Enhancing Character Competency Through Learning Design Module (LDM): A Qualitative Case Study of P5 Implementation in Vocational High School

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Abstract: This study aims to analyze the implementation of the Learning Design Module (LDM) in the Proyek Penguatan Profil Pelajar Pancasila (P5) with the theme of Employment for eleventh-grade students at SMK Graha Madina Singosari. Using a qualitative case study approach, the research focuses on three main aspects: (1) the design and content of the LDM, (2) the classroom implementation process, and (3) the impact of LDM use on students' character competency. Data were collected through classroom observations on P5's teacher and students of grade XI at SMK Graha Madina Singosari, in-depth interviews, and document analysis, and analyzed using the interactive model of Miles and Huberman. The findings indicate that the LDM, developed based on Project-Based Learning (PjBL) and Inquiry-Based Learning (IBL), successfully integrates modern office administration skills with the strengthening of core character values such as responsibility, independence, and collaboration. The implementation of LDM fostered active student engagement through contextual learning activities that simulate real-world work practices, although challenges remain in time management and group dynamics. Overall, the use of LDM not only enhances instructional effectiveness but also serves as a transformative tool for character development in vocational education. These findings underscore the importance of project- and reflection-based learning design in supporting Indonesia's Merdeka Curriculum, which emphasizes 21st-century competencies.

Keywords: Learning Design Module; P5; character education; vocational school; Project-Based Learning; employment readiness

Introduction

21st century education demands the development of critical thinking skills, collaboration, creativity, and communication as core competencies that students must have in facing global dynamics (Trilling & Fadel, 2009; Voogt & Roblin, 2012). In this context, the Independent Curriculum implemented in Indonesia emphasizes strengthening the Pancasila Student Profile (P5) as a

transformative approach in learning to shape character and essential competencies (Kemendikbudristek, 2022; Oktaviani et al., 2023). P5 as part of the curriculum is designed based on project-based learning to increase active student participation in solving real problems in their environment, so that the strengthening of Pancasila values can be internalized through direct practice (Mishra & Mehta, 2017; Bell, 2010). However, the implementation of P5 learning still faces various challenges in terms of learning design, selection of appropriate methods, and suitability to the local context of vocational schools such as SMK (Hasibuan et al., 2022; Hu & Gao, 2020). To answer these challenges, the development of a Learning Design Module (LDM) is crucial, because it can function as a systematic framework for developing meaningful, contextual, and adaptive learning experiences to students' needs (Laurillard, 2012; Bower, 2017). LDM is designed with the principle of constructivist pedagogy, which allows students to build their knowledge through interactions with the learning environment and their peers (Jonassen, 1999; Conole, 2013).

Project-Based Learning (PjBL) has long been recognized as an effective approach in encouraging contextual and collaborative learning, which is in accordance with the essence of learning in the Strengthening Pancasila Student Profile (P5) project (Bell, 2010; Thomas, 2000). In the context of vocational education, the application of PjBL allows students to acquire practical skills through solving real-world problems relevant to their field of expertise (Hernández-de-Menéndez et al., 2020). The Learning Design Module (LDM) is a systematic tool that facilitates teachers in designing learning flows that are appropriate to student characteristics and curriculum needs (Laurillard, 2012; Conole, 2013). LDM encourages the application of a constructivist-based pedagogical approach, where learning is seen as an active process built by students themselves through experience and reflection (Jonassen, 1999). Several studies have highlighted the importance of technology integration in learning design to improve the effectiveness of the teaching and learning process, especially in today's digital generation (Castañeda & Selwyn, 2018; Bower, 2017). In this context, digital-based LDM has the potential to support personalization of learning and real-time tracking of learning outcomes. However, research on the implementation of LDM in the context of vocational education in Indonesia is still relatively limited, especially in P5 learning which is cross-disciplinary and character-based (Susanti et al., 2023). Therefore, further research is needed that specifically examines the effectiveness of LDM implementation in supporting the achievement of character competencies in vocational high school students.

A preliminary study at SMK Graha Madina Singosari showed that most teachers had difficulty implementing P5-based learning consistently due to the limited systematic and integrated instructional guides in the form of learning modules (Field Observation Results, 2024). This has implications for the lack of achievement of students' character competency indicators, especially in the dimensions of mutual cooperation and independence. Previous studies have shown that the use of LDM can increase the effectiveness of learning in the context of competency-based education, because it provides a clear, flexible, and achievement-oriented learning flow (Castañeda & Selwyn, 2018; Hernández-de-Menéndez et al., 2020). However, there have not been many studies that specifically examine how LDM can be implemented in P5 subjects at the vocational high school level, especially at the 11th grade level. Furthermore, research on the implementation of LDM in the context of vocational education is still very limited in Indonesia, especially those that examine aspects of planning, implementing, and evaluating P5 learning comprehensively (Susanti et al., 2023; Nugroho & Hidayati, 2022). This gap shows the importance of in-depth studies that can fill the research gap related

to the use of learning module design in strengthening the implementation of P5 in vocational high schools.

In this context, this study is important because it attempts to answer the empirical and practical needs for a structured and module-based learning model that can support the success of P5 in SMK. In addition, the approach used in this study is oriented towards contextual learning that emphasizes active student involvement, meaningfulness, and critical reflection (Biggs & Tang, 2011; Herrington et al., 2010). Therefore, the purpose of this study is to analyze the implementation of the Learning Design Module in the P5 subject for grade XI students at SMK Graha Madina Singosari. This study focuses on three main aspects: 1) analysis of LDM design and content; 2) evaluation of the implementation process in class; and 3) the impact of LDM use on the achievement of student character competencies.

Method

This type of research is descriptive qualitative research with a case study approach. The subjects of the study were teachers and students of grade XI at SMK Graha Madina Singosari who were involved in the implementation of the P5 subject.
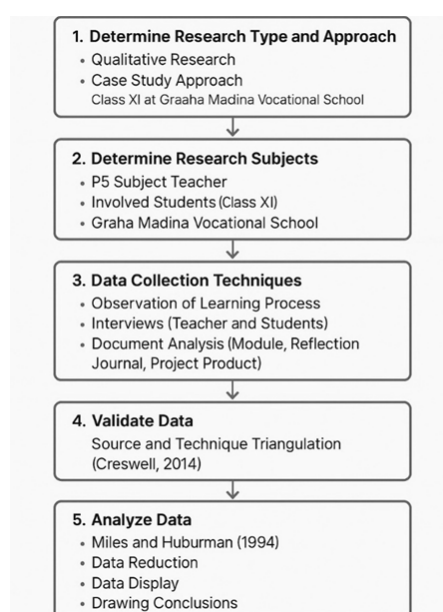

Figure 1. Flowchart Data collection techniques

Data collection techniques include observation of the learning process, in-depth interviews with teachers and students, and document analysis (modules, reflection journals, and student project products). Data validity is tested through triangulation of sources and techniques (Creswell, 2014).

The data were analyzed using the interactive model of Miles and Huberman (1994) consisting of data reduction, data presentation, and drawing conclusions. The focus of the analysis was directed at the design, implementation process, and the impact of using the Learning Design Module on the achievement of the character dimensions of the Pancasila Student Profile.

Results

1. Learning Design Module (LDM) Design and Content

The Learning Design Module (LDM) design for the Proyek Penguatan Profil Pelajar Pancasila (P5) subject with the theme of Employment is systematically compiled by the teaching teacher by referring to the development of student competencies in the field of Office Management and Business Services (MPLB). This module integrates the Project-Based Learning (PjBL) approach to create a project-based learning experience and Inquiry-Based Learning (IBL) to encourage student exploration, problem solving, and reflection on the modern world of work.

As conveyed by one of the supervising teachers:

> "We designed the module so that students learn how to write a job application letter, compile a CV, and conduct a simulated interview. All content is directed to be relevant to the world of work in the modern office sector." (Teacher P5, Interview April 15, 2025)

The development of LDM includes a number of main components, namely: (1) character-based learning objectives, (2) contextual learning activities, (3) authentic assessment, and (4) learning reflection. The module also contains character indicators based on the Pancasila Student Profile, such as independence, responsibility, and critical and creative thinking skills.

Additional interviews confirmed that the module design took into account local variation in activity and contextualization:

> "We also include interview assignments with HR practitioners as part of the out-of-class learning activities.""The content is designed to be contextual to the local environment of Malang, for example making applications for companies operating in this area.""Each section of the module lists character indicators that can be achieved, such as courage, empathy, and teamwork.""This module provides space for students to determine project topics according to their career interests.""We want students to not only know the theory, but also real practice through simulations and the creation of administrative documents." (Teacher P5, Interview April 15, 2025)

The LDM module was successfully designed as a contextual and applicable learning media, integrating the needs of the MPLB curriculum with strengthening student character, especially in the context of work readiness. Based on the results of interviews with teachers and the results of descriptive analysis, it can be concluded that the Learning Design Module (LDM) design applied to the P5 subject on the theme of employment at SMK Graha Madina Singosari has met the pedagogical principles based on the Project-Based Learning and Inquiry-Based Learning approaches. The module is designed contextually, integrating the needs of the modern office work world into learning activities, such as compiling administrative documents, job interview simulations, and compiling CVs.

The values of the Pancasila Student Profile are internalized through project assignments, with a focus on developing independent character, responsibility, and critical thinking. Teacher involvement in compiling content that is applicable and relevant to the reality of work is a major factor in the success of this module design. This design is not only instructional, but also transformative because it brings the learning process closer to a real professional context.

2. Evaluation of the Implementation Process in Class

The implementation of LDM in the classroom shows the dynamics of active and participatory learning. Students appear enthusiastic when working on projects to compile office documents, such as

meeting minutes, official letters, and digital archives. This activity simulates real work roles in an office environment, so that students feel more connected to professional work practices.

As stated by the teaching teacher:

> "The children are enthusiastic because they feel they are preparing themselves for the real world of work." (Teacher P5, April 20, 2025)

However, challenges still arise, especially in terms of time management and role division in teamwork. Some groups show inequality of contribution that impacts the final outcome of the project. The solution taken is to implement an individual assessment system and role reflection in the group.

Additional Interviews Strengthen Findings:

> "This project makes students feel more empowered. They have space to be creative and express themselves.""We have difficulty monitoring the progress of each group because students move at different speeds.""Some students tend to rely on their more active friends.""There are groups that complete assignments on time because they immediately divide roles from the start.""We create a weekly monitoring schedule that helps reduce tardiness." (Teacher P5, Interview April 20, 2025)

In general, the implementation of LDM encourages active interaction between students and strengthens authentic learning experiences. Collaborative constraints can be minimized with more structured project management and strict monitoring from teachers. The LDM implementation process has shown success in building active student engagement through project-based activities that mimic real-world work practices. Students are actually able to work on administrative tasks such as meeting minutes, official letters, and digital archiving with enthusiasm and a collaborative spirit. However, there are technical challenges such as inequality in the distribution of group assignments and time management constraints.

The implementation of group progress monitoring strategies, as well as individual evaluations in collaborative work have proven to be able to overcome most of these problems. Therefore, it can be concluded that the implementation of LDM requires a strong facilitative role of teachers in terms of supervision, mentoring, and adjusting learning strategies to ensure that all students are evenly and actively involved in the project being carried out.

3. Impact of LDM on Student Character Competence

LDM has a positive influence on the development of student character, especially in the aspects of responsibility, independence, collaboration, and communication. Interview results showed that students felt more prepared to face the world of work and were more confident in carrying out administrative tasks and interacting in groups.

As one student put it:

> "I became more confident after learning how to write a job application letter and conduct an interview." (Student XI MPLB, April 23, 2025)

Additional interviews supported that the learning experience through LDM enhanced interpersonal competencies and job readiness:

> "I learned how to organize a group work schedule." "When taking minutes of meetings, I realized the importance of recording information in detail." "I became able to convey ideas confidently during project presentations." "I used to be afraid of public speaking, but now

I am braver." "We learned to respect each other's ideas and work together to solve problems in a team." (Student XI MPLB, Interview April 23, 2025)

Learning with LDM provides space for character development that is in line with the values of the Pancasila Student Profile. Activities that require interaction, presentation, and reflection encourage students to become more independent and cooperative individuals. The results of interviews with students showed that LDM module-based learning contributed significantly to strengthening students' character competencies, especially in the dimensions of responsibility, cooperation, communication, and independence. Students feel more confident in facing the challenges of the world of work because they gain real experience in compiling professional documents, interacting in groups, and conveying ideas orally and in writing.

It can be concluded that LDM not only functions as an instructional tool, but also as a means of character formation in accordance with the Pancasila Student Profile. The character grows through a reflective, collaborative, and real problem-solving-oriented learning process, resulting in students who are not only academically competent, but also socially and emotionally mature in a professional context.

Discussion

The implementation of the Learning Design Module (LDM) with a project-based learning (PjBL) approach showed a significant influence on student motivation and engagement in learning P5 on the theme of employment. This module successfully framed the context of the real world of work through activities to prepare office documents such as job application letters, CVs, and interview simulations. This is reflected in the enthusiasm of students who feel that learning is more meaningful and directed at work readiness. The LDM design that integrates the character dimensions of the Pancasila Student Profile, such as responsibility, mutual cooperation, and critical reasoning, provides a strong foundation for contextual character education. This module combines technical competencies with character building through collaborative and reflective activities. The results of teacher observations showed that students began to show improvements in communication and teamwork. One of the strengths of LDM is the use of authentic assessments that assess the process, not just the end product. Assessments are carried out through observation of involvement, assessment of teamwork, and individual reflection on the projects being carried out. According to Gulikers et al. (2022) in Assessment & Evaluation in Higher Education, authentic assessments enable deeper learning because students must demonstrate understanding in a real-world context. This supports the LDM strategy which aims to prepare students holistically.

The use of LDM has a significant impact on the transformative learning experience, especially in shaping students' reflective awareness of their future careers. Students not only learn administrative skills but also internalize the values of professionalism and responsibility. Learning that provides space for personal reflection can change the way students view themselves and their roles in the future. This is evidenced by quotes from students who feel more prepared and confident in facing the world of work (Murphy & Costa, 2023). Modules designed based on digital contexts, such as electronic archiving and digital documents, accommodate the needs of digital literacy in the modern world of work. The integration of technology in vocational learning improves students' adaptive skills and digital competence (Zhou et al, 2023). With technology-based administrative simulations, students are accustomed to using modern work tools from an early age. This is an added value in the development of a vocational curriculum based on industry 4.0.

Despite its many advantages, LDM requires structured planning to address logistical constraints, project time allocation, and variations in student abilities. Research by Brown & Green (2024) in Instructional Design Quarterly shows that the success of project learning design is largely determined

by mapping micro-activities that are appropriate to the needs of students. In this implementation, some students have difficulty completing projects due to limited time, so the module needs to be adjusted to more efficient time management. Adaptive and flexible modules are an urgent need in vocational education. Students' experiences in working together and completing projects strengthen the social learning aspect of vocational education. A learning environment that supports collaboration encourages the formation of interpersonal skills and empathy, which are very much needed in the world of work. Collaborative competence is one of the main indicators of the success of the work adaptation of the younger generation (Thompson, 2022). This can be seen from the testimonies of students who feel more able to express their opinions and accept differences in group discussions.

The module also succeeded in forming a culture of reflection through learning journals which are part of the formative assessment. This reflection provides space for students to evaluate the learning process, challenges faced, and strategies they use. A study by Kim & Reeves (2022) in Reflective Practice shows that reflection is an important instrument in improving students' metacognition and self-awareness. Thus, LDM not only educates technically, but also prepares students to become lifelong learners. Overall, this study supports the paradigm that modern vocational education must prioritize experiential, character, and technology-based learning. The LDM module is an integrative learning model that prepares students as a whole to enter the complex and dynamic world of work. These findings strengthen the position of P5 as a transformative vehicle in vocational high school learning based on character and work competencies. Further research is recommended to develop LDM across themes and departments to increase scalability and systemic impact on vocational secondary education.

Conclusion

The implementation of the Learning Design Module (LDM) in the Proyek Penguatan Profil Pelajar Pancasila (P5) with the theme of Employment has proven to be effective in enhancing both character competencies and vocational readiness among students at SMK Graha Madina Singosari. The module, which integrates Project-Based Learning (PjBL) and mapping-project, offers a contextualized and student-centered learning experience that reflects real-world office practices. Through the development of job application letters, CVs, and interview simulations, students are not only equipped with technical administrative skills but also experience significant growth in core character values such as responsibility, independence, collaboration, and critical thinking. The findings demonstrate that LDM fosters deeper student engagement, supports reflective learning, and encourages collaborative problem-solving. However, successful implementation requires careful planning, teacher facilitation, and continuous monitoring to address challenges in group dynamics and time management. Overall, the LDM approach represents a transformative educational strategy that aligns with the goals of Indonesia's Merdeka Curriculum by promoting holistic, experiential, and character-based learning in vocational education settings. Future research is recommended to explore the scalability of LDM across various P5 themes and vocational disciplines to further support systemic innovation in teaching and learning practices..

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