



Curriculum-Based Learning Design: Comparative Study of National, International, and Hybrid Curricula in Indonesian High Schools

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Abstract

This study aims to analyze and compare the learning designs implemented in three curriculum models at senior high schools in Indonesia: the national curriculum (Kurikulum Merdeka), the international curriculum (Cambridge International), and a hybrid curriculum combining both. The study draws on qualitative survey data from two schools, SMAN 39 Jakarta and Pesantren Kafila International, both applying the national curriculum, supplemented with secondary data from Global Prestasi School (GPS) Bekasi, which applies a hybrid curriculum combining Kurikulum Merdeka and Cambridge. The findings show that the learning designs of the three models differ in pedagogical approach, assessment methods, student engagement, and the relevance of content to real life. The national curriculum emphasizes student-centered learning through discussion and presentation; the international curriculum focuses on critical thinking and English proficiency; while the hybrid curriculum integrates the strengths of both to produce graduates who are academically competent and rooted in national character. The study concludes that no single model is absolutely perfect, but the hybrid approach holds strong potential for meeting the needs of 21st-century education in Indonesia.

1. INTRODUCTION

Education is the primary foundation for developing quality human resources. In the Indonesian context, the education system has undergone significant curriculum transformation in response to global dynamics and national needs. Law No. 20 of 2003 on the National Education System defines curriculum as a set of plans and arrangements regarding objectives, content, and learning materials, as well as the methods used as guidelines for organizing learning activities to achieve specific educational goals. Currently, three curriculum models are applied at the senior high school (SMA) level in Indonesia: first, the national curriculum embodied in Kurikulum Merdeka; second, international curricula such as Cambridge International Examinations (CIE) and the International Baccalaureate (IB); and third, a hybrid curriculum that combines both. Each model carries a different approach to learning design, whether in terms of educational philosophy, teaching methods, assessment systems, or content relevance.

Learning design is also an instructional planning process that comprehensively covers objectives, materials, methods, media, and evaluation. Cholilah et al., (2023) argue that

Kurikulum Merdeka encourages the development of student-centered learning designs that are responsive to local needs within the context of 21st-century learning. In a comparative study of Kurikulum 2013 and Kurikulum Merdeka in elementary schools in Garut Regency, concluded that Kurikulum Merdeka is more flexible and student-centered than its predecessor. At the senior high school level, Kurikulum Merdeka eliminates the Science/Social Studies/Language streaming system, replacing it with subject selection based on interests and talents from grade XI onward. Studying the implementation of Kurikulum Merdeka in senior high schools designated as Sekolah Penggerak (Mobilizing Schools), found that pioneer schools successfully implemented Project-Based Learning (PjBL), encouraging students to think critically and collaborate actively, with assessment shifting from a dominance of written exams toward comprehensive process-based assessment.

The international curriculum most widely adopted in Indonesia is the Cambridge curriculum, developed by Cambridge Assessment International Education (CAIE), part of the University of Cambridge, United Kingdom. Rifka dkk, (2024), analyzing the implementation of the Cambridge curriculum at an international school in Jakarta, found that it emphasizes flexibility in subject selection, the use of English as the main medium of instruction, and a globally standardized assessment system. More than 219 schools in Indonesia currently use the Cambridge curriculum (Education, 2021). In addition, the International Baccalaureate (IB) curriculum, originating from Geneva, Switzerland, is implemented by 52 schools across 11 provinces in Indonesia, known for its emphasis on holistic education encompassing students' academic, social, emotional, and personal development.

The hybrid curriculum integrates elements of both national and international curricula into a single, unified learning system. Didaktia, (2025) examined the management of a combined Cambridge and national curriculum at SMP Islam Al Abidin Surakarta, finding that merging the two curricula can holistically improve student competence when managed well. Research published by Didaktia, (2025) on the implementation of a combined Cambridge and Kurikulum Merdeka curriculum at SD Islam Al-Azhar 63 Palu showed that the two curricula share philosophical similarities, both being project-based and emphasizing 4C-skill development, with Project-Based Learning (PjBL) serving as an effective pedagogical bridge that encourages students to actively communicate, collaborate, think critically, and create. The issues examined in this article are: (1) How is learning design implemented in schools with the national curriculum? (2) What are the characteristics of learning design in the international curriculum? (3) How does the hybrid curriculum integrate both approaches? and (4) What are the implications of these differences in learning design for the quality of education in Indonesia?

2. METHOD

This study employs a qualitative descriptive approach with data collected through in-depth surveys, including structured interviews with teachers and students. Primary data were collected from two schools with different curriculum models, while data on the hybrid curriculum were obtained from secondary sources, including official school documentation, journal articles, and institutional reports. The research subjects consisted of: (1) teachers and students at SMAN 39 Jakarta, representing Kurikulum Merdeka in a public school; (2) teachers and students at Pesantren Kafila International, representing Kurikulum Merdeka in a religious-based school; and (3) secondary data from Global Prestasi School (GPS) Bekasi, representing the hybrid curriculum (Kurikulum Merdeka + Cambridge). The research instrument was an interview guide covering five dimensions of

learning design: (1) the type of curriculum implemented; (2) the adaptation of materials to student needs; (3) the learning approach (teacher-centered vs. student-centered); (4) the assessment system; and (5) the relevance of materials to real life. Data were analyzed using comparative thematic analysis.

3. RESULT AND DISCUSSION

This section presents the findings on the issues raised in this study, organized by curriculum model.

3.1 Learning Design Based on the National Curriculum (Kurikulum Merdeka)

a. SMAN 39 Jakarta

SMAN 39 Jakarta is a public school that has implemented Kurikulum Merdeka for four years. Based on interview results, the learning design at this school reflects the core, student-centered principles of Kurikulum Merdeka. In lesson planning, teachers begin by understanding students' characters and learning styles, whether auditory or visual. Material is then divided into smaller sub-topics, discussed, and presented by students using creative media such as Canva. This approach aligns with the principle of differentiated learning that characterizes Kurikulum Merdeka.

The assessment system at SMAN 39 Jakarta emphasizes the learning process more than final exam results alone. Teachers assess students' active participation in discussions, presentation skills, and question-and-answer interaction. Students confirmed that this assessment feels fair, as it values individual progress and active contribution to the learning process. In terms of content relevance, teachers have successfully linked biology material to real life. For example, in the digestive system topic, teachers discuss food nutrition and the long-term impact of food-industry technology on body health. Students reported that biology feels highly relevant because it addresses life mechanisms they experience daily.

b. Pesantren Kafila International

Pesantren Kafila International also implements Kurikulum Merdeka, but within a religious-based school context with its own learning traditions. The learning design at this school shows high flexibility in pedagogical approach. Teachers at Pesantren Kafila International use an adaptive approach, alternating between teacher-centered and student-centered methods depending on the material. The teacher-centered method is applied for explaining material that requires precision and conceptual depth, while the student-centered method is used to strengthen understanding through exploration and discussion. In designing lessons, teachers first refer to achievement indicators, then adjust them to the intended learning objectives, while still referring to the textbook as a guide.

The assessment system applies a balanced approach: process scores are taken from daily assignments, while result scores come from tests. Students responded positively to this system, considering it a better reflection of their actual abilities rather than exam performance alone. Students also appreciated teachers' direct, to-the-point teaching style, which they found efficient and easy to understand. In terms of relevance, grade XI biology material covering the human organ system was considered highly contextual. Students felt that studying the human body is knowledge they directly possess and experience, keeping their learning motivation strong.

Table 1. Comparison of Learning Designs at Two National-Curriculum Schools

No	Dimension	SMAN 39 Jakarta	Pesantren Kafila Internasional
1	Learning Approach	Predominantly student-centered; group discussion and presentation	Flexible; a mix of teacher-centered and student-centered
2	Main Method	Group discussion, creative presentation (Canva)	Structured lecture, discussion, question-and-answer
3	Assessment System	Process and active participation weighted more heavily than exams	Balanced: daily assignments (process) + tests (results)
5	Content Relevance	High; linked to real-world technology and health issues	High; human-organ material connected to students' own experience
6	Student Engagement	Very active; extensive presentation and independent exploration	Active; focused on concept understanding and practice questions

3.2 Learning Design Based on the International Curriculum

The international curriculum adopted in Indonesia, particularly Cambridge International, has learning-design characteristics fundamentally different from the national curriculum. Based on a literature review and data from Rifka dkk, (2024), learning design under the international curriculum is characterized by several key elements described below. First, in terms of curriculum planning, Cambridge-curriculum schools design learning based on a standardized global syllabus, while retaining flexibility to adapt content to local contexts. The Cambridge curriculum map covers four main stages (Cambridge Primary, Lower Secondary, Upper Secondary, and Advanced), enabling smooth transitions between levels and across countries.

Second, in terms of learning methods, the international curriculum consistently applies a student-centered approach that fosters critical, analytical thinking and public-speaking ability. As found by Rifka, (2024), teachers at an international school in Jakarta use images and videos as initial stimuli, then encourage students to independently identify issues and pose questions before discussion begins. Third, the assessment system under the Cambridge curriculum is highly standardized internationally. The IGCSE (International General Certificate of Secondary Education) exam, applied to grade 9-10 students, covers written, oral, and practical examinations with a grading range from A to G recognized by universities worldwide. This approach differs significantly from the memorization-based examinations that remain a component of the national curriculum.

Fourth, the use of English as the main medium of instruction is a striking distinction between the international and national curricula. Strong English competence prepares students to compete globally and to continue their education at leading universities worldwide. Fifth, the Cambridge curriculum emphasizes the development of individual interests and talents. Unlike the national curriculum, which requires all students to study all subjects, Cambridge allows students to focus on only the subjects that match their interests, enabling deeper and more focused mastery.

3.3 Learning Design Based on the Hybrid Curriculum: A Case Study of Global Prestasi

Global Prestasi School (GPS) is a Cooperative Education Unit (Satuan Pendidikan Kerjasama/SPK) that officially implements a hybrid curriculum, combining Kurikulum Merdeka (national) with the Cambridge curriculum (international), from elementary through senior high school level. GPS has received an excellent SPK accreditation from

the Indonesian Ministry of Education and Culture and is a partner of Cambridge Assessment International Education (CAIE).

Learning design at GPS senior high school integrates the Kurikulum Merdeka framework, which emphasizes holistic character and competence development, with Cambridge's global academic standards, covering AS and A Level subjects in Mathematics, ICT, Chemistry, Physics, Biology, and Economics. The bilingual learning program uses English as the medium of instruction, so students become accustomed to thinking and communicating in a global context.

In terms of the learning process, GPS adopts Project-Based Learning (PjBL) as its main approach, which is the meeting point between the philosophies of Kurikulum Merdeka and Cambridge. As revealed in Salsabila, (2025) research on the implementation of the combined Cambridge and Kurikulum Merdeka curriculum, both curricula are project-based, allowing teachers to implement them synergistically without pedagogical conflict. In this model, students are trained simultaneously in all four 4C skills.

The assessment system at GPS is dual in nature: process assessment follows Kurikulum Merdeka standards (portfolio, observation, and project-based assessment), while outcome assessment uses Cambridge standards (checkpoint progression tests and global exams conducted in English). This combination provides a more comprehensive picture of student competence from both local and international perspectives. Beyond academics, GPS also integrates a character-development program aligned with the Pancasila Student Profile, including habituation, life skills, and self-development programs. This ensures that the global strength of the Cambridge curriculum does not come at the expense of shaping students' national identity and values as Indonesian citizens.

Table 2. Comparison of Learning Designs Across Three Curriculum Models in Senior High Schools

Aspect	National Curriculum (SMAN 39 and Kafila)	International Curriculum (Cambridge/IB)	Hybrid Curriculum (GPS)
Basic Philosophy	National values, Pancasila character, local-global competence	Global standards, critical thinking, international competence	Integration of national values and global standards
Language of Instruction	Indonesian	English	Bilingual (Indonesian + English)
Learning Approach	Student-centered, project-based, group discussion	Student-centered, inquiry-based, critical thinking	Integrative PjBL, 4C skill development, inquiry
Assessment System	Process assessment + exams; emphasizes activeness and progress	Standardized international exams (IGCSE, A-Level), portfolio	Dual: national standard (process) + international (Cambridge exam)
Subject Selection	Flexible, based on interest (grades XI-XII)	Very flexible; students study only chosen subjects	Flexible; compulsory national subjects + Cambridge electives (AS/A Level)
International Recognition	National (Indonesia)	Global (160+ countries)	Dual: national + international (CAIE)
Character Development	Pancasila Student Profile (faith, mutual cooperation, independence, etc.)	Global (160+ countries)	Pancasila Student Profile + global citizenship

3.4 Comparative Analysis: Strengths and Challenges

The comparison of the three curriculum models above shows that each has its own strengths and challenges within the context of Indonesian education. Kurikulum Merdeka has succeeded in creating a more democratic and contextual learning space. Students at both SMAN 39 Jakarta and Pesantren Kafila International demonstrated active engagement in the learning process. However, its main challenge is inconsistent implementation across regions and dependence on the quality and creativity of individual teachers (Adelia, R.; Suyatno, S.; Hasanah, 2026)

The international curriculum excels in global standardization and preparing students to compete on the world stage. However, its high cost and exclusivity of access make it demographically uneven. There is also a risk of eroding local cultural values if it is not integrated with national wisdom. The hybrid curriculum implemented by GPS attempts to resolve this dichotomy. By integrating PjBL as a shared methodology, the hybrid curriculum is able to develop 4C skills simultaneously while still maintaining the formation of national character. Research by Salsabila, (2025) reinforces this finding, showing that collaboration between Kurikulum Merdeka and Cambridge in well-managed schools produces a positive impact on students' communication, collaboration, critical thinking, and creativity competencies.

4. CONCLUSION

Based on the comparative study of learning design across three curriculum models in Indonesian senior high schools, it can be concluded that the national curriculum, Kurikulum Merdeka, has successfully shifted the learning paradigm from a teacher-centered approach to a more dynamic, contextual, and student-centered model, as demonstrated by its implementation at SMAN 39 Jakarta and Pesantren Kafila International, which has produced positive outcomes in student engagement and learning relevance. Meanwhile, the international curriculum, particularly Cambridge and IB, offers strong advantages in global standardization, critical-thinking development, and preparation for international higher education, although its accessibility remains limited for most Indonesian students. The hybrid curriculum implemented by Global Prestasi School Bekasi further demonstrates that integrating Kurikulum Merdeka with the Cambridge curriculum is not only technically feasible but also pedagogically synergistic, especially through Project-Based Learning, which serves as a common platform for both curricula. However, no curriculum model can be regarded as entirely superior, as each has complementary strengths, and the selection of a curriculum must be aligned with the school's context, vision and mission, student needs, and available resources. Therefore, the government should promote cross-curriculum collaboration by strengthening the regulatory framework for SPK schools, teachers should receive cross-curriculum training to enable them to adopt the best principles from different curriculum models, and national schools should consider incorporating learning-design elements from international curricula, particularly competency-based assessment and global skills development, while continuing to preserve national values and identity.

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