



Improving Critical and Creative Thinking Skills Through the Pancasila Student Profile Strengthening Project (P5) At SMAN 1 Kertosono

Yudha Kusumaningrum^{1*} and Harmanto Harmanto¹

¹ State University of Surabaya, Faculty of Social and Political Sciences, Pancasila and Citizenship Education, Indonesia

Yudhakusumaningrum.20032@mhs.unesa.ac.id

Abstract. Indonesia occupies a low literacy position, according to the Global Creative Index in 2015 revealing that Indonesia's level of creativity is still relatively low. Education has a very important role, looking at the independent curriculum, there is a project known as P5 which has the goal of developing soft skills and overcoming Indonesia's lagging position. This study uses a qualitative approach with a Case Study research design. The object of this research is SMAN 1 Kertosono. The informants taken were the P5 coordinator, supervisor, examiner teacher, representatives of class X students and XI students. Data collection techniques are in the form of observations, interviews with P5 implementing informants, and documentation. Data analysis techniques are data collection, data reduction, data presentation, and decision-making. The results of this research show that the implementation of P5 with 3 themes taken shows that it is able to improve critical and creative thinking skills.

Keywords: Critical thinking skills, creative thinking skills, Pancasila Student Profile Strengthening Project (P5)

1 Introduction

Based on the Programme for International Student Assessment (PISA) survey released by the Organization for Economic Co-operation and Development (OECD) in 2019, Indonesia ranks 62nd out of 70 countries or the bottom 10 countries that have low literacy positions. Then in research by the Ministry of Communication and Informatics in 2021 and UNESCO 2022, it was stated that the interest in reading among the people of Indonesia was only 0.001%, which can be interpreted as only 1 person out of 1,000 people who like to read. In line with the results of the 2021 National Assessment (AN) stated that Indonesia is experiencing a literacy emergency, because 1 in 2 students have not reached the minimum literacy competence. Based on the data above, it can be concluded that the level of critical thinking of students is also in a low position. The low literacy of students also causes a decline in students' critical thinking. Then in the Global Innovation Index Report in 2023 released by the World Intellectual Property Organization (WIPO) noted that.

Indonesia currently needs the next generation who can think critically and have high creativity. In line with the statement that creative thinking is indispensable to know students' understanding [1]. It can be concluded that it is very important to have

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cooperation from critical and creative thinking in the progress of the development of children and the nation. According to [2] "Progress in a nation is very related to the role of youth, how productive it is in the progress of its nation". This means that the youth are a movement for change for the better for the nation, so it is very important that the youth have the ability to think critically and creatively from now on.

Through critical thinking, a person is able to think rationally and logically in receiving information which is very important to solve a problem[3]. The indicator that researchers use to see critical thinking skills [4] is when students have the ability to analyze, have the ability to conclude data based on facts.

Furthermore, the explanation of creative thinking is included in advanced thinking, because in creative thinking it is invited to find solutions that others have not used or improved ideas from others. Agreeing with Susanti, (2022:155) creative thinking includes combining parts to form something original, filtering, and refining ideas to find possibilities, building new theories and objects, and acting on intuition. In line with Susanto's opinion [6] who revealed that the ability to think creatively is the determinant of a nation's excellence.

In line with what Baker et al. 2001 [7] (in Handoko, 2017:86) stated that creativity is needed for students to increase their capacity and stimulate the improvement of their ability to excel. Indicators used to measure students' creative thinking abilities according to [8]. When students:

1. Able to think fluently and
2. Students are able to think originally.

The curriculum is very important for the success of education, so the government must adapt to the changing times [9]. According to Nadiem Makarim as the Minister of Education, "The independent curriculum is present as an innovation in creating a fun and ideal learning environment" [9]. According to Inayati 2022 [9] states that this independent curriculum combines literacy skills, knowledge, abilities, and attitudes related to the use of technology.

This independent curriculum is project-based learning, this aims to develop soft skills according to the Pancasila Student Profile, based on students' abilities [10]. This program is used for students to observe and think about solutions to the problems they faced[2]. This project program is known as the Pancasila Student Profile Strengthening Project or P5, through the Project Based Learning approach in its implementation [11].

The P5 program provides opportunities for students to 'experience knowledge' as the main process of strengthening students' character, so that while learning from the social environment around them (Ministry of Education and Culture. 2022). The P5 program provides students with the opportunity to take action, where in taking real action they learn from the real environment around them. So that it can grow a level of confidence in students in their work, besides that it can increase their self-potential and know the interests of students' talents from certain fields [12].

According to Avianty & Tobing, (2022: 83) states that the learning of the project-based P5 program is not focused on the final result but on the process of how students solve problems which ultimately results in creativity and critical thinking and cooperation. The education unit is the main actor in terms of the development of the P5 program[13].

Based on a preliminary study conducted on February 20, 2024, the results of an interview with the curriculum driving teacher, Mrs. Cholifah, S.Pd. and supported by

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the decision regarding the Driving School Program (PSP) on April 30, 2021, which revealed that SMAN 1 Kertosono is the first batch of schools to implement P5 and become one of the Driving School Program Schools (PSP) in Nganjuk Regency.

SMAN 1 Kertosono has carried out P5 3 times and 7 P5 project themes, namely Sustainable Lifestyle, Local Wisdom, Bhinneka Tunggal Ika, Build the Soul and Body, Voice of Democracy, Engineering and Technology to build the Republic of Indonesia, and Entrepreneurship have been implemented. Then in the distribution of project themes evenly from all classes and grade levels at SMAN 1 Kertosono. The initial process until the completion of P5 at SMAN 1 Kertosono provides students with the freedom to explore their thoughts with the implementation of the last 2 hours in class X, then the last 4 hours on Wednesday for class XI, and the last 4 hours for class XII in completing the P5 program.

The implementation of the P5 program is from class X semester 1-2, then class XI semester 1-2 and class XII for semester 1. The level for class X gets 3 project themes which for 4 months alternate themes for 3 times. The XI grade level gets 2 themes, where every 6 months alternates themes, the steering wheel for grade XII gets 2 themes in a period of 3 months alternately.

Based on the results of previous research by Anton & Trisoni (2022), it shows that the P5 program produces students with 4C skills, namely critical thinking, creativity, communication, and collaboration (cooperation). The 4Cs contribute to the implementation of P5 in the independent curriculum. However, the study has not revealed how the implementation of the P5 program improves students' critical and creative thinking (Anton & Trisoni, 2022:523-533). Therefore, the researcher is interested in describing how the P5 Program to improve students' critical and creative thinking skills at SMAN 1 Kertosono.

2 Method

This study uses a qualitative approach with a Case Study research design. The selection of the qualitative approach is based on the focus of research that is carried out to explore the research object directly, namely SMAN 1 Kertosono by exploring a subject in the object that will be studied directly, namely SMAN 1 Kertosono students so that they can answer the researcher's problem formulation clearly.

The focus of this study is how the P5 program at SMAN 1 Kertosono to improve students' critical and creative thinking skills. Seeing the condition where Indonesia has not been fully said to be high in the context of the level of ability to think critically and creatively. Indicators of creative thinking according to constructivistic learning theory are building their knowledge, finding the meaning of their own learning, exploring what they get, and perfecting new concepts and ideas with existing knowledge Djameludin, 2019 (da-lam Firdaus, 2023:32)[14].

The informants in this study are the key informants, namely teachers and students. The selected in-formants are Curriculum Drivers, Coordinators of the P5 program, P5 group supervisors, P5 program examiners, representatives of class X students and class XI students. The reason for choosing an informant is to understand the flow of implementing the P5 program at SMAN 1 Kertosono, where they are able to collaborate or cooperate well between teachers and students in the implementation of the P5

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program at SMAN 1 Kerto-sono. Then based on the school that has responsibility for the P5 program, then willing to answer questions about the P5 program implemented at SMAN 1 Kertosono.

The location of the research is the research location used in conducting the research, namely SMAN 1 Kertosono, Jalan Panglima Sudirman, Kepuh, Kertosono District, Nganjuk Regency, East Java 64315. The determination of the location of the research was based on the researcher's understanding and preliminary study through interviews with teachers driving the curriculum of SMAN 1 Kertosono, SMAN 1 Kerto-sono was the first batch of schools to implement P5 and became one of the schools of the Driving School Program (PSP).

The research is carried out starting from the stage of submitting the title of the proposal to the thesis hearing, in going through all these stages, it is estimated that the time needed is 6 months, starting from January 2024 to July 2024.

There are 3 data collection techniques, namely observation, interview, and documentation. Observations were made at SMAN 1 Kertosono on the implementation of the P5 program carried out by students. Observing how the flow of implementing the P5 program in the classroom, which is carried out by teachers as facilitators, coaches to examiners in the implementation of the P5 program. In this study, the informants taken by the researcher were the Curriculum Waka, representatives of the P5 group supervisors, representatives of the P5 program examiners, representatives of class X students and class XI students, where the answers to the information were written in the results of the interview notes. The documentation in this study is the Circular Letter of the Minister of Education and Culture No. 262/M/2022 on the amendment of the Ministry of Education and Culture No. 56/M/2022 concerning the implementation of the Learning Curriculum, the provisions for the implementation of the P5 Program or the P5 Module of SMAN 1 Kertosono, the assessment instrument used to test the P5 implementation process, Student work as a form of product of the process of the P5 SMAN 1 Kertosono program.

The steps to analyze the data in this study are as follows:

1. This research searches, records, and collects everything objectively and as it is in accordance with the results of observations, interviews, and documents in the field according to what was done at SMAN 1 Kertosono regarding the implementation of the P5 Program.
2. Data reduction is an analytical form that sharpens, selects, discards, discards, and compiles data in a way in which the final conclusion can be described and verified. The reduced data provides a clear picture and makes it easier for researchers to collect data later
3. Presenting data that has been reduced into a report systematically in the form of descriptions, based on the data obtained about the P5 Program conducted by SMAN 1 Kertosono. The presentation of data in this stage aims to make it easier to understand the focus of the research being researched.
4. The conclusion in qualitative research gives rise to new findings in the form of a clear description of the problem formulation. Conclusions are obtained when the researcher presents data about the P5 program systematically which

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has been summarized according to the answers of the researcher's formulation and provides understanding for the researcher.

3 Results and Discussion

Overview of the P5 Program at SMAN 1 Kertosono. The purpose of P5 is designed so that students can learn to conduct investigations, solve problems and make decisions. The implementation of the P5 Program also prepares for the P5 module, where this P5 module is a document that contains the objectives, steps to implement P5, learning media, assessments needed for the implementation of the P5 program in schools. The seven themes set by the Ministry of Education and Culture are Sustainable Lifestyle, Local Wisdom, Bhinneka Tunggal Ika, Build the Soul of the Body, Voice of Democracy, Innovation and Technology, Entrepreneurship (Ministry of Education and Culture. 2022).

The implementation of P5 at SMAN 1 Kertosono is divided as follows:

No	Class	Theme from P5	Sub theme of P5	Implementation
1.	X-1 until X-4	Sustainable lifestyle	Garden creation	Implementation every day every last 2 hours after school
2.	X-5 until X-7	Local Wisdom	Flush	
3.	X-8 until X-11	Entrepreneurship	Pakcoy planting	
4.	XI-1 until XI-6	Voice of Democracy	Election of Student Council President (Election)	Implementation for all class XI on Wednesday for the last 4 hours before leaving school
5.	XI-7 until XI-11	Engineering and technology	Making laundry soap from used cooking oil	
6.	XII-1 until XII-6	Wake up your body and soul	Music Creation	Implementation on Thursday every last 4 hours before leaving school
7.	XII-7 until XII-11	Bhinneka Tunggal Ika	Short film making	

The division for X is divided into 3 waves, where the School Curriculum Driver explained that class X has 11 classes where each class will get the 3 themes and at the

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specified time there are alternate themes. The implementation of P5 for class XI has 2 themes, namely the theme of engineering and technology. The implementation for class XI itself alternates for every 6 months, with the aim that students can experience the process of solving 7 themes that have been determined by the Ministry of Education and Culture. The last theme division was carried out in grade XII where it got 2 themes, namely the theme Build the Soul and Body and the theme Bhinneka Tunggal Ika In the implementation of the only one in semester 1, and the time was quite short. The research taken was in class X with the theme of Entrepreneurship, then class XI with 2 themes, for class XII it was not researched because class XII had already carried out a farewell and was not in school.

The entire implementation of P5 at SMAN 1 Kertosono in each theme for classes X, XI, and XII is accompanied by a supervisor or facilitator. The selection of supervisors or facilitators is adjusted to the teacher who is teaching in the class, with the aim of making it easier for students to discuss. Then at the end of each P5 implementation there is an exhibition or work title where students show their work to the entire community of SMAN 1 Kertosono and will be tested by the examiner teacher related to the ability to think critically and creatively of students.

The P5 program with the theme of entrepreneurship is carried out by class X, one of the themes is entrepreneurship. The theme of Entrepreneurship that was carried out was with the sub-theme of planting pakcoy mustard hydroponic plants. The results of the observation show that the ability to think critically appears when:

1. Socialization activities, students are able to have discussions with teachers and their groups about the obstacles and process of planting pakcoy.
2. During the preparation of the material, students with groups who divide themselves who play the role of bringing the material. Students are able to interact with their group friends regarding the ability to bring the specified materials.
3. The process of planting pakcoy seedlings to the harvest process of pakcoy mustard, where students are able to respond to environmental developments, regarding obstacles during nursery, pakcoy seedlings that are ready to be transplanted in rockwool, to pakcoy mustard plants that are ready to harvest and safe for consumption.
4. In the work title activity where critical thinking skills appear, students are able to ask and answer questions with the examiner about the results of the report.

Then the ability to think creatively comes in the moment:

1. During the harvest process, where students are able to have a high curiosity about the development of the environment including the development of attractive packing and good promotion strategies.

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2. At the time of the work, students are able to create works that are more special and different from other people's works, such as decorating tenants, and making videos.

The implementation of P5 on the theme of Voice of Democracy was carried out by students in grades XI-1 to XI-6. Ariyanto as the team coordinator explained that the vote for democracy has a sub-theme, namely the election of the student council president (pilkasis). The implementation of the election has several stages, namely introduction, contextualization, action, and reflection. Supported by the results of observations in March 2024 which show that students' critical thinking abilities appear when:

1. Socialization so that students are able to interact with the environment and students are able to ask and discuss about the process of Electoral Democracy and Democracy in Indonesia.
2. During the meeting with the student council, where students are able to discuss and ask questions with the working group and supervisor about the process of selection, voting, and obstacles in the democracy of the election of the student council president.
3. During the oration in the field. At the time of the oration, students have the right to ask questions and respond to problems in the environment, from the results of student interaction they can describe the problem so that students are able to determine their assessment in terms of exchanging ideas.
4. During voting and vote counting, where students are able to ask questions and discuss with their groups about the voting process and what must be done as preparation.
5. In the action activity in the voice on social media, students are able to respond to developments regarding democracy in Indonesia, students are able to determine assessments.
6. In the title activity, students' critical thinking skills appear, students are able to respond to the environment through questions and answers with examiners, where the results of the interaction are used by students to improve students' final projects.

The ability to think creatively arises when:

1. Voting, students are able to have a high curiosity to see how the development of good voting arrangements develops, so that from interaction with their groups, students are able to create attractive banner designs, make good ballot boxes and arrange polling stations that make it easier for the entire community of SMAN 1 Kertosono in the election process.
2. Educational action activities on social media, where students are able to see the development of the environment regarding democracy, so that students are able to design good posters and express opinions about democracy with works that are different from other groups.

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3. In the work title activity, where students are able to produce works that are different from other groups, and are able to be responsible for the works displayed.

The P5 program is the theme of engineering and technology with the sub-theme of making laundry soap from household waste, namely used cooking oil, which is carried out by students in grades XI-1 to XI-6. In the process, students become the main actors and the role of the supervisor as a facilitator. The implementation of P5 on the theme of engineering and technology at SMAN 1 Kertosono was able to improve critical thinking skills in students during the following activities:

1. Socialization, where students' critical thinking skills emerge, because students are able to interact socially about the obstacles and procedures of making laundry soap.
2. The process of making soap, the ability to think critically appears, students are able to respond to social interactions regarding soap making,

Then to think creatively in students, it is shown in the following activities:

Selection of color, form of laundry soap, and laundry soap packing process. Students are able to have a high curiosity about the shape and color of soap that is common.

The implementation of P5 SMAN 1 Kertosono is in accordance with the Constructivistic learning theory proposed by Vygotsky with the principles of social learning, zone of proximal development (ZPD), cognitive internship period, and mediated learning. Activities that show scaffolding or little help from the supervisor. The results of the study also show that the implementation of P5 at SMAN 1 Kertosono is able to improve students' critical and creative thinking skills, and in the implementation produces students who develop as expected.

4 Conclusion

The conclusions obtained by the researcher from the results of the research on the implementation of the Pancasila Student Profile Project (P5) as well as the explanation of the constructivistic learning theory put forward by Vygotsky in improving the ability of students to think critically and creatively at SMAN 1 Kertosono are as follows:

1. Implementation of P5 Entrepreneurship theme

Pelaksanaan P5 dalam tema kewirausahaan dengan subtema penanaman tanaman hidroponik yakni sawi pakcoy yang dilaksanakan oleh kelas X-8 sampai X-11 menunjukkan pada prosesnya semua dilakukan oleh siswa dan kelompoknya walaupun terdapat kendala namun siswa mampu menyelesaikannya. Pelaksanaan P5 tema kewirausahaan juga mampu meningkatkan kemampuan berpikir kritis dan kreatif. Pelaksanaan dari proses penanaman sawi pakcoy menghasilkan

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perkembangan siswa yang sesuai dengan harapan sekolah dan pelaksanaan program P5 dengan tema kewirausahaan sesuai dengan teori belajar konstruktivistik yang dikemukakan oleh Vygotsky dengan sedikit bantuan untuk menyelesaikan penanaman sawi pakcoy.

2. Implementation of P5 with the theme Voice of Democracy

The P5 program carried out by classes XI-7 to XI-11 is the theme of democratic vote with the subtheme of the election of student council president (pilkasis). The implementation of the democratic voice theme also emphasizes the participation of all students. The implementation of democratic voices shows the ability to think critically and creatively in students. However, in the implementation of obstacles that often occur in making reports, students are able to solve them. The implementation of P5 with democratic votes produces students who develop according to expectations and in connection with Vygotsky's constructivist theory in accordance with the implementation where the supervisor monitors and helps students a little in completing the P5 theme of democratic votes with the subtheme of the election of the student council president (pilkasis).

3. Implementation of P5 on the theme of Engineering and technology

The P5 program with the theme of engineering and technology sub-theme of making laundry soap from household waste, namely used cooking oil, which is used by students in grades XI-1 to XI-6. In the process, students become the main actors and the role of the supervisor as a facilitator. The practice of making laundry soap can produce critical and creative thinking skills in students. It is shown in socialization activities, the distribution of materials, the process of making soap, the completion of reports, the packing process, sales. Then from the implementation of P5 engineering and technology in accordance with the Constructivist learning theory. Vygotsky's Constructivist learning theory explains that humans construct their new knowledge through their learning process with their environment. Students who learn with their environment with the help of a supervisor as a facilitator in completing soap making. Student development from the assessment of the examiner teacher said that the student progressed as expected.

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