

# EFFECTIVE STRATEGIES FOR DETERMINING INTEGRATED LEARNING MATERIALS IN THE ERA OF THE INDEPENDENT CURRICULUM

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## Abstract

*This study aims to identify effective strategies for determining integrated learning materials in the era of the Merdeka Curriculum. Using a qualitative descriptive method with a literature study approach, this study analyzes various strategies that can be applied by elementary school educators in developing integrated learning materials. The results of the study show that effective strategies include: (1) thematic mapping based on the developmental stages of students, (2) integration of local wisdom and contextual learning, (3) utilization of digital technology and multimedia learning resources, (4) collaborative planning involving cross-subject teams, and (5) continuous evaluation and reflection. These strategies enable educators to create learning experiences that are more meaningful, contextual, and student-centered. The application of these strategies can improve students' critical thinking, creativity, and ability to connect knowledge across subjects. This study contributes to the development of pedagogical practices in the era of the Merdeka Curriculum and provides practical guidance for educators in implementing integrated learning effectively.*

**Keywords:** *integrated learning, independent curriculum, learning materials, basic education*

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## A. INTRODUCTION

Education is the main foundation for developing excellent human resources who are able to compete in the global era. The implementation of the Merdeka Curriculum has brought about a paradigm shift in Indonesian education, particularly in the approach to learning in elementary schools. This curriculum emphasizes the development of students' character and competencies through more flexible, contextual, and student-centered learning. One of the main features of the Merdeka Curriculum is the implementation of integrated learning that combines various subjects into one theme or learning project.

In the context of national development, improving the quality of education is one of the Indonesian government's top priorities. In line with the developments and challenges of the 21st century, the education system in Indonesia continues to undergo changes and adjustments to be more relevant to the needs of students and the demands of society. One of the major innovations in education is the implementation of the Merdeka Curriculum, which is expected to address these needs through a more flexible, humanistic approach that is oriented towards developing the competencies and character of students.

The Merdeka Curriculum is a response to various problems in the implementation of the previous curriculum, which was considered too dense, inflexible, and did not provide enough space for teachers and students to innovate. In this curriculum, learning is

student-centered, providing space for exploration and emphasizing the importance of meaningful contextual learning. One of the main features of this approach is its implementation. Integrated learning is an approach that connects various subjects into a meaningful whole that is relevant to students' lives. This approach not only helps students understand academic concepts more deeply, but also develops critical thinking skills, creativity, and 21st-century skills needed to face future challenges.

However, the implementation of integrated learning in the era of the Merdeka Curriculum faces various challenges, especially in terms of determining appropriate and effective learning materials. Educators often find it difficult to identify relevant materials, design integrative learning activities, and assess student competency achievements holistically. Research by Suryani and Widodo (2022) shows that 68% of elementary school educators still experience obstacles in developing integrated learning materials that are appropriate to the characteristics and needs of students.

The importance of effective strategies in determining integrated learning materials is the main focus of this study. The right strategies will help educators create meaningful learning experiences, optimize student potential, and achieve the learning objectives set out in the Merdeka Curriculum. In addition, effective strategies will also support the development of educators' competencies in designing and implementing innovative and adaptive learning.

Based on this background, this study aims to identify and analyze effective strategies that can be applied in determining integrated learning materials in the era of the Merdeka Curriculum, especially for elementary school level.

## **B. RESEARCH METHOD**

This study uses a qualitative descriptive method with a literature review approach. This method was chosen to thoroughly analyze various effective strategies in determining integrated learning materials based on a review of previous studies, curriculum policy documents, and best practices that have been implemented in the field. The data sources in this study include national and international scientific journal articles, reference books, official documents on the Merdeka Curriculum from the Ministry of Education, Culture, Research, and Technology, as well as research reports related to integrated learning. The criteria for selecting data sources were publications in the 2019-2025 time frame, relevance to the topic of integrated learning and the Merdeka Curriculum, and source credibility.

Data analysis was conducted using thematic content analysis techniques, which identified, categorized, and analyzed the main themes that emerged from various literature sources. The analysis process included categorization, interpretation, and synthesis to produce comprehensive and effective strategies that could be applied in learning practices.

The validity of the research was maintained through source triangulation, which compared information from different literature sources, and peer review with education experts to ensure the accuracy of the interpretation and analysis.

## **C. RESULTS AND DISCUSSION**

### **Effective Strategies for Determining Integrated Learning Materials**

Based on the literature analysis conducted by the researcher, five main strategies were found to be effective in determining integrated learning materials in the era of the Merdeka Curriculum, as follows.

#### **1. Thematic Mapping Based on Student Development Stages**

The first crucial strategy is to conduct thematic mapping tailored to the cognitive, social, and emotional development stages of elementary school students. Research by Hartono and Sari (2023) shows that teachers who conduct thematic mapping systematically are able to create more effective learning with a competency achievement rate 85% higher than conventional learning.

Thematic mapping involves identifying central themes that are relevant to students' lives, then integrating various subjects into those themes. For example, the theme "My School Environment" can integrate Indonesian Language (reading and writing about the environment), Mathematics (measuring and calculating the area of the school), Natural Sciences (observing ecosystems in the school environment), and Social Sciences (understanding social interactions at school).

In addition to cognitive strengthening, thematic mapping also supports the achievement of students' social-emotional aspects. Learning developed based on themes that are close to students' lives can facilitate cooperation, communication, and empathy through integrated group activities. Widodo and Setyawan (2021) emphasize that the selection of learning activities needs to consider the differences in developmental stages between lower and upper grades. In lower grades, concrete approaches such as thematic games and storytelling are more appropriate, while upper grades can be directed towards inquiry activities, simple data processing, and group discussions.

The implementation of thematic mapping is also in line with the principle of differentiated learning in the Merdeka Curriculum. This curriculum encourages teachers to develop learning objectives based on the characteristics and readiness of students, including in the selection of themes and activities (Kemendikbudristek, 2022). Thus, appropriate thematic mapping contributes to the effectiveness of the overall learning process and encourages the realization of learning experiences that are relevant, comprehensive, and oriented towards the needs of students.

#### **2. Integration of Local Wisdom and Contextual Learning**

The second strategy is to integrate local wisdom and contextual learning into integrated learning materials. The Merdeka Curriculum provides ample space for teachers to develop learning materials that are appropriate to the local context and culture. Research by Ningrum, Nandi, and Sungkawa (2018) proves that learning based on local wisdom can improve students' understanding of ethical values and character.

This strategy can be implemented by identifying local potential around the school, such as cultural traditions, handicrafts, unique flora and fauna, or local economic

activities. These materials are then integrated into various subjects to create meaningful learning that is relevant to students' lives.

This strategy can be implemented by identifying local potential around the school, such as cultural traditions, handicrafts, unique flora and fauna, or local community economic activities. These materials are then integrated into various subjects to create meaningful learning that is relevant to students' lives. Learning that emphasizes the local context not only fosters a love for local culture, but also builds students' identity and pride as part of their community (Rahmawati, Suryana, & Wahyuni, 2020).

For example, in the theme "Life Around Me," students can learn about local traditions through Indonesian Language by writing folk tales, Mathematics by calculating the production of local handicrafts, and Natural Sciences by observing plants unique to the region. This kind of integration supports the principles of holistic and interdisciplinary learning, which are the main characteristics of integrated learning in the Merdeka Curriculum (Kemendikbudristek, 2022). In addition, contextual learning based on local wisdom facilitates students' understanding of abstract concepts in a concrete way, because the material is learned through real experiences in the surrounding environment (Nugraha & Rohendi, 2021).

Another study conducted by Susanti and Taufik (2021) also shows that integrating local cultural values into learning increases student motivation and strengthens character values such as responsibility, cooperation, and tolerance. In the context of the Merdeka Curriculum, flexibility in selecting learning content provides ample opportunity for teachers to develop contextual and relevant material based on the needs and backgrounds of students (Zulfa & Irwanto, 2023). Therefore, the integration of local wisdom is not only an effective pedagogical strategy but also a form of cultural preservation and strengthening of national character through basic education.

### **3. Using Digital Technology and Multimedia Learning Resources**

In the digital age, teachers need to use technology for integrated learning. This strategy includes multimedia learning resources to enrich the use of various digital platforms, educational applications, and learning materials. Hidenat and Rosticawati (2018) have shown in their research that the use of digital media can significantly improve students' science skills.

Teachers can create engaging and interactive learning experiences using learning videos, interactive simulations, augmented reality applications, or online learning platforms. In addition, this technology also allows teachers to access learning resources from various regions around the world, broadening students' knowledge and perspectives.

Furthermore, the use of technology enables personalized learning tailored to the needs and abilities of each student. According to Putra and Agustin (2021), the use of a Learning Management System (LMS) in integrated learning has been proven to increase students' independence in learning and provide more space for exploration of interdisciplinary material. In addition, technology also supports the integration of material

in a visual and dynamic manner, which is able to bridge students' understanding of abstract concepts through graphic and audio-visual representations (Supriyanto, 2022).

The Merdeka Curriculum encourages the use of digital technology to support the principles of differentiated and contextual learning. This is in line with the statement by the Ministry of Education, Culture, Research, and Technology (2022), which emphasizes that strengthening digital literacy in learning is one of the priorities of educational transformation. Teachers are expected to be able to select and modify digital learning resources in accordance with the integrated learning themes developed. For example, in the theme "My Heroes," teachers can integrate historical documentary videos, interactive quizzes, and digital maps into Indonesian language, social studies, and civics lessons to strengthen the interconnection between materials while developing students' digital literacy.

The strategy of using technology also expands access to learning resources from various cultural and geographical contexts. This opens up opportunities for students to gain a global perspective while still appreciating local values, making learning more inclusive and relevant (Rahman & Kurniawan, 2020). Thus, the integration of technology in integrated learning not only enriches the material but also encourages the realization of a Pancasila learner profile that is adaptive to the times.

#### **4. Collaborative Planning Involving Cross-Subject Teams**

The fourth strategy is to develop collaborative planning involving teachers from various subjects. The team teaching or co-teaching approach allows teachers to share their expertise and create more comprehensive integrated learning. Each teacher can contribute according to their expertise while maintaining the integration of learning themes.

This collaborative planning includes regular discussions between teachers, joint development of lesson plans, coordination in assessment, and joint reflection on the implementation of learning. This strategy not only improves the quality of learning but also develops teacher professionalism through the collaborative learning process.

Furthermore, collaboration between teachers can minimize material overlap and strengthen the interconnection between concepts from various disciplines. According to Trianto (2020), integrated learning designed by a cross-subject team produces a more comprehensive learning experience because students not only understand one point of view but are also able to see the connections between concepts holistically. This is very much in line with the essence of the Merdeka Curriculum, which emphasizes the development of students' competencies and character as a whole.

Collaborative activities can also be a means of increasing teachers' professional capacity, particularly in terms of developing learning designs, assessments, and the utilization of learning resources. A study by Widyastuti and Prasetyo (2021) shows that teachers who regularly participate in collaborative planning forums demonstrate significant improvements in pedagogical competence and reflective abilities, especially in the context of developing thematic-integrated learning in elementary schools.

The implementation of this strategy requires structural support from the school, including scheduling meetings between teachers, collaborative training, and a supervision system that supports cross-disciplinary learning innovation. Without such support, collaboration between teachers risks becoming a mere formality with no real impact on the quality of learning. Therefore, collaborative planning is not only a matter of technical strategy but also a commitment to a collective work culture within the school environment.

## 5. Continuous Evaluation and Reflection

The final strategy is the implementation of continuous evaluation and reflection on the effectiveness of integrated learning materials. Teachers need to consistently assess the achievement of learning objectives, student responses, and the suitability of materials to student characteristics. Evaluation is not only carried out on student learning outcomes, but also on the learning processes and strategies used.

Continuous reflection enables teachers to dynamically improve and adjust learning materials. Teachers can use various evaluation instruments such as student portfolio observation, peer assessment, and self-assessment to obtain a comprehensive picture of the effectiveness of learning.

### Implementation of Strategies in Learning Practices

**Table 1. Examples of Integrated Learning Strategy Implementation**

Strategy	Implementation	Success Indicators
Thematic Mapping	The theme “Water in Life” integrates science, mathematics, Indonesian language, and social studies	Students are able to relate the concept of water in various contexts.
Local Wisdom	Learning about “Traditional Regional Dance” is integrated with history, art, and mathematics	Students understand cultural values and can apply them in their lives.
Digital Technology	Use of simulation applications for integrated science learning	Increased engagement and understanding of concepts.
Team Collaboration	Science and Mathematics teachers collaborate on the “School Garden” project	More comprehensive and in-depth learning.
Continuous Evaluation	Formative and summative assessments using holistic rubrics	Constructive feedback for learning improvement.

The implementation of these strategies requires commitment and support from various parties, including school principals, teachers, students, and parents. The success of integrated learning is also determined by the availability of adequate facilities and infrastructure, as well as the ability of teachers to adapt strategies according to the context and specific needs of the school.

## D. CONCLUSION

Based on the results of the literature review, it can be concluded that determining effective integrated learning materials in the context of the Merdeka Curriculum requires the application of strategies that are planned, contextual, and student-centered. Five main strategies have been identified as having a significant contribution to improving the quality of integrated learning in elementary schools, namely: (1) thematic mapping based on student development stages, which allows teachers to develop materials according to the cognitive, social, and emotional characteristics of students; (2) integration of local wisdom and contextual learning, which fosters a sense of identity, cultural awareness, and the relevance of learning to students' real lives; (3) utilization of digital technology and multimedia learning resources, which supports more interactive, adaptive learning that is in line with the times; (4) Collaborative planning across subjects, which strengthens the integration of concepts and creates synergy among teachers in developing holistic learning; and (5) Continuous evaluation and reflection, which ensures that the learning process remains dynamic, responsive to students' needs, and constantly improving.

These five strategies not only support the achievement of the learning objectives set out in the Merdeka Curriculum, but also shape students who are able to think critically, creatively, and connect knowledge across disciplines. The implementation of these strategies must be carried out in an integrated manner by involving all education stakeholders—teachers, principals, students, and parents—in a supportive and collaborative learning environment.

The systematic and comprehensive implementation of these strategies can improve the quality of learning in elementary schools, develop students' competencies holistically, and support the achievement of the Merdeka Curriculum objectives. Teachers, as learning facilitators, need to continuously develop their professional skills to be able to apply these strategies effectively.

Thus, success in determining and implementing integrated learning materials is highly dependent on teachers' readiness to design adaptive strategies and structural support that facilitates innovation. This study is expected to serve as a practical reference and scientific contribution to the development of contextual and transformative learning practices in the era of the Merdeka Curriculum.

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