	30	.13	.70	.4393	.18255
NGain_percent	30	12.50	70.00	43.9281	18.25463
Valid N (listwise)	30				

(data processing source SPSS 25)

Based on the N-Gain test in the table above, it can be concluded that the average value of NGain_score 0.4393 is included in the (moderate) category because it is between 0.30 – 0.70, while the average value of N Gain_percent of 0.43.9281 determines that the project activities implemented are able to provide a fairly effective increase in the creativity of fifth grade students in understanding economic activity material.

2. Ecoprint making

According to Irainingsih (in Astuti, Erna Zuni, 2025) , the ecoprint technique is one way of processing white cloth by utilizing various plants that can produce natural colors. Ecoprint is not only a medium for expressing creativity, but also supports environmental conservation through the use of environmentally friendly materials. Ecoprint projects in elementary education have various benefits, including: Cultivating concern for the environment, stimulating fine motor skills, fostering creativity and imagination, instilling the values of collaboration and cooperation between students.



Figure 1: The researcher demonstrates how to print leaves onto cloth.

Before students discussed how the ideas would be expressed in making the ecoprint, the researcher first gave an example of how to place the leaves on the cloth and how to make their discussion run smoothly.

3. Student creativity before implementing P5

Creative thinking is a new way of seeing and doing things, encompassing four aspects: fluency, flexibility, originality, and elaboration. Creativity implies the power of creativity. Creativity is a student's ability to generate new ideas, methods, or models to solve problems (Astuti in Setiawan, 2021) . In this study, student creativity is a variable that measures the extent to which students can develop ideas and innovations in the learning process using ecoprint making to determine the level of student creativity, the results obtained from teacher interviews regarding student creativity are that to make products still need guidance and there are some students who can, and there are some students who still ask questions and have difficulty working together, some students can work together and some just want to be alone, the way teachers develop student creativity is through making products at home by videoing but still being monitored by the teacher, according to the teacher, class 5B students have never heard of and have never tried making ecoprints, therefore the researcher immediately practices and explains and even directly exemplifies how to make

ecoprints, which will then be made directly by students, and if students are divided into groups, usually students are able to work together in teams but there are also those who want to do it alone, the level of student creativity in this P5 activity is still relatively low, indicated by monotonous work results and lack of initiative and student exploration in collaboration and elaboration.

Discussion

The researcher conducted an interview first with the class teacher to find out the initial conditions Before implementing P5 learning based on ecoprint, the researcher also observed the initial conditions of learning in the class based on the results of interviews with class teachers, it is known that P5 is still taught in schools and learning is still actively carried out, but in terms of making ecoprints, both teachers and students have never done it to be used as learning to increase student creativity, according to the informant, students will be active if learning is directly in practice because learning is usually only conventional which makes students inactive in learning. So it can be concluded from the results of the researcher's interview with the teacher that P5 is quite effective if in the context of making products whose materials are easy to find but difficult to understand for students who do not like making products and working together in teams, teachers and students also do not know about ecoprint

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never heard of and have never tried making ecoprints, therefore the researcher immediately practiced and explained and even directly exemplified how to make ecoprints, which will then be made directly by the students.

Ecoprint is a coloring technique that uses natural dyes. "Ecoprint is the process of transferring leaf and flower motif patterns (shapes) onto a prepared fabric surface by removing the wax layer and dirt so that the leaf/flower color can adhere optimally" (AR Hikmah in Lukito et al., 2024) . Therefore, the variables in this study are ecoprint-based P5, P5 is a project-based learning model that focuses on the application of ecoprint techniques as a medium and support for student learning, ecoprint is the art of printing patterns on fabric using natural materials such as leaves and flowers, P5 aims to develop students' skills in art, as well as help increase students' awareness of environmental concerns and student activeness.

The results of this study are supported by research conducted by (Widiansyah et al. 2024) in their research entitled "analysis of the effectiveness of P5 in encouraging active participation of students in a high school environment" this study states that the results of the study indicate that the P5 model effectively increases student motivation and participation in learning. Around 72% of students reported increased interest and engagement through problem-based projects, such as analyzing social change and designing solutions to community problems. These projects also encourage critical thinking skills, collaboration, and practical abilities that are relevant to real life, the study has similarities with this study, namely both examining the same topic and the same methods and sampling. (Asni, Tri Ayu Lestari Natsir, Novita Ashari, 2024) . about the Effectiveness of the Pancasila Student Profile Strengthening Project (P5) in increasing creativity in children aged 4-5 years at Dharma Wanita Kadidi Kindergarten, Sidrap Regency. The results of the study indicate that there is an influence on the effectiveness of the Pancasila Student Profile Strengthening

Project (P5) in increasing the creativity of children aged 4-5 years at Dharma Wanita Kindergarten, Kadidi, Sidrap Regency. The study also has similarities with this study, namely both researching the effectiveness of P5 and both using quantitative methods and using a pre-experimental approach, while the difference lies in the population tested because the previous study used a population of Kindergarten students, the difference between the two schools.

CONCLUSION

Based on the results of the research that has been conducted with a measurement of 30 respondent tests, it can be concluded that the student creativity score before the implementation of the ecoprint activity (pretest) with the lowest value of 35, the highest value of 85, an average of 50.17, and a standard deviation of 12,694. while the lowest value after (posttest) the P5 activity was 50, the highest value of 95, an average of 71.83, and a standard deviation of 12,140. based on the category conversion adjustment, it can be seen that the student's creativity before implementing the P5 ecoprint was in the poor category of 24%. While the student's creativity after implementing the P5 ecoprint was in the good category of 35%. After obtaining the data on the student's creativity scores before and after the implementation of the ecoprint activity, it was continued with hypothesis testing. It can be concluded that the implementation of ecoprint-based P5 is quite effective in developing student creativity, especially in high grades with the average posttest score being greater than the pretest, and the results of this study are also supported by research from (Widiansyah et al., 2024) in their study entitled "analysis of the effectiveness of P5 in encouraging active participation of students in the high school environment" this study states that The results of the study show that the P5 model effectively increases student motivation and participation in learning. Around 72% of students reported increased interest and engagement through problem-based projects, such as analyzing social change and designing solutions to community problems. These projects also encourage critical thinking

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