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Implementation P5 The Formation of Innovative Attitudes in SMP Al Mahira IIBS Malang

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Abstract:
During the Covid-19 pandemic in Indonesia, online learning faced limitations, requiring additional support for effective teaching. Online learning can have an impact along with rapid changes in the learning process, both for teachers and students which causes a decline in learning, so that changes in the teaching and learning process are needed by implementing a prototype curriculum. The government has changed the teaching and learning process by implementing the independent curriculum which has been legalized by the Ministry of Education, Culture, Research, and Technology. In the implementation of the independent curriculum, students are required to create or carry out a certain project in order to train skills in a certain field. this study aims to find out and analyze the implementation of P5 activities at SMP Al Mahira IIBS Malang as P5 in schools and analyze the impact of its implementation on students. Therefore, the researcher discusses the analysis of P5 activities in P5 followed by SMP Al Mahira IIBS Malang. This study uses a qualitative method with a descriptive approach. The research sample was 9th grade students from SMP Al Mahira IIBS Malang. The data collection technique used was from interviews regarding P5 activities as an implementation of the independent curriculum with sources, namely 1 homeroom teacher, having 27-29 students, and having 12 adequate classes. P5 activities aim to improve students' skills in producing various projects.

Keyword: P5 Activities, Independent Curriculum, Student Skills

INTRODUCTION

During the Covid-19 pandemic in Indonesia, online learning faced limitations, requiring additional support for effective teaching (Arifudin, 2021). Online learning can have an impact along with rapid changes in the learning process, both for teachers and students which causes a decline in learning, so that changes in the teaching and learning process are needed by implementing a prototype curriculum that has been inaugurated by the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) in

the 2022-2023 academic year (Supryady, 2022); (Astiningtyas, 2018). Efforts to improve the effectiveness of the Independent Curriculum learning can run well, namely first aligning views or perceptions to create one vision by thinking critically, collaborating between teachers and students (Darmawan, 2021).

The curriculum is implemented slowly, after going through many evaluations of the problems that occur, so that new progress begins to have an impact on teachers, related agencies in learning, and students (Subandrio, 2021). In the implementation of the independent curriculum, students are required to create or carry out a specific project in order to train skills in a particular field. In these project activities, students can also apply and develop knowledge, skills, and self-potential through various fields (Wijaya et al., 2023). The project in this independent curriculum is one of the creations of the implementation of P5 activities.

Project-Based Learning (PjBL) has become a major focus in curriculum efforts in Indonesia, especially through the implementation of the Merdeka Reform Curriculum. This approach places students at the center of learning, encouraging them to be active, creative, and able to solve real problems. In 2021, the Curriculum Prototype was implemented in 2,500 educational units that are members of the Sekolah Penggerak programs. One of the main characteristics of this curriculum is the implementation of PjBL to support character development in accordance with the P5. Schools are given the freedom to design learning projects that are relevant to their environment. For example, SMP Negeri 30 Bengkulu Selatan has implemented the "Voice of Democracy" and "Bhinneka Tunggal Ika" projects to instill democratic and diversity values in students (BPMP NTT, 2021).

The Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) also collaborates with industry, the business world, and the world of work to strengthen PjBL. The goal is to deepen learning that is in line with the needs of the industrial world, so that it can be applied and developed by vocational colleges (Indriani, 2022). Although effective in increasing student activeness and focus, the implementation of PjBL in Junior High Schools (SMP) faces challenges such as lack of teacher understanding, limited facilities, and lack of support from stakeholders. Recommended strategies include continuous teacher training, provision of adequate facilities, partnerships with industry, and development of comprehensive assessment instruments (Zein, 2024; Lestari and Brahma, 2024).

PjBL offers a holistic approach that provides students with opportunities to apply theoretical knowledge in real contexts. This method increases student engagement, encourages collaboration, and develops practical skills that are useful in real life. Overall, project-based learning has become a key element in curriculum reform in Indonesia, with the aim of producing graduates who are competent, creative, and ready to face real-world challenges. P5 activity is a project-based activity in strengthening the P5 (Wijaya et al., 2023). P5 activities can be carried out through 3 stages, namely stages based on basic concepts that have been taught, to stages based on context or application of skills (Wijaya et al., 2024). In P5 activities, students are given the freedom to learn formally, a more flexible learning structure at school can adjust the division of time according to interests, so that more active learning activities occur for students who are directly involved in the surrounding environment with the aim of strengthening and improving various competencies possessed by students in the P5 (Rachmawati et al., 2022).

The implementation of P5 activities is the application of learning in terms of basic concepts and skills in the process of adjusting to students' learning interests, students' readiness to get good and maximum learning outcomes (Marlina, 2019). Learning in the

independent curriculum must be planned well and optimally, namely implementing planning regarding the learning: (1) conducting a study of the curriculum used so that it can be adjusted to the strengths and weaknesses of students; (2) implementing school planning and strategies that can adjust the curriculum and learning methods that can be used to meet student needs; (3) explaining the form of support from teachers in meeting student needs; (4) evaluating and assessing the achievement of school plans in the short and long term as an improvement in the quality of education (Marlina, 2019).

In the current situation, improving the quality of education is a top priority for the government, especially educational institutions, in equalizing education to the community as a whole. According to Lestari et al., (2025), schools that are of high quality can meet existing quality standards. High quality schools include adequate graduate competencies, education and teaching staff standards, curriculum standards, and others. Improving the quality of education is also not limited to academic aspects, including developing social awareness and skills, strengthening moral principles, and mastery of technology literacy (Hasanah, 2021).

Efforts to improve the quality of education, for Junior High Schools (SMP), are certainly an important transition period for students in forming their personality, academic abilities, and social skills that are used for the next level of education in social life in the community with the implementation of P5 activities at the school (Dirgantara et al., 2025). The implementation of P5 activities can foster students' self-confidence in innovating, creating, and working to improve students' potential, which can be seen from each student's talents and interests related to a particular field of interest. In the implementation of P5, teachers play an important role as facilitators or provide direction to students in their field of interest.

P5 activities with the implementation of project-based learning, because in P5 activities students can improve their skills to build students' interest in teaching and learning. P5 activities can make students more active in discussing with friends about projects that are shown by collaborating between students, and thinking critically in developing student ideas. The purpose of P5 is to improve students' skills in producing projects that are adjusted to P5 (P5). P5 is part of the Ministry of Education, Culture, Research and Technology's policy at elementary school to college levels as an effort to realize Pancasila students (Aditia et al., 2021).

The Minister of Education, Culture, Research and Technology Nadiem Anwar Makarim has inaugurated 6 indicators in P5 activities. Six indicators in P5, such as having noble character, being independent, thinking critically, being creative, working together, and being globally diverse (Rusnaini et al., 2021). The curriculum change also has an impact on teachers as educators who must be able to implement the new curriculum comprehensively (Mawati et al., 2023). Teachers must also understand the new curriculum with its components if they want to implement it with satisfactory results (Rahman, 2021). Curriculum changes require socialization for teachers who are implementing it in the field (Tanjung, 2022).

The new curriculum must be able to make all teachers understand the new curriculum so that the implementation of the new curriculum is successful (Ardiawan, 2020). According to Ulfah, 2019, the best learning for students in schools has a tremendous impact on the development of student potential in the independent curriculum education process (Arifudin, 2021). According to Arifudin, 2020, teachers act as educators who provide the best meaningful education for students (Fikriyah, 2022). In the P5 activity activities are implemented as an effort to control the learning crisis caused by the Covid-19 pandemic (Syuzairi, 2024). After conducting studies and research, the P5

activities carried out as an implementation of the P5 activity are able to provide more active and meaningful learning experiences and processes to students. In its implementation, students are required to collaborate by discussing openly with friends in making an item or related to a project in training students in solving a problem to get good results.

This study aims to address these issues by creating and encouraging teachers to use digital learning resources for science education and integrating unique Android-based learning resources into science education with an emphasis on basic scientific understanding (Utami et al., 2021). To increase students' interest and involvement in understanding basic science concepts, Android technology-based learning media can make learning more dynamic, enliven learning through discussion, problem solving, or case study, and contribute to more interesting learning (Alfiyah et al., 2024). In addition, this study suggests that all parties involved in the education sector map the need to use digital learning resources for Junior High School (SMP) science learning.

SMP Al Mahira IIBS Malang is committed to improving the quality of education through a supportive learning environment, especially aspects of comfort, creativity, focus on developing potential, and others. Optimization in training programs and habits is one of the main programs that is often implemented with the aim of improving the competence of teachers and students in implementing learning. On the other hand, every day students teach the application of everyday values, such as discipline, cooperation, and having a responsible attitude. Thus, this study aims to find out and analyze the implementation of P5 activities at SMP Al Mahira IIBS Malang as P5 in schools and analyze the impact of its implementation on students. Therefore, the researcher discusses the analysis of P5 activities in P5 followed by SMP Al Mahira IIBS Malang.

RESEARCH METHOD

This research uses a case study method with a qualitative descriptive approach and quantitative data analysis. Research surveys involve individuals answering several questions through observations, interviews, questionnaires, and tests (Rokhim et al., 2020; Sugiyono, 2013). This research aims to develop of P5 activities by collecting data through observation, interviews, questionnaires, and literature studies. This study uses a qualitative method with a descriptive approach. The research sample was 9th grade students from SMP Al Mahira IIBS Malang.

The data collection technique used was from interviews regarding P5 activities as an implementation of the independent curriculum with sources, namely 1 homeroom teacher, having 27-29 students, and having 12 adequate classes (Sulistyati et al., 2021). Data analysis in this study first used ongoing data collection and data collection in the field. Data analysis in this study went through several stages of study, such as (1) selecting data, researchers were able to summarize data from observations, interviews, and documentation with the aim of obtaining some basic data; (2) data presentation, compiling data obtained when the basic data can support so that the researcher's data is easy to understand; (3) drawing conclusions, namely researchers concluded the data compiled to verify whether the data could be understood by the reader.

The instruments used in this study were interview sheets consisting of 8 questions to homeroom teachers regarding P5 activities at SMP Al Mahira IIBS Malang and 5 questions to students regarding science product manufacturing projects, such as hygiene products and cosmetics (Wijaya et al., 2024). Furthermore, the results of the assessment conducted by each grade 9 tutor and teacher are given to assess student activity.

Therefore, researchers to find student interest to improve the quality of education in Indonesia.

RESULTS AND DISCUSSION

The researcher's data was collected through interviews, observations, and documentation studies. The next stage was the data was analyzed descriptively regarding the P5 activities at SMP Al Mahira IIBS Malang. The criteria for the informants in this study were homeroom teachers who taught class 9K by implementing the independent curriculum and students in class 9A-9L with a total of 339 students as participants in the P5 activities (Pancasila Learning Profile Strengthening Project). The results of the interviews conducted by the researcher with students and representative teachers of class 9 are as follows:

Table 1. Results of Interview with Resource Person 1: Homeroom Teacher of Class 9K

No.	Question	Answer
1	What is the background of the implementation of the P5 activity at SMP Al Mahira IIBS Malang?	Competency study of the Principals in Malang City. In Malang City, State and Private Schools also apply the criteria organized by the Ministry of Education, Culture, Research and Technology. Schools are advised to provide additional teachers in carrying out training organized by the Ministry of Education and Culture.
2	The most significant difference between learning using the 2013 curriculum and learning the P5 activity?	The number of students' burdens on the P5 activity tends to be less theoretical learning compared to the implementation of the 2013 curriculum. The P5 activity tends to train critical thinking in finding several supporting journal references. Students are also able to master the references recommended for use in training skills.
3	What learning methods are used in the 9th grade learning process?	Face to face or offline learning methods by implementing guidance to students for monitoring.
4	What is the reason for carrying out P5 activities?	P5 activities are a series of activities carried out during the independence curriculum in strengthening the P5 project in training student skills.
5	What themes are used in this P5 activity?	The themes used in this P5 activity consist of: 1. Science (Natural Sciences) 2. Social (Social Sciences)
6	What are the project outputs expected in the P5 activity?	The project output results displayed in this P5 activity are: 1. Poster 2. PowerPoint (PPT) 3. Product/Prototype
7	What are the series of activities that take place in the P5 activity?	This series of P5 activities includes: 1. Conceptual activities such as explaining the theme that will be used as the research title, students are given literature such as journals/articles in looking at several formulations for making cosmetic and hygiene products. 2. Skill activities, such as student activities in creating a product innovation that is developed based on the theme used, for

No.	Question	Answer
		example science related to products/prototypes for entrepreneurship (Wijaya et al., 2024).
8	Are P5 activities carried out every semester?	This P5 activity is carried out every semester like last year. There are obstacles that occur such as students who are not responsible for the project assignments given or there are some students who are less enthusiastic in completing the P5 project.

Source. Interview/online news, 2025

Based on the interview with the homeroom teacher of class 9K at SMP Al Mahira IIBS Malang, the implementation of the P5 (Project for Strengthening the Profile of Pancasila Students) activity is rooted in the competency framework promoted by the Ministry of Education, Culture, Research, and Technology. Unlike the 2013 curriculum, P5 emphasizes less theoretical learning and instead focuses on fostering students' critical thinking and practical skills through projects based on science and social themes. The learning approach is conducted face-to-face with direct student monitoring. Outputs from P5 include posters, PowerPoint presentations, and product prototypes, reflecting students' application of knowledge and creativity. The activities are divided into conceptual and skill-based phases, enabling students to engage in research and product development. Although the program is conducted each semester, challenges such as student disengagement and lack of responsibility in project completion persist, highlighting the need for improved student motivation and accountability in project-based learning.

Table 2. Interview Results with Resource Person 2: Class 9K Students

No.	Question	Answer
1	How many themes must each student implement in the P5 activity?	Each student must implement at least 1 theme with a draw given to each class
2	Is this P5 activity carried out individually or in groups?	P5 activities are carried out per group with each group consisting of 7-8 members
3	What themes are in class 9K that are implemented in the P5 activity?	The themes used in class 9K include: 1. Hygiene Products 2. Cosmetic Products 3. Perfume Products
4	What project activities have been implemented on the theme?	The titles of the project activities in the research are: 1. Formulation and Evaluation of Liquid Soap Preparations from Lerak Fruit 2. Formulation and Evaluation of Liquid Soap Preparations from Mint Leaves 3. Formulation and Evaluation of Lip Scrub Preparations from Vanilla Extract 4. Formulation and Evaluation of Perfume Preparations from Vanilla Extract
5	What are the outputs of this P5 project?	The outputs in this P5 project include 1. PowerPoint Presentation (PPT) 2. Product/Prototype Infographics

Source. Interview/online news, 2025

The interview with a class 9K student at SMP Al Mahira IIBS Malang reveals that the P5 activity requires each student to engage with at least one theme assigned to their class through a random drawing system. The activities are conducted in groups of 7–8 members, fostering collaboration and teamwork. The themes selected for class 9K focus on real-world applications related to hygiene, cosmetics, and perfumes, encouraging students to innovate within familiar and practical contexts. Project titles indicate a scientific approach to product formulation, such as the use of natural ingredients like lerak fruit, mint leaves, and vanilla extract for creating soap, lip scrub, and perfume. The outputs of these projects include PowerPoint presentations and product infographics, reflecting students' ability to communicate their research and development process effectively, while also demonstrating applied knowledge and creativity in product-based learning.

Table 3. Percentage of Students' Critical Thinking and Problem-Solving Skills Achievement in P5 Activities

No	Statement	Percentage of Success (%)			
		BB	MB	BSH	SB
1	Identifying, clarifying, and analyzing relevant information and prioritizing certain ideas	0%	30%	45%	25%
2	Explain the assumptions used, realize the tendencies and consequences of bias in their thinking, and try to consider different perspectives	0%	30%	51%	19%
3	Explore and express their thoughts and/or feelings in the form of work and/or actions, and evaluate them and consider their impact on others	0%	37%	42%	21%
4	Generate alternative solutions by adapting various ideas and feedback to deal with situations and problems	0%	27%	56%	17%

Source: Author, 2025

SMP Al Mahira IIBS Malang is a driving school in trying to have driving teachers in making project-based learning or P5 a strategy to excel in terms of academics and non-academically. These driving teachers were formed when there was an independent curriculum implemented by the Ministry of Education, Culture, Research and Technology as a new program in P5 (Faiz et al., 2022). Learning in the independent curriculum increases the potential of students who have a creative and innovative spirit in creating unique product ideas (Mukhlisa et al., 2021). Learning in the independent curriculum is held to strive to fulfill the needs of students who are able to direct their interests and talents and increase interest in learning in students based on projects. In the implementation of the independent curriculum at SMP Al Mahira IIBS Malang in science learning in making a cleaning product, cosmetics, or other products.

In the learning process, teachers teach using face-to-face or offline learning models. As for the learning process, it uses a combination of internet-based technology, such as looking for references to articles or journals that support the achievement of educational goals optimally (Driscoll, 2002). The implementation of independent curriculum learning at SMP Al Mahira IIBS Malang in implementing P5 activities (P5 Strengthening Project) can be adjusted to 2 themes between science and social (Simangunsong et al., 2020). Both themes are regulations from the Ministry of Education and Culture which are developed in accordance with priority issues in line with the 2020-

2035 Education roadmap on the topic of SDGs (Sustainable Development Goals) and other relevant documents (Wijayanti et al., 2022); (Wijaya et al., 2024).

Figure 1. Students Practicing Science Product-Making during P5 Activities at SMP Al Mahira IIBS Malang
Source: Author, 2025

The P5 is implemented with intracurricular and extracurricular learning that includes achievements in forming character and skills needed in daily activities to instill identity in each student. School culture is one of the environmental conditions in forming student character, school guidelines, interaction patterns and communication that have been implemented by the school. Intracurricular focuses on learning process activities in the classroom or room, while extracurricular is a learning activity outside of academic learning in improving student potential and talents (Rahayuningsih, 2022).

P5 activities aim to shape the character of students in having the opportunity to develop learning potential from the surrounding environment to be skilled in innovation, creativity, and critical thinking (Saraswati et al., 2022). This project inspires students to contribute to the impact of their surroundings (Susanti et al., 2021). SMP Al Mahira IIBS Malang implements the independent curriculum implemented in grade IX, while in grades VII and VIII it still uses the K13 curriculum. The independent curriculum is a curriculum that focuses on learning that focuses on students' interests in exploring basic concepts to be applied in skills to strengthen competencies with sufficient time to be implemented. In addition, the independent curriculum is also an important part of recovering learning from the Covid-19 crisis (Nurani et al., 2022).

The implementation of information and communication technology in schools is a school policy in adapting technological developments in the digital era and various policies in several schools in mastering technology (Ariefah, 2023). However, the policy of SMP Al Mahira IIBS Malang in providing teachers with an understanding of technology, the availability of facilities in accessing technology and information, and the use of technology by teachers in carrying out learning practices. Over time, every day there will be an evaluation in the learning carried out for students. The following is an explanation of the implementation of the independent curriculum based on technology and information in schools as follows:

1. Teacher Understanding of Information Technology

Most teachers at SMP Al Mahira IIBS Malang have demonstrated a solid understanding of information technology, as evidenced by their ability to access various

scientific articles and research-based journals to support learning in the context of the independent curriculum. Interviews with several teachers reveal that they view information technology as a tool that significantly assists in the distribution and acquisition of learning materials. This aligns with their practices of utilizing digital platforms to find references, research findings, and other learning aids that enhance classroom instruction. The integration of technology in teaching has allowed teachers to create a more enriched and resourceful learning environment, which aligns with the goals of the independent curriculum to foster student-centered learning and critical thinking. Teachers are not only consumers of information but also facilitators who guide students in navigating the vast digital resources available to them.

In addition to teachers, students at SMP Al Mahira IIBS Malang are also equipped with basic digital literacy, particularly in accessing relevant references to support their learning. Through the use of information technology, students are encouraged to explore creative ideas and become active participants in their education. Information technology, as defined by (Nanda & Suyanto, 2019), plays a critical role in helping individuals process and manage accurate information, ultimately making educational tasks more efficient. Interviews with both students and teachers confirm the regular use of technological devices in academic activities within the school environment. This includes accessing digital libraries, using educational apps, and exploring online databases, which altogether reflect a positive culture of ICT adoption. The ability of both teachers and students to effectively engage with digital tools indicates a strong foundation in information and communication technology (ICT), positioning SMP Al Mahira IIBS Malang as a forward-thinking institution that embraces technological advancement in education (Halim et al., 2024).

2. Availability of Information Technology Facilities

SMP Al Mahira IIBS Malang has made significant efforts in providing infrastructure that supports both teacher and student learning activities. The availability of educational facilities and infrastructure is a crucial factor in ensuring the success of learning programs, especially those involving face-to-face interactions, as emphasized by (Kholidah et al., 2022). At this school, various forms of service infrastructure are available and considered adequate, including WiFi connectivity throughout the campus, digital learning platforms, laptops, desktop computers, and LCD projectors installed in every classroom. In addition, the school is equipped with laboratories that support practical learning, email accounts for students and teachers, HDMI and LAN cables to support multimedia use, and the active use of social media to enhance communication and dissemination of information. These facilities enable teachers to be more creative in planning and implementing learning in accordance with the independent curriculum, which emphasizes flexibility, innovation, and student engagement.

In the context of project-based learning, especially through the P5 (Project Penguatan Profil Pelajar Pancasila) program, SMP Al Mahira IIBS Malang continues to optimize its existing infrastructure. Teachers and students utilize laptops and WiFi to access educational content, conduct research, and collaborate on projects that develop critical thinking and problem-solving skills. The use of school facilities is seen as an integral part of the learning process, supporting the effective implementation of educational programs. The presence of reliable technological tools and digital resources not only facilitates the teaching and learning process but also positively influences student engagement and academic outcomes. Thus, the infrastructure at SMP Al Mahira

IIBS Malang plays a vital role in ensuring that learning activities run smoothly and that the objectives of the independent curriculum and P5 projects are successfully achieved.

3. Teachers Utilize Information Technology in Student Learning

Teachers at SMP Al Mahira IIBS Malang actively use information and communication technology (ICT) to support their teaching, particularly in searching for relevant learning materials and resources. The implementation of ICT in the educational context aims to familiarize students with the use of technology in their daily lives, as highlighted by Yunita and Sholeh (2021). Through the integration of digital tools in the classroom, students are encouraged to become more independent and adaptive in accessing various forms of information. However, before introducing students to technology-based learning, teachers at SMP Al Mahira IIBS Malang carry out a thorough analysis of teaching materials. This process involves tailoring the content and method of instruction to suit the specific characteristics and needs of the students, ensuring that the integration of ICT is effective and aligned with their learning capacities.

Understanding student characteristics is a fundamental step for teachers in applying ICT wisely and appropriately in the learning process. By recognizing the diversity in learning styles, cognitive abilities, and interests, teachers can design more engaging and meaningful lessons that maximize the benefits of technology. Furthermore, teachers conduct evaluations to gain deeper insights into students' learning behaviors and needs. These assessments help educators to provide constructive feedback, guide students in improving their learning strategies, and encourage them to actively seek out knowledge beyond the classroom. According to Alfina and Hasanah (2024), this approach not only promotes self-directed learning but also equips students with the necessary digital literacy skills to navigate an increasingly information-rich world. As a result, the strategic implementation of ICT at SMP Al Mahira IIBS Malang supports the development of student autonomy and a more dynamic educational environment.

CONCLUSION

SMP Al Mahira IIBS Malang has made significant progress in implementing project-based learning through the P5 activities under the independent curriculum. The program encourages students to think critically, work collaboratively, and develop innovative solutions to real-world problems. However, challenges such as student disengagement and inconsistent responsibility remain. These findings underline the importance of continuous improvement in student motivation and engagement to fully realize the potential of the independent curriculum and P5 activities.

To enhance the implementation and success of the P5 project at SMP Al Mahira IIBS Malang, it is essential to focus on increasing student motivation and accountability, especially through better monitoring and evaluation systems. Strengthening teamwork and ensuring equal participation among group members can be achieved by providing training on collaboration and using individual progress reports. Additionally, improving technological infrastructure and offering continuous teacher training on project-based learning methods will further support effective implementation.

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DP contributed as the conceptor and drafter of the article; CA contributed as the data analyst and interpreter; NL drafted the manuscript; DD, WA, and IH contributed to data collection and revised the article critically. All authors agree to be accountable for all aspects of this work.

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