

Implementation of Kurikulum Merdeka Development in Facing the Industrial Revolution Era 4.0 at SMKN 6 Padang

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Abstract: The project to strengthen the Pancasila Student Profile (P5) in the Merdeka Curriculum is an important thing to be carried out in each education unit because it guides educators in building the character and competencies of students in schools. Furthermore, it is hoped that Indonesian students are students whose lives are competent, characterized, and behave according to the values of Pancasila. SMKN 6 Padang is one of the high schools implementing Kurikulum Merdeka and a Sekolah Pusat Unggulan. This paper aims to analyze the implementation of P5 activities at SMKN 6 Padang and reveal problems in the performance of P5. The research method uses a qualitative approach to descriptive research. The data collection techniques used are observation, interviews, and documentation. This P5 activity begins with identifying problems facilitated by the teacher so that the activity starts to have an orientation to the understanding of concepts and resolve the issue according to the theme. The P5 theme selected activities are sustainable lifestyles, local wisdom, and entrepreneurship. Generally, the implementation of P5 in SMKN 6 Padang has been going well, and it has reflected the character and behavior of the values of Pancasila.


1 INTRODUCTION


The industrial revolution 4.0 indirectly changed the paradigm of education in the 21st century (Humairah, 2022). The shift in 21st-century learning at this time is not solely on the concept of teaching methods, but the perspective on learning itself is far more essential. Education is one of the crucial foundations in the progress of a nation in order to form quality human resources so that they can keep up with increasingly advanced times (Bebasari et al., 2022). Education is a driving sector in culture in producing creative and innovative things. In Indonesia, education is highly prioritized and considered a fundamental matter. It follows the opening of the 1945 Constitution in the fourth paragraph, which contains the goal of


educating the nation's life, which is the state's responsibility.


The era of independent learning can be interpreted as a period in which teachers and students have independence or freedom of thought, free from the shackles of educational burdens to develop their potential to achieve educational goals. (Widiyono and Millati, 2021). The essence of freedom of thought, according to Nadiem, must be passed by teachers before they carry out the learning process. As the main component in education, the teacher has the flexibility and freedom to translate. By understanding the curriculum that has been set, the teacher can answer the needs of students during the learning process. (Nurlaili et al., 2021). Through independent learning, teachers are expected to be able to develop

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their potential such as planning interesting, fun, and meaningful learning (Setiawan *et al.*, 2022).

The curriculum is the life of education. Education in Indonesia always experiences curriculum changes from time to time. Changes in the curriculum certainly cannot be avoided and passed but must always be lived and adapted to the needs and principles (Sadewa, 2022). The national education system is required to make renewal in a planned, directed continually, and continuous manner so that it can guarantee equitable education, improved quality as well as the relevance and efficiency of education management to prepare students to face challenges according to the demands of life changes both local, national, to global (Faiz and Kurniawaty, 2022).

In Indonesia, one of the educational development processes is curriculum development (Bisri, 2020; Safaruddin, 2020). The curriculum in Indonesia has been developed since independence, and changes occur from time to time. The curriculum is the life of the course of education (Huda, 2017). Through the curriculum, it is expected that education success will be created. Changes in the curriculum cannot be avoided due to the lack of proper education in Indonesia and the influence of sociocultural systems, politics, economics, and science and technology (Pahlawan *et al.*, 2022). To achieve success in education, in addition to a good curriculum, all components in education must be bound to each other (Abi Hamid *et al.*, 2020; Safaruddin, 2020)

In 2021 the government, through the Ministry of Education and Culture, the government launched the prototype curriculum, which was further enhanced in 2022 and became the Merdeka curriculum. In its journey, the implementation of the Merdeka Curriculum (IKM) was carried out in stages, not simultaneously and not massively. The government provides opportunities for schools to conduct IKM learning independently. IKM Mandiri is made in three categories: Mandiri Learning, Change, and Mandiri Sharing.

One of the schools that uses the Merdeka Learning curriculum is SMK Negeri 6 Padang, also a Sekolah Pusat Keunggulan. According to the results of interviews with deputy school principals in the field of curriculum and several learning committee teachers at SMKN 6 Padang, "In Merdeka curriculum, there is a term called KOSP (Education Unit Operational Curriculum) which is the basis of learning at school, teaching modules and student profile project Pancasila."

In the Merdeka Learning Curriculum, learning strives to lead to the formation of the Pancasila Student Profile following its vision and mission,

which emphasizes the formation of Pancasila students. Based on the Minister of Education and Culture Regulation No. 22 of 2020 concerning the Strategic Plan of the Ministry of Education and Culture of 2020-2024, Pancasila Students are the embodiment of Indonesian students as a lifelong student who has global competence and behaves Pancasila values, with six main characteristics: Believers, fear God and have a noble character, global diversity, work together, independent, critical reasoning, and creative.

Before using the Merdeka Learning Curriculum, SMK Negeri 6 Padang had implemented character education for its students. For example, by inviting students always to maintain the cleanliness of the school, not damage plants, and discipline in time. Education developers use Pancasila Student Profiles as the leading destination (Kemendikbud Ristek, 2021B). According to the Deputy Principal of the Curriculum Section of SMKN 6 Padang, there are still several obstacles to applying to Kurikulum Merdeka in this school.

The demand for independent learning certainly has various obstacles. One of the factors that causes this to happen is educational technology. Educational technology is a scientific field that aims to facilitate the learning process by using various learning resources included in the appropriate technology to form an efficient and practical education. This is illustrated in the definition of educational technology according to AECT 2004, which contains that learning technology is research and ethical practice in facilitating learning and can improve performance based on appropriate technological resources. (Setiawan and Fauzan, 2022). Educational technology is intended to make learning more effective, efficient, numerous, comprehensive, faster, and meaningful for the lives of those who learn (Setiawan and Fauzan, 2022). Thus, technological advances are expected to allow teachers to apply various technologies in education.

Based on the background of the problem above, which is the topic of discussion in this study, the writer feels the need to analyze the development of the Kurikulum Merdeka in Facing the Industrial Revolution Era 4.0 SMKN 6 Padang.

2 METHODOLOGY

This research is a qualitative approach to descriptive research. Data collection techniques used are in-depth interviews, observation, and documentation. Data analysis is done through data reduction, presentation,

and conclusion. This study's data sources are the Principal, Deputy Principal of the Curriculum Section, and SMK N 6 Padang teachers.

3 RESEARCH RESULTS AND DISCUSSION

3.1 Planning for Learning Projects Strengthening Pancasila Student Profiles at SMKN 6 Padang

SMKN 6 Padang is one of the high school-level Sekolah Pusat Unggulan in West Sumatra. SMKN 6 Padang, in 2022, has implemented Kurikulum Merdeka for the first and second years. SMKN 6 Padang has been to deliver that students can face the era of the industrial revolution 4.0.

Based on the results of observations and interviews, SMKN 6 Padang has developed its curriculum according to the school context and according to needs. It indicates that the complexity level of SMKN 6 Padang in adopting the curriculum is already in the medium category. Meanwhile, the SMKN 6 Padang education unit is already in the advanced stage category and is recommended to mentor early and developing schools. It is because SMKN 6 Padang has met the criteria, namely, all teachers have carried out project learning, the project is cross-disciplinary, the system already exists, and there is partner involvement in its implementation.

Before the learning project strengthened the Pancasila Student Profile, SMKN 6 Padang formed the Learning Committee Team. Based on interviews with the Principal of SMKN 6 Padang, the Learning Committee Team designed and planned the learning project for Pancasila Student Profile. This team holds workshops, training, and assessments with other teachers so that the learning will be carried out according to the same goals and expectations.

Some of the activities of the learning committee team that have been carried out are identifying the stages of readiness in schools in running projects, determining the dimensions and themes of profile projects, designing the time project time allocation, compiling the profile project module, determining learning objectives and developing topics, activity flow and assessment of profile projects. Based on interviews with the Head of the Project Planning Team, Strengthening the Pancasila Student Profile said that the development of ideas and project modules according to the local context, needs, and

interests of students involves students' opinions and ideas.

In identifying the stages of the readiness of the education unit in carrying out the project strengthening the Pancasila student profile, including at the developing stage, because in SMKN 6 Padang already has a system to carry out the project-based learning, some teachers already understand the project-based learning and SMKN 6 Padang already involved outside parties to help wrong one project activity.

Through the Pancasila Student Profile, it is expected that students, especially in high school, can develop their character values so that good behavior is formed and inherent in students. There are six key competencies: faith, devotion to God Almighty and noble character, global diversity, cooperation, creativity, and critical and independent. The six dimensions are interrelated and also strengthen.

The Project to Strengthen Pancasila Student Profile (P5), allocated around 30 total JP per year, is carried out flexibly in terms of content and implementation time. P5 activities must refer to the achievements of the Pancasila student profile according to the phase of the students and do not have to be linked to the learning outcomes of the subjects. As for the implementation time, it can be carried out by allocating project study hours from all subjects, and the total implementation time for each project does not have to be the same.

Educators need to develop these six dimensions as a whole in SMK. In addition, to help a more thorough understanding of the dimensions of the Pancasila student profile. Then the meaning of each dimension is explained, and its development is sequenced according to the psychological and cognitive development stages of school-age children and adolescents. Furthermore, each dimension of the Pancasila student profile consists of several elements, and some elements are explained more concretely into sub-elements. It is contained in the Decree of the Head of the Educational Curriculum Standards and Assessment Agency (BSKAP) Number 09/H/KR/2022 concerning Profile Dimensions, Elements, and Subelements Pancasila students. Furthermore, the Internalization Process of the 6 Dimensions above is carried out in the Project learning activities.

Implementing Pancasila Student Profile Projects at SMKN 6 Padang was choosing the theme of Work, building body and soul, and local wisdom.

3.2 Implementation of Learning Projects Strengthening Pancasila Profiles in the Era of the Industrial Revolution 4.0

The Pancasila Student Profile Strengthening Project (P5), which was developed at SMKN 6 Padang in the 2022/2023 school year, is devoted to the mandatory theme, namely Work and the chosen theme Wake Up Your Mind and Body and Local Wisdom and in the even semester, P5 learning is given with the theme of choosing a Sustainable Lifestyle.

3.2.1 Work

The employment theme project aims to explore and develop the potential of students in order to understand the scope and characteristics of work according to their program of expertise. The general objective of the employment-themed project is for students to understand the scope and characteristics of the world of work according to their expertise program. The relevance of the main learning activities from P5 learning is implementing Project Based Learning by involving students in work and social projects. The competencies acquired by students can be implemented in solving surrounding problems by maximizing the function of the Student Practice Room (Teaching Factory).

The specific goals of each project can be seen in each sub-theme. Through this project, students are expected to develop four dimensions of Pancasila student profiles: faith and piety to God Almighty and noble character, independence, mutual cooperation, critical reasoning, and creativity.

An example of implementing a work project is students making cakes as a P5 project.



Figure 1: Students Making Cakes.

The process of making cakes in the P5 project with the theme of work already uses automated machines so that students, when they enter the industry, are no longer surprised by the technology used. It is in supporting the 4.0 industrial revolution

that has been carried out at SMKN 6 Padang. Apart from that, marketing has also used technology, be it social media, technology, and so on, that support the industrial era 4.0.

3.2.2 Wake up Body and Soul

The theme of choice 1 given to students of SMKN 6 Padang is Wake Up Their Mind and Body. This theme has a project theme, "Prevent Cyber Bullying." This theme creates learning opportunities for students to shape themselves according to the Pancasila Student Profile. Aiming to train physical and mental health on an ongoing basis, this project with an active and learner-centered learning method is expected to be a tool that offers a meeting point for collaboration and identifies related parties for solving cyberbullying problems around them.

Through this project, students are ultimately expected to have explicitly developed the three dimensions of the Pancasila Student Profile, namely Fear of God Almighty and having noble character, cooperation, and independence, including the sub-elements that will be elaborated. This theme is implemented for the learning duration of 72 JP.

One of the activities in the "prevent cyberbullying" project is conducting a literacy tour.



Figure 2: Explore Literacy.

This literacy activity aims to provide students with an understanding of the dangers of bullying on social media, namely by knowing how to use social media correctly and adequately so students do not go the wrong way in using social media.

3.2.3 Local Culture

The theme of Choice 2 given to students is the theme of Local Wisdom. This theme is very suitable for class X students so they have knowledge and experience learning about the local cultures surrounding them. This project begins with the discovery stage, where students are invited to recognize the forms and functions of local wisdom in several regions in Indonesia. After that, the activity continues with finding the relationship between self-

identity and cultural identity and learning to understand that identity is a dynamic and ever-changing conception.

In this case, the activity carried out is the Makan Bajamba project, which is eating together based on Minangkabau customs and culture.



Figure 3: Makan Bajamba.

In this activity, food, drinks, and everything needed in the Bajamba eating project are prepared by students and teachers.

3.3 Evaluation Results of Project Strengthening Pancasila Student Profile Using the CIPP Model

A hypothetical design or hypothetical model results from a comparative analysis between the results of relevant preliminary studies (conceptual models) and field models (factual models) findings.

Based on the results of research both qualitatively, it is known that the implementation of P5, in general, is appropriate; it is just that the evaluation of the project is less appropriate and relevant to the 21st-century competency.

Based on the findings of the planning, process, and evaluation of the learning of P5 at SMK N 15 Padang, the following is a description of the evaluation results of the implementation of the P5 project. Using the CIPP model can be seen in the table below:

Table 1: Evaluation Results of Project Strengthening Pancasila Student Profile Using the CIPP Model.

Aspect	Findings of the Results of the project strengthening the Pancasila Student Profile
Context	- There is already a Project Module for Strengthening Pancasila Student Profile - Assessment is carried out optimally
Input	- Limited knowledge and ability of teachers in differentiation learning - The use of technology is good
Process	Application in class is not optimal because, in one meeting, it has not been

	able to carry out learning simultaneously with assessment and reflection.
Product	The unavailability of an assessment rubric is related to the project themes relevant to P5, and several projects have supported the era of the industrial revolution 4.0

Referring to the data of the study's results so that the objectives of the P5 project can be achieved optimally, researchers try to design the P5 project hypothetically. The following is a Hypothetical Design Project P5:

Table 2: Hypothetical design project strengthening student Profile Pancasila.

Aspect	Hypothetical design project strengthening student profile Pancasila
Context	- Analyzing the achievement of industrial revolution era 4.0 Objectives so that the aim of implementing projects is right on target - Development of P5 Assessment related to the era of the industrial revolution 4.0
Input	- Teacher guidance - Procurement of facilities and infrastructure, especially technological tools
Process	- Improve teacher competence in the learning process regarding the syntax of the learning model - Rubric Assessment of Project Results Relevant to P5 and can be used in the face of the industrial revolution 4.0 era
Product	- School Exhibition Project results attended by teachers, students, parents, and the community around the school.

Based on Permendikbudristek No. 56/M/2022, Pancasila Student Profile Strengthening Project (P5) is a project-based curricular activity designed to strengthen efforts to achieve competency and character following the Pancasila Student Profile, which is arranged based on graduate compensation standards. Project strengthening of the Pancasila Student Profile (P5) new learning raised in the driving school.

This P5 is part of the Merdeka Curriculum structure in addition to intracurricular learning. P5 is a learning that provides direct experience following the characteristics of the surrounding environment so that children have global competence and behave that reflects the values of Pancasila in daily life. Implementing the recommended project approach in developing P5 can be preceded by observing or investigating the topics chosen by students following their respective interests and needs.

In the hypothetical design of the project, strengthening the Pancasila student profile in terms of context is to analyze the achievement of the 21st-century competency goals so that the objectives of implementing the project are right on target.

In this case, implementing P5 must follow students' competencies in the 21st century. According to (Griffin, Care, and McGaw, 2012), the competencies that students must have been critical thinking and problem-solving, creativity, communication skills, and the Ability to Work Collaboratively. In implementing this project, there must be a P5 assessment form related to 21st-century competency. It is more than just an assessment that contains the characters from P5 that students must achieve.

In its implementation, in the hypothetical design of the project, strengthening the Pancasila Student Profile in terms of input and guidance is needed for teachers to achieve this competency goal. Supervisors by the teacher on the project help students inform what needs are needed in implementing P5.

For implementing the P5 project, it is necessary to increase the potential of teachers to manage the learning process, and component training can be held, especially in using the syntax of the learning model.

To evaluate the implementation of the P5 project can be seen in the products produced by students. Assessment is not only with one model of assessment; this evaluation is not only on student learning but also on the learning process of educators in preparing project activities and the readiness of education units and other educational units in carrying out projects. So the evaluation benchmark is the development and self-growth of students, educators, and education units. Moreover.

4 CONCLUSION

In planning a project strengthening the Pancasila Student Profile, SMKN 6 Padang has adjusted the project module provided by the Ministry of Research and Technology following the local context, needs, and interests of participants by involving opinions; and student ideas.

Implementation of Projects Strengthening Pancasila Student Profile, Teachers have implemented a project strengthening Pancasila Student Profile with less or more than the recommended Ministry of Education and Culture of the Project. This activity begins with identifying problems facilitated by the teacher so that project activities begin to be oriented to the concept of

concepts and solving problems (Problem Solving) according to the theme.

SMKN 6 Padang Education involves the community, the community on an ongoing basis to support intracurricular learning and project strengthening the profile of Pancasila students. The community involved is more diverse according to intracurricular learning objectives and projects, strengthening the profile of Pancasila students. Project activities Strengthening Pancasila Student Profiles held at SMKN 6 Padang has prepared students to face the 4.0 revolution era after graduation because they are used to working in an all-automated and all-technological way.

Limitations in this study include no analysis of student perspective on the implementation of the P5 program using valid instruments. Therefore, this can be a follow-up to the following study.

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