https://doi.org/10.51574/ijrer.v4i2.2839

# DEVELOPMENT OF P5 LEARNING MODULE THEME ECOPRINT IN MIDDLE SCHOOL

Nurul Hakiki<sup>1</sup>, Abd Aziz Ahmad<sup>2</sup>, Irfan<sup>3</sup>

1, 2, 3 Universitas Negeri Makassar, Indonesia

#### **Article Info**

#### Article history:

Received December 25, 2024 Revised February 28, 2025 Accepted March 10, 2025

#### Keywords:

Ecoprint;
Middle School;
Project Learning;
Profile of Pancasila Students
(P5);
4-D Model.

#### **ABSTRACT**

The study's goal is to create a learning module project (P5) with an ecoprint theme to improve character in the application of independent dimensions and creative dimensions of students. This study uses research and development (R&D) and the 4D model scheme. The development of this 4-D model involved the steps of defining, designing, developing, and disseminating. Public Middle School 7 Makassar served as the study's site. The results of the study indicated that the assessment of the overall module by material experts obtained a value of 9.8 with an average of 4.9 with the description "Very Good," while the media expert assessed the quality of the module cover design, module content design, and aspects of media effects on learning strategies with a total value of 14.75 with an average of 4.9 and the description "Very Good." Based on the assessment of the material expert validator and the media expert validator, it can be concluded that the learning module project (P5) with an ecoprint theme is feasible to use. The intended final stage is dissemination; however, the researcher did not proceed to this stage. The final stage carried out was the teacher response test, which had previously been carried out on teacher needs testing. In addition, the results of this study also indicated that it made it easier for teachers or facilitators to transfer knowledge through interesting learning in the P5 ecoprint project learning theme.

Copyright © 2025 ETDCI.
All rights reserved.

#### Corresponding Author:

Nurul Hakiki,

Universitas Negeri Makassar, Indonesia Email: hakikinurul78@gmail.com

# 1. INTRODUCTION

Humans have an insatiable need for education. The role of education is also critical because it is difficult to develop someone without education (Kopnina, 2020). Therefore, education must produce truly qualified humans, in terms of competitiveness, human strength, responsibility, character, and morals. Education is a learning process for students to improve themselves and make it easier to achieve their goals (Madani, 2019). Students' knowledge development still dominates the learning process. In fact, a competency has three main aspects, namely knowledge, skills, and attitude/behavior. All three aspects determine how successfully a person completes a job. Knowledge is

the easiest aspect to develop, while developing skills and attitudes generally requires more time and effort.

The skill aspect must be developed through training, simulations, and repeated practices accompanied by feedback (Schmidt & Wulf, 2017; Tetzlaff et al., 2021). Real interaction experiences in the field are the ideal way to develop the attitude element. In other words, schools sometimes do not balance intracurricular and co-curricular activities; learning focuses more on intracurricular activities that improve student knowledge but lacks co-curricular activities that enhance student skills through projects (Mishra & Aithal, 2023; Nudin, 2024; Utami et al., 2024).

The unimproved quality of education in Indonesia has sparked various programs and policies at the national level (Sulisworo, 2016; Pramana et al., 2021). Efforts to improve the quality of education are attempted by establishing quality schools in various regions, including through the International Standard School Pioneer policy, reference schools, and model schools. A growing number of quality schools in an area can inspire other schools.

As an effort to continue and develop policies to improve the quality of education to be more evenly distributed to more schools and regions, the Ministry of Education and Culture initiated the School Mover Program (Sekolah Penggerak) (Afrina et al., 2022). This program seeks to encourage schools to transform themselves to improve the quality of learning at the internal level and then disseminate it to other schools to make similar quality improvements (Vebrianto et al., 2024). In order for this program to be sustainable, efforts are needed to create an ecosystem for improving the quality of education at the national, regional, and education unit levels (Khofifah & Syaifudin, 2023). Regulations, policies, and budgeting in the education sector will be focused on supporting quality improvements so that learning outcomes continue to increase at the education unit, regional, and national levels.

The School Mover Program focuses on developing student learning outcomes holistically, including competencies (literacy and numeracy) and character, starting with superior human resources, such as principals and teachers (Wuryaningsih, 2023; Karo et al., 2024). The School Mover Program is a refinement of the previous school transformation program. The School Mover Program will accelerate public/private schools in all school conditions to move 1-2 stages more advanced (Rahimi et al., 2023). We carry out this program in stages, integrating it with the ecosystem until all schools in Indonesia become part of the School Mover Program. In February 2022, the Ministry of Education, Culture, Research, and Technology officially launched the independent curriculum. The independent curriculum is a learning method that focuses on students' talents and interests (Murtaqiatusholihat et al., 2023; Aini, 2023; Satriani et al., 2023). Students can choose any subjects they want to study according to their passion. The driving schools implement this curriculum.

In general, the structure of the independent curriculum is a diverse intracurricular and co-curricular learning curriculum (Ningsih, 2023; Wirawan et al., 2024). The curriculum is designed to provide optimal content, allowing students ample time to explore concepts and enhance their competencies. Afterwards, teachers possess the

authority to select a variety of teaching tools, enabling them to tailor the learning process to the students' needs and interests. Additionally, the government develops this curriculum to enhance the Pancasila student profile, based on specific themes (Chamisijatin et al., 2023; Hasbi et al., 2023). The project is not directed to achieve specific learning targets and is therefore not tied to subject content.

The objectives of the independent curriculum are, first, to create a fun education for students and teachers (Ibrahim et al., 2024). This curriculum emphasizes the development of skills and character in Indonesian education in accordance with the values of the Indonesian nation (Intiana et al., 2023). Secondly, the curriculum aims to bridge the learning gaps resulting from the Covid-19 pandemic. This curriculum was created with the aim that education in Indonesia can be like in developed countries, where students are given the freedom to choose what they are interested in learning. Thirdly, the curriculum aims to foster the development of students' potential. We simplify and adapt this curriculum to enhance in-depth learning. In addition, the independent curriculum also focuses on essential materials and the development of student competencies at their phases (Irwan et al., 2024). We expect the independent curriculum to foster the development of student competencies. This curriculum offers a distinct advantage by emphasizing student autonomy. This curriculum also makes it easier for teachers to provide learning to students (Pahrudin & Jatmiko, 2024). Additionally, the government's policy allocates time for co-curricular activities, combining separate project learning with intracurricular learning, to account for up to 25% of effective school time, in accordance with the curriculum's content. This arrangement allows teachers and students to conduct in-depth and structured exploration related to the project theme they choose.

The implementation of the independent curriculum expects students to form and run a project (Khairi et al., 2023). Through project implementation, students are able to develop their talents and skills. Among the projects of the independent curriculum is the learning project to strengthen the profile of Pancasila students (P5).

In a preliminary study at Public Middle School 7 Makassar, the author found the right theme in the learning process to strengthen the profile of Pancasila students (P5) about the needs of students by looking at the condition of the school environment that was not managed properly, such as garbage on leaves that were only left to fall without being utilized. Thus, the author is interested in compiling a learning module to strengthen the profile of Pancasila students (P5) with an ecoprint theme by prioritizing the instillation of independent dimensions and creative dimensions in students so that students are able to express their ideas, concepts, and creativity.

Ecoprinting is a technique for transferring natural colors and shapes onto a cloth (Mohamed et al., 2024). The ecoprint technique is carried out by directly tracing leaves from underutilized trees in the school environment (Fahreza et al., 2023). The author chose this title to highlight how the benefits of the surrounding nature can be used to create student creativity.

The implementation of the Pancasila student profile strengthening project learning (P5) has been implemented at public middle school 7 Makassar, which is one of the first

generations of schools in Makassar. You can either integrate P5 learning into intracurricular activities or implement it separately using a block system. Meanwhile, in terms of content, the implementation of P5 must be based on the Pancasila student profile according to its phase but does not have to be linked to learning achievements in certain subjects. Therefore, this study aims to develop a P5 learning module with the Ecoprint theme at public middle school.

### 2. METHOD

The type of research used is the research and development (R&D) method with the 4-D model. Research and development are a research method used to produce certain products and test the effectiveness of the product. R&D activities revolve around producing new products or refining existing ones. The research was conducted at public middle school 7 Makassar. We developed the 4-D model, an abbreviation for the stages of definition, design, development, and dissemination. This selection is based on the consideration that the 4-D model research design is systematic and based on the theoretical basis of educational product design in the form of learning devices, learning models, media, and learning applications so that the resulting product has a standard of eligibility. The following is the 4-D model development flow presented in Figure 1.

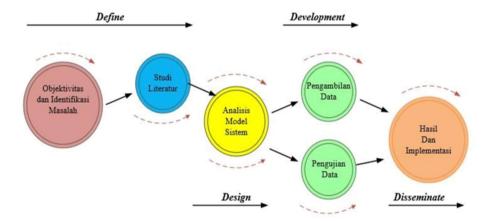


Figure 1. Four D (4-D) Model

The flow of activities carried out in the 4-D model can be described as follows:

# a. Define

The first stage is the stage to determine and define matters related to learning requirements. Thiagarajan conducted an analysis of five activities that were carried out during the define stage, which included front-end analysis, learner analysis, task analysis, concept analysis, and the formulation of learning objectives (specifically, instructional objectives).

# b. Design

In the design stage, the goal is to make learning tools. There are four steps that must be taken: 1) making test standards (criterion test construction); 2) choosing media that fits the material and learning goals (media selection); 3) choosing formats

(format selection), which means looking at existing learning tool formats and choosing the format of the new learning tool to be made; and 4) making an initial design based on the chosen format.

# c. Development

The development stage is the stage to produce development products. This stage is carried out through two steps, namely expert appraisal followed by revision, and developmental testing.

# d. Disseminate

The dissemination stage is carried out to promote the development product so that it can be accepted by users, either individuals, a group, or a system. The dissemination stage consists of three activities, namely validation testing, packaging, and diffusion and adoption. At the validation testing stage, the product that has been revised at the development stage is then implemented on the actual target.

# RESULTS AND DISCUSSION

The learning project aimed at strengthening the Pancasila student profile (P5) serves as a means of achieving the Pancasila student profile, which allows students to "experience knowledge" as a process of character development and an opportunity to learn from their surroundings. In this profile project activity, students have the opportunity to study important themes or issues such as climate change, anti-radicalism, mental health, culture, entrepreneurship, technology, and democratic life so that pupils can take real action in responding to these issues according to their learning stages and needs (Yustina et al., 2024; Gafari et al., 2024).

The Pancasila student profile strengthening project module (P5) with the ecoprint theme has gone through the stages of developing the 4-D model. This stage includes defining, designing, and developing to produce modules that are in accordance with the needs of teachers and students in co-curricular learning or P5 project learning.

The results of the teacher needs analysis show that the P5 project learning approach used previously was not fully involved in the planning, preparation, and creation of the P5 project module and had the opportunity to make decisions and collaborate so that it was in the "needed" category. Therefore, the project module with the ecoprint theme is designed to strengthen the Pancasila student profile (P5) so that teachers can participate in preparing and creating the P5 module, making classroom learning more effective and creative. Based on the results of the observations and the needs analysis questionnaire, it was found that the majority of teachers needed an effective, easy-to-understand, structured, and interesting learning module for the Pancasila student profile (P5) with the ecoprint theme so that it is easy to apply to students in the learning process.

The stages in developing the learning module for the Pancasila student profile strengthening project (P5) with the ecoprint theme in the development of 4-D are Define, The definition stage consists of 3 steps, namely teacher needs analysis, student character analysis, and curriculum analysis. With the following results: art learning, which is one of the learning activities that can develop student creativity but is often

\_

rarely raised in co-curricular learning, so this ecoprint theme is very much needed to develop student creativity and also the benefits of the surrounding environment; then the Pancasila student profile strengthening project module (P5) is a module that can be a pocket book for teachers as facilitators to develop interesting and interactive learning for students so that it is very much needed in the co-curricular learning process.

The design stage consists of two steps: designing the learning module for the Pancasila student profile strengthening project with an assessment instrument that will be filled in by a media expert validator and a material expert validator. The third stage is the development phase. In the development stage, three steps are carried out: the first is a validity test by two experts, namely a media expert and a material expert; the second is a practicality test carried out during the teaching and learning process; and the third is an effectiveness test to see the development of the facilitator (teacher) in using the learning module for the Pancasila student profile strengthening project (P5). The initial draft of the P5 module that was developed is presented in Figure 2 below.

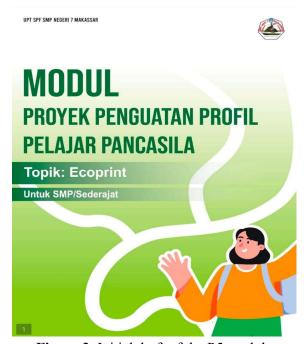


Figure 2. Initial draft of the P5 module

The results of the assessment carried out by the media expert validator are categorized as excellent in terms of cover design, module content design, and aspects of the effects of learning media on learning strategies, while the results of the assessment by the material expert on the learning aspect are categorized as excellent, and the aspect of the substance of the material is categorized as good. So the product in the form of a learning module for the Pancasila student profile strengthening project with an ecoprint theme is suitable for use in learning. The final stage is dissemination. At this stage, the product that has been tested for validity is a learning module for the Pancasila student profile strengthening project (P5) that has been designed. Thus, in accordance with the

conversion of the development test, these results indicate that the development of the learning module for the Pancasila student profile strengthening project (P5) can be categorized as "excellent."

The trial results indicate that the Pancasila student profile strengthening project module (P5) with the ecoprint theme is able to facilitate teachers in the learning process effectively. The responses of students and facilitators were positive, indicating that the P5 project module developed is relevant to their needs. The following is the finalized version of the P5 module developed in Figure 3.



Figure 3. P5 Module

Based on the research that has been conducted, the learning module for the Pancasila student profile strengthening project (P5) with the ecoprint theme that was developed has proven to be valid and practical because it was validated by media experts and validated by material experts, and the results of the teacher response questionnaire were in the "excellent" qualification. Therefore, other schools may modify the P5 project module as needed.

The benefits of developing this module are also relevant and supported by the results of previous studies, which indicate that the implementation of P5 character enhances the independent and creative dimensions of students (Fithriyah et al., 2024; Qalam et al., 2024). These results demonstrate the beneficial impact of the P5 module on the development of students' knowledge and character. This conclusion is relevant to Mahiratin's research, which states that P5 activities provide opportunities for students to learn in informal conditions and have a flexible learning structure. In addition, P5 activities have a significant impact on students' creative skills (Muin et al., 2024).

#### 4. CONCLUSION

This study aims to produce a P5 ecoprint theme module referring to the R&D model, namely the 4-D model. There are only three stages in the research and development of the learning module for the Pancasila student profile strengthening project (P5) with the ecoprint theme. These are the define stage, the design stage for the development stage, which is used in the validation activities of the expert validator team, and the disseminate stage. The first stage is defining, namely the analysis stage, starting with the teacher needs analysis stage, student characteristics analysis, and curriculum analysis; the second stage is designing, including the learning module for the Pancasila student profile strengthening project, designing assessment instruments, and conducting validation tests until the module is truly suitable for use; and the final stage of dissemination is the teacher response test that has previously been tested for teacher needs. In addition, the results of this study also indicate that the P5 module runs effectively and interactively and is structured according to the needs of students and the school environment and makes it easier for teachers or facilitators to transfer knowledge through interesting learning in the P5 ecoprint project learning theme.

As an idea, the sustainable product development and testing of the usefulness and effectiveness of the product development module (P5) with the ecoprint theme still needs more work to meet the requirements of extracurricular learning in schools as set out in the relevant curriculum. It is hoped that ongoing research on learning objectives and expectations for student character development will continue to achieve desired outcomes. Furthermore, we hope to test the practicality and efficiency of this module in the future.

### REFERENCES

- Afrina, M., Siska, J., Agusta, O. L., Sasongko, R. N., & Kristiawan, M. (2022). The policy of mover school as a catalyst for improving the quality of education. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 8(1), 108-115.
- Aini, Q. (2023). Implementation of an independent curriculum in supporting students' freedom to create and learn. *Journal of Scientific Research, Education, and Technology (JSRET)*, 2(3), 999-1008.
- Chamisijatin, L., Pantiwati, Y., Zaenab, S., & Aldya, R. F. (2023). The implementation of projects for strengthening the profile of Pancasila students in the implementation of the independent learning curriculum. *Journal of Community Service and Empowerment*, 4(1), 38-48.
- Fahreza, M. R., Yani, A., & Rompegading, A. B. (2023). Plant Diversity that Can be Used as Silk Fabric Ecoprint Material as a Learning Resource Contextual for High School Students. *Jurnal Bioterdidik: Wahana Ekspresi Ilmiah*, 11(2), 138-151.
- Fithriyah, D. N., Sa'diyah, Z., & Faizah, L. N. (2024). Pengembangan Modul P5 PPRA Berbasis Kearifan Lokal di Madrasah Ibtidaiyah. *SITTAH: Journal of Primary Education*, 5(2), 198-210.
- Gafari, M. O. F., Pulungan, H. K., Astuti, W. W., Assalam, M. H., & Surip, M. (2024). Development of the Pancasila Student Profile Strengthening Project Module (P5) Based on Pakpak Bharat Culture. *KEMBARA: Jurnal Keilmuan Bahasa, Sastra, dan Pengajarannya*, 10(1), 352-365.
- Hasbi, M., Fitri., & Muktamar, A. (2023). Character building profile of Pancasila students

- as an effort to realize national character. ETDC: Indonesian Journal of Research and Educational Review, 2(4), 70-83.
- Karo, J. T. K., Mudjisusatyo, Y., & Pangaribuan, W. (2024). Analisis kebijakan sekolah penggerak. *Esensi Pendidikan Inspiratif*, 6(2).
- Khairi, A., Jalinus, N., Ambyar, A., & Waskito, W. (2023). Evaluation of the implementation of independent learning-independent campus (mbkm) curriculum by using the cipp evaluation model. *Scaffolding: Jurnal Pendidikan Islam dan Multikulturalisme*, 5(2), 543-559.
- Khofifah, B., & Syaifudin, M. (2023). Analisis kebijakan pemerintah mengenai sekolah penggerak. *Jurnal Inovasi Penelitian*, *3*(8), 7405-7410.
- Kopnina, H. (2020). Education for the future? Critical evaluation of education for sustainable development goals. *The Journal of Environmental Education*, 51(4), 280-291.
- Ibrahim, I., Husnah, A., Fadillah, A. R., Eriska, E., & Amanda, S. (2024). Preparation for the implementation of the independent curriculum. *Journal Analytica Islamica*, 13(1), 101-113.
- Irwan, I., Arnadi, A., & Aslan, A. (2024). Developing critical thinking skills of primary school students through independent curriculum learning. *Indonesian Journal of Education (INJOE)*, 4(3), 788-803.
- Intiana, S. R. H., Prihartini, A. A., Handayani, F., Mar'i, M. I., & Faridi, K. (2023). Independent curriculum and the Indonesian language education throughout the era of society 5.0: A literature review. *Al-Ishlah: Jurnal Pendidikan*, 15(1), 911-921.
- Madani, R. A. (2019). Analysis of educational quality, a goal of education for all policy. *Higher Education Studies*, *9*(1), 100-109.
- Mishra, N., & Aithal, P. S. (2023). Effect of extracurricular and co-curricular activities on students' development in higher education. *International Journal of Management, Technology, and Social Sciences*, 8(3), 83-88.
- Mohamed, A. A. F., Nassar, A. M., Galal, F. H., & Moustafa, S. M. (2024). Development of antimicrobial and insecticidal silk fabrics via eco-printing with natural dyes from agricultural wastes. *Fibers and Polymers*, 25(8), 2953-2965.
- Muin, A., Maisaroh, S., Ramadhan, W., & Sulaimon, J. T. (2024). Effectiveness of the P5 Program in the Merdeka Curriculum to Increase the Creativity and Independence of Class V Elementary School Students. *Al Ibtida: Jurnal Pendidikan Guru MI*, 11(1).
- Murtagiatusholihat, M., Ali, M., Hernawan, A. H., & Dewi, L. (2023). The Effectiveness of a Curriculum Designed Based on an Authentic Learning Approach in Improving Study Success, Attitudes, and Independent Learning Abilities of Prospective Teachers. *International* Journal of Learning, Teaching and Educational Research, 22(9), 365-381.
- Ningsih, N. (2023). Penerapan kurikulum merdeka belajar di upt smp negeri 9 gresik. DIDAKTIKA: Jurnal Pemikiran Pendidikan, 29(1), 144-151.
- Nudin, B. (2024). The Relevance of Intracurricular, Co-curricular, and Extracurricular Islamic Religious Education with 21st Century Competencies. *IJIRCS: International Journal of Islamic Religion dan Culture Studies*, 2(3), 1-15.
- Pahrudin, A., & Jatmiko, A. (2024). The Role of Teachers in Implementing Independent Curriculum Based Learning. *Bulletin of Science Education*, 4(3), 149-154.
- Pramana, C., Chamidah, D., Suyatno, S., & Renadi, F. (2021). Strategies to Improved Education Quality in Indonesia: A Review. *Turkish Online Journal of Qualitative Inquiry*, 12(3).
- Qalam, M. N., Hasan, M., & Rohman, R. F. (2024). Implementasi Profil Pelajar Berbasis Kearifan Lokal dalam Membangun Kesadaran Multikultural di Madrasah Tsanawiyah Singkawang. *Intelektual: Jurnal Pendidikan dan Studi Keislaman*, 14(1), 124-142.

- Rahimi, A., Darlis, A., Ammar, S. A., & Daulay, D. A. (2023). Sekolah Penggerak Sebagai Upaya Peningkatan Kualitas Pendidikan. *Jurnal Pendidikan dan Konseling (JPDK)*, 5(1), 692-697.
- Satriani., Amiruddin., Sakinah, A., & Muktamar, A. (2023). Problems of Implementing the Independent Learning Curriculum in the Digital Era. *ETDC: Indonesian Journal of Research and Educational Review*, 2(4), 36-43.
- Schmidt, R. A., & Wulf, G. (2017). Continuous concurrent feedback degrades skill learning: Implications for training and simulation. In *Simulation in Aviation Training* (pp. 375-391). Routledge.
- Sulisworo, D. (2016). The contribution of the education system quality to improve the nation's competitiveness of Indonesia. *Journal of Education and Learning (EduLearn)*, 10(2), 127-138.
- Tetzlaff, L., Schmiedek, F., & Brod, G. (2021). Developing personalized education: A dynamic framework. *Educational Psychology Review*, *33*, 863-882.
- Utami, T., Susilana, R., & Dewi, L. (2024). Mapping of Co-curricular Achievements in Kurikulum Merdeka with the Problem-Centered Thinking Skills Model. *AL-ISHLAH: Jurnal Pendidikan*, 16(2), 651-660.
- Vebrianto, R., Hermita, N., Irawan, D., Mujtahid, I. M., & Thahir, M. (2024). Teachers' experiences in sekolah penggerak program: a retrospective case study. *Journal of Education and Learning (EduLearn)*, 18(1), 79-88.
- Wirawan, Z., Arwien, R. T., Sumartini, R., & Bachri, S. S. (2024). Independent Curruculum Development In Educational Units And Its Application In 21st Century Learning. *Klasikal: Journal of Education, Language Teaching and Science*, 6(1), 223-233.
- Wuryaningsih, W. (2023). Program Pendidikan Guru Penggerak, Efektifkah?: Sebuah Ulasan pada Kerangka Pengembangan Profesional Guru. *Jurnal Widyaiswara Indonesia*, 4(2), 17-26.
- Yustina, Y., Wahyuni, R., Suhara, S., Darmawati, D., Wulandari, P. A., & Saputra, R. R. (2024). Evaluating the Impact of the Pancasila Student Profile Project on Developing Student Competencies. *AL-ISHLAH: Jurnal Pendidikan*, *16*(3), 4201-4212.