

Integrative Curriculum Management for the Development of 21st-Century Student Competencies at SD Muhammadiyah 4 Surabaya

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Abstract: *This study aims to describe how curriculum management at SD Muhammadiyah 4 Surabaya contributes to the development of students' competencies, focusing on three aspects: planning, implementation, and evaluation. The research method used is a qualitative descriptive approach, with data collected through observations, interviews, and documentation. The study population includes the principal, vice principal for curriculum affairs, teachers, students, and parents. The findings indicate that SD Muhammadiyah 4 Surabaya has implemented an integrated curriculum combining local, national, and international elements. Curriculum planning is carried out through a School-Based Management (SBM) approach, with the development of a School Operational Curriculum (KOSP) aligned with the needs of 21st-century students. The curriculum implementation emphasizes structured learning, differentiated teaching strategies, and the reinforcement of Islamic values in all aspects of education, including the integration of the Pancasila Student Profile Strengthening Project (P5). Curriculum evaluation is conducted continuously through regular meetings, learning communities (Kombel), as well as formative and summative assessments to ensure effective learning. Overall, the integrated curriculum management at SD Muhammadiyah 4 Surabaya has successfully enhanced the quality of education through a systematic, collaborative approach based on Islamic values, fostering 21st-century student competencies. The implication of this research is that other schools seeking to improve their quality can adopt a similar integrated model, enabling students to excel academically while also developing strong moral and global competencies.*

Keywords: Curriculum Management, Student Competencies, 21st Century

Introduction

In the 21st century, various aspects of life have undergone significant changes due to the emergence of new technologies and the rapid advancement of artificial intelligence. These technological developments have had a major impact on daily life, including for Generation Alpha, born between 2010 and 2024. They are known as the "digital generation" because they have been familiar with technology since birth.¹ This ease of access brings

¹ Ahmad Hidayat, *Pendidikan Generasi Alpha - Jejak Pustaka* (Jejak Pustaka, 2021).

positive impacts, such as assisting children in learning, fostering creativity, and broadening their understanding of the digital world. However, there are also negative aspects, such as the potential for addiction, exposure to inappropriate content, and possible disruptions in social interaction and emotional development.² Therefore, parents and educators must guide and supervise children to ensure that technology is used appropriately.

Most Generation Alpha elementary school students spend a significant amount of time at school, making it essential to equip them with competencies in attitudes, knowledge, and skills. The integration of these three aspects fosters resilient, productive individuals who are prepared to contribute in an ever-evolving era.³ These competencies can be developed through a specially designed curriculum, such as the Integrated Curriculum Model, which combines academic learning, character development, and practical skills within a single learning system. An integrated curriculum is a curriculum design approach that connects various disciplines to provide students with a more contextual learning experience. Fogarty categorizes integration into three classifications: first, integration within a single discipline; second, integration across multiple disciplines; and third, a mixed integration approach.⁴ This method emphasizes the fusion of knowledge, skills, and attitudes into a cohesive learning experience, allowing students to recognize interconnections between subjects and apply them in real life.⁵ So, an integrated curriculum is closely linked to project-based and thematic learning models, enabling students to explore topics from multiple perspectives.

The implementation of an integrated curriculum has been adopted by several schools in Indonesia. According to a survey conducted by the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) in 2022, only about 35% of elementary schools in Indonesia have implemented an integrated curriculum model, with most still facing challenges in its execution.⁶ These challenges include the gap between theory and practice in curriculum development, inadequate teacher preparation, limited facilities

² Mathura Shanmugasundaram dan Arunkumar Tamilarasu, "The Impact of Digital Technology, Social Media, and Artificial Intelligence on Cognitive Functions: A Review," *Frontiers in Cognition* 2 (24 November 2023) DOI <https://doi.org/10.3389/fcogn.2023.1203077>

³ Tun Zaw Oo dkk., "Design-Based Learning in Higher Education: Its Effects in Students' Motivation, Creativity and Design Skills," *Thinking Skills and Creativity* 53 (1 September 2024). DOI <https://doi.org/10.1016/j.tsc.2024.101621>

⁴ Erwin Akib dkk., "Study on Implementation of Integrated Curriculum in Indonesia," *IJORER : International Journal of Recent Educational Research* 1, no. 1 (19 April 2020): 39–57, DOI <https://orcid.org/0000-0001-5453-2318>

⁵ Enakshi Sengupta, ed., *Integrative Curricula: A Multi-Dimensional Approach to Pedagogy* (Bingley: Emerald Publishing Limited, 2023).

⁶ Sukarno dkk., "Implementation of Independent Curriculum for Elementary Schools in Indonesian Schools Abroad," *Jurnal Penelitian Pendidikan IPA* 10, no. 10 (25 Oktober 2024): 7228–35, DOI <https://doi.org/10.29303/jppipa.v10i10.8398>

and infrastructure, and a lack of clear guidelines to achieve educational goals. According to the World Economic Forum, Indonesia remains at a mid-level ranking in the digital education readiness index compared to other Southeast Asian countries.⁷ These challenges highlight the gap between the implemented curriculum and the demands of 21st-century education, where the education system must equip students with global competencies.⁸ One solution to address these issues is to enhance the quality of the learning process and innovate the curriculum to better align with the needs of a generation growing up in the digital era, with a strong focus on student competency development.

Several previous studies have explored integrated curriculum development. First, a study titled "*Implementation of Integrated Curriculum Development at UIN Maulana Malik Ibrahim Malang*" revealed that the implementation strategy includes the initial stage, process, conclusion, and learning evaluation, which can serve as a guideline for other institutions in adopting a similar approach.⁹ Another study titled "*Practicing Curriculum Management: The Implementation of Integrated Curriculum Management in Islamic Schools*" examined curriculum planning, implementation, and evaluation at Chongkraksat Wittaya School, Pattani, Thailand. The school applies an integrative approach between religious curriculum (*Sassanah*), which comprises 40% of the content, and academic curriculum (*Saman*), which constitutes 60%.¹⁰ Studies on the integrated curriculum in the context of Generation Alpha remain limited, especially in Indonesia. Most previous research has focused only on the general concept of the integrated curriculum without exploring how this approach can be adapted to address the challenges of education in the digital era. Therefore, this research holds a strategic position in filling the gap in curriculum management studies at the primary education level.

The phenomenon underlying this research is the gap between the demands of 21st-century education and a learning system that still heavily

⁷ Lalu Adi Adha, "Digitalisasi Industri dan Pengaruhnya terhadap Ketenagakerjaan dan Hubungan Kerja di Indonesia," *Jurnal Kompilasi Hukum* 5, no. 2 (30 Desember 2020): 267-98, <https://doi.org/10.29303/jkh.v5i2.49>

⁸ Herlinawati dkk., "The Integration of 21st Century Skills in the Curriculum of Education," *Heliyon* 10, no. 15 (15 Agustus 2024): e35148, [https://www.cell.com/heliyon/fulltext/S2405-8440\(24\)111796?uuiid=3Abeb69b96-916f-44ef-aa85-d0092138f43a](https://www.cell.com/heliyon/fulltext/S2405-8440(24)111796?uuiid=3Abeb69b96-916f-44ef-aa85-d0092138f43a)

⁹ Ikmal, Tobroni, dan Sutiah, "Implementasi Pengembangan Kurikulum Integratif di UIN Maulana Malik Ibrahim Malang," *Edukasi Islami: Jurnal Pendidikan Islam* 11, no. 001 (26 Desember 2022) <https://jurnal.staialhidayahbogor.ac.id/index.php/ei/article/view/3419/1394>

¹⁰ Edi Yulianto dan Agus Zaenul Fitri, "Practising Curriculum Management: The Implementation of Integrated Curriculum Management in Islamic School," *MANAGERIA: Jurnal Manajemen Pendidikan Islam* 6, no. 2 (31 Desember 2021): 205-22, DOI <https://doi.org/10.14421/manageria.2021.62-13>

relies on traditional approaches. Generation Alpha, growing up in the digital era, has different characteristics from previous generations. They tend to be more visual, interactive, and accustomed to technology, making conventional teaching methods often perceived as less effective in enhancing their interest and understanding. Integrated curriculum management has become an urgent necessity in the education sector to prepare a generation that is adaptive and competitive both nationally and internationally. One example of an institution implementing an integrated curriculum approach is SD Muhammadiyah 4 Surabaya. This school is known for its curriculum innovations aimed at enhancing students' competencies to better align with future demands and needs. Its location in the heart of Surabaya provides advantages in accessing modern educational resources, technology, and global community networks. Additionally, the school's management operates systematically with a well-structured organization, ensuring that every program and activity runs optimally. These achievements have positioned the school as a trendsetter and model for other institutions in innovative learning.

This study aims to explore the latest phenomenon related to integrated curriculum management at SD Muhammadiyah 4 Surabaya, focusing on curriculum planning, implementation, and evaluation. The selection of this research focus is based on the need to understand how the integration of local, national, and international curricula can be effectively implemented to enhance the quality of education. Furthermore, SD Muhammadiyah 4 Surabaya has demonstrated a systematic curriculum management approach rooted in Islamic values, making it a relevant model for in-depth study. The predicted outcomes of this research include identifying key success factors in implementing an integrated curriculum, the challenges faced by schools in managing the curriculum, and innovative strategies employed to ensure sustainable and effective learning. Thus, this study is expected to provide practical recommendations for other schools in designing and adapting curricula that meet the needs of students in the global era. This study contributes to enriching the literature on educational innovation based on integrated curriculum management, providing insight for stakeholders in formulating more adaptive educational policies that are oriented to the needs of the 21st century.

Method

This research employs a qualitative approach with a descriptive study type to gain an in-depth understanding of the management of an integrative curriculum in developing 21st-century student competencies at SD Muhammadiyah 4 Surabaya. The main focus of this study is to analyze the planning, implementation, and evaluation of the integrative curriculum that accommodates 21st-century competencies, namely character, citizenship, critical thinking, creativity, collaboration, and communication. Data is collected through in-depth interviews, direct observations, and document

studies. Interviews are conducted with the principal, vice principal for curriculum affairs, classroom teachers, and students. Observations take place in classrooms and the school environment to examine curriculum implementation and learning activities that support 21st-century competencies. The document study includes an analysis of curriculum documents, learning tools, and educational policies implemented at SD Muhammadiyah 4 Surabaya.

Table 1. Research Informants and Interview Themes

No.	Informant	Interview Themes
1.	Headmaster (Male, S2)	• Vision and mission of the school in implementing an integrative curriculum. • The principal's role and strategies in curriculum management. • School policies related to the curriculum.
2.	Vice Principal of Curriculum (Female, S2)	• Planning and development strategies for the integrative curriculum. • Organization of curriculum components across different levels. • Coordination among teachers in curriculum implementation. • Evaluation and assessment of curriculum effectiveness.
4.	Teachers (Male and Female, S1 and S2)	• Teacher preparation in lesson planning. • Experiences in implementing the curriculum in the classroom. • Use of teaching methods, materials, and curriculum evaluation.
5.	Students (Male and Female)	• Students' perceptions of the school curriculum. • Learning experiences with the integrative curriculum. • Implications of the integrative curriculum on student competencies

Data analysis follows the Miles and Huberman model, which consists of data collection, data condensation, data display, and conclusion drawing.¹¹ The analysis process begins with data collection through interviews, observations, and documentation, followed by data selection and categorization. The categorized data is then presented descriptively to identify patterns in the implementation of the integrative curriculum. Conclusions are drawn by linking research findings with curriculum management theories and 21st-century student competencies. To ensure data validity, this research applies member checking and triangulation of sources and methods, ensuring that the findings provide an accurate depiction of integrative curriculum management at SD Muhammadiyah 4 Surabaya.

Result

SD Muhammadiyah 4 Surabaya, also known as Mudipat, operates under the supervision of PCM Ngagel. The school implements an integrated curriculum approach, emphasizing 4 competencies: religion, academics, character, and life skills. Religious education serves as the fundamental foundation embedded in every learning activity. Mudipat applies six types of curricula. Three of these are academic curricula, namely the Merdeka Curriculum, the Al-Islam Kemuhammadiyah Curriculum, and the Cambridge Curriculum, which are designed to provide a strong academic foundation alongside deep religious education. Meanwhile, three character-building and habituation-based curricula include the Child-Friendly School Curriculum, the Arek Suroboyo Curriculum, and the Circular Curriculum, aimed at creating a safe and inclusive learning environment while instilling social and environmental awareness values.

The curriculum integration model at SD Muhammadiyah 4 Surabaya aligns these six curricula within a unified learning system. Single-discipline integration is implemented using the Connected Model, such as in science subjects that link concepts from the Merdeka Curriculum and Cambridge Curriculum. Cross-disciplinary integration follows the Webbed Model, as seen in environmental projects that merge Science, Social Studies, and Islamic Studies. Meanwhile, student-centered integration adopts the Networked Model, allowing students to explore subjects based on their interests through project-based learning and extracurricular activities. This approach makes learning more contextual, strengthens Islamic character, and equips students with 21st-century skills. This comprehensive integration ensures a holistic education that nurtures academic excellence, character development, and essential life skills for future-ready students.

¹¹ Qomaruddin dan Halimah Sa'diyah, "Kajian Teoritis Tentang Teknik Analisis Data Dalam Penelitian Kualitatif: Perspektif Spradley, Miles Dan Huberman," *Journal of Management, Accounting, and Administration* 1, no. 2 (1 Desember 2024): 77–84, DOI <https://doi.org/10.52620/jomaa.v1i2.93>

The implementation of this integrated curriculum requires a systematic and structured curriculum management system. The management process involves 4 activities: Planning, Organizing, Actuating, and Controlling (POAC). However, the "organizing" phase is often merged with the "planning" stage, so that it becomes 3, namely planning, implementation, and evaluation. The curriculum management at SD Muhammadiyah 4 Surabaya is well-structured and runs smoothly due to the established guidelines and Standard Operating Procedures (SOP). These guidelines cover the planning, implementation, and evaluation of an integrated curriculum.

Planning the Integrative Curriculum for 21st-Century Student Competencies at SD Muhammadiyah 4 Surabaya

Table 2. Curriculum Planning

Research Findings	Description
Multicurriculum Integration at SD Muhammadiyah 4 Surabaya	Curriculum integration is divided into two categories: academic curriculum (Merdeka Curriculum, Al-Islam Kemuhammadiyah Curriculum, and Cambridge Curriculum) and character-based curriculum (Child-Friendly School Curriculum, Arek Suroboyo Curriculum, and Circular Curriculum).
Operational Guidelines (KOSP))	The curriculum document is supported by a special guideline book prepared at the beginning of the academic year, ensuring that all teachers understand and implement learning strategies in line with the established educational direction.
Curriculum Team Formation	A Curriculum Team is formed to design, develop, and evaluate the curriculum to align with educational policies and competency needs.
Curriculum Planning Steps	1) Analyzing the context and characteristics of the educational institution. 2) Formulating the vision, mission, and goals. 3) Organizing the learning process. 4) Developing lesson plans. 5) Conducting evaluation, professional development, and mentoring.
Teacher Competency Enhancement Program	This program is carried out through regular meetings, workshops, and participation in learning communities (Kombel) and the K3S program.

Implementation of an Integrative Curriculum for Developing 21st-Century Student Competencies at SD Muhammadiyah 4 Surabaya

Table 3. Curriculum Implementation

Research Findings	Description
Structured Communication and Coordination System	The curriculum planning document at SD Muhammadiyah 4 Surabaya has been successfully developed into a concrete implementation program through intensive socialization and a structured communication system.
Utilization of Technology in Learning	SD Muhammadiyah 4 Surabaya supports learning with technology through a Learning Management System (LMS), a computer laboratory, and digital facilities such as Smart TVs and tablets in every classroom.
Learning Programs Based on the Operational Curriculum (KOSP)	The learning programs at SD Muhammadiyah 4 Surabaya include project-based methods, daily reflection and evaluation, positive culture implementation, shadow teacher assistance for students with special needs, 39 extracurricular activities, formative and summative evaluations, learning community (Kombel) programs, and other initiatives.
Supervision in Curriculum Implementation	Supervision is carried out internally by the principal and the curriculum team, as well as externally by education office supervisors, covering administrative aspects.

Evaluation of an Integrative Curriculum for 21st-Century Student Competency Development at SD Muhammadiyah 4 Surabaya

Table 4. Curriculum Evaluation

Research Findings	Description
Regular Curriculum Evaluation	Curriculum evaluation is conducted through leadership meetings, official staff meetings, and learning communities to ensure uniform teaching quality, assess students' material comprehension and skills, and follow up on evaluation results with teacher training and student mentoring.

Learning Community (Kombel) in Curriculum Evaluation	A platform for principals, teachers, and class coordinators to evaluate and develop learning processes, ensuring consistent teaching quality across parallel classes. This includes discussions on KOSP, lesson plans (RPP), teaching modules, ATP, learning materials, assessments, report card evaluations, differentiated learning, and the Merdeka Teaching Platform (PMM).
System-Based Management and SOP	SD Muhammadiyah 4 Surabaya implements standard operating procedures (SOP) in all areas, promotes teamwork based on collaboration principles, ensures efficient internal coordination, and enforces policy monitoring mechanisms to maintain consistency.

Discussion

Planning the Integrative Curriculum for 21st-Century Student Competencies at SD Muhammadiyah 4 Surabaya

Curriculum planning at SD Muhammadiyah 4 Surabaya is conducted at the beginning of each academic year, guided by the Kurikulum Operasional Satuan Pendidikan (KOSP) or the School Operational Curriculum. The Vice Principal for Curriculum Affairs explained, "*The KOSP guidelines are provided at the beginning of the year. Initially, we design the curriculum and then distribute it to each teacher.*" Curriculum planning must be conducted comprehensively to provide a clear direction for teachers in implementing classroom learning.¹² With thorough planning, all teachers gain a uniform understanding of educational objectives, teaching strategies, and assessment methods, ensuring that learning is effective and aligned with students' needs.

Curriculum planning at SD Muhammadiyah 4 Surabaya is based on philosophical, pedagogical, and regulatory foundations, designed to align with the school's vision, mission, and objectives. The curriculum is developed collaboratively, involving the internal curriculum team, academics from universities, school supervisors, and the school foundation. This aligns with research stating that curriculum development should involve expert teams to remain relevant to scientific advancements and educational needs.¹³ The curriculum is designed to meet students' needs, aiming to produce graduates with a global outlook, high competitiveness, and adaptability in society.

¹² Thomas K. F. Chiu dan Ching-sing Chai, "Sustainable Curriculum Planning for Artificial Intelligence Education: A Self-Determination Theory Perspective," *Sustainability* 12, no. 14 (January 2020): 5568. DOI <https://doi.org/10.3390/su12145568>

¹³ Jane Southworth dkk., "Developing a model for AI Across the curriculum: Transforming the higher education landscape via innovation in AI literacy," *Computers and Education: Artificial Intelligence* 4 (1 January 2023): 100127. DOI <https://doi.org/10.1016/j.caeai.2023.100127>



Figure 1. Steps in Curriculum Planning at Mudipat

This image illustrates the curriculum planning process within an educational institution, consisting of five main stages: analyzing school characteristics, formulating vision and mission, determining learning organization, developing lesson plans, and designing evaluation and professional development. This process is cyclical, where short-term (semester/yearly) and long-term (4-5 years) evaluation results are used to refine and adjust the curriculum to remain relevant. This model emphasizes a systematic and data-driven approach in education, ensuring that learning is not only well-planned but also evolves according to student needs and contemporary demands.

- a. Analyzing the Context and Characteristics of the Educational Institution
- The analysis of the institution's context and characteristics aims to understand the social and cultural background as well as the student's needs so that the designed curriculum is relevant and effective.¹⁴ At SD Muhammadiyah 4 Surabaya, this analysis includes mapping internal factors such as the availability of school resources, facilities, and student profiles, as well as external factors like community expectations and national education policies. Additionally, technological developments are considered, ensuring

¹⁴ Ifti Luthviana Dewi, "Analisis Karakteristik dan Kebutuhan Peserta Didik dalam Pembelajaran Bahasa Inggris untuk Pengembangan Modul Ajar," *Ideguru: Jurnal Karya Ilmiah Guru* 9, no. 1 (2024): 279-84, DOI <https://doi.org/10.51169/ideguru.v9i1.749>

that the curriculum is more integrated with digital technology to accommodate students' modern learning patterns.

b. Formulating Vision, Mission, and Objectives

The formulation of the vision, mission, and objectives in the curriculum planning at SD Muhammadiyah 4 Surabaya refers to the school's vision: "To Become an Excellent and Globally Competitive School." This vision serves as the primary foundation in determining the direction of education, which is then broken down into missions and objectives that support the formation of graduates with strong character, achievements, and readiness to compete globally. Therefore, every aspect of the curriculum is designed to foster an outstanding and adaptive generation.

c. Organizing Learning

The learning organization at SD Muhammadiyah 4 Surabaya involves structuring the curriculum, learning methods, and teaching strategies to align with 21st-century education needs. The curriculum structure is competency-based, integrating intra-curricular, co-curricular, and extracurricular learning. Intra-curricular learning follows learning outcomes through various subjects taught according to national standards. Co-curricular activities focus on strengthening the Pancasila Student Profile through thematic projects. Extracurricular programs include 39 activities conducted daily after school hours, providing students with opportunities to develop their interests and talents.

Teaching strategies are adjusted according to each grade level's needs. Project-based and contextual learning approaches are used to increase student engagement in the learning process, as recommended by constructivist education theory.¹⁵ Technology is also utilized as a learning tool, particularly for students in grades 4 to 6, who are required to bring tablets to support a paperless learning method. In teacher assignment distribution, the school considers educational background, experience, and competence to maintain high-quality learning. Teacher rotation is conducted annually to enhance teaching experience and creativity.

d. Developing Lesson Plans

The lesson planning documents include various components such as syllabi, lesson plans (RPP), teaching modules, learning materials, student worksheets, teaching media, assessment instruments, and evaluation journals. These documents are prepared by teachers and reviewed by the

¹⁵ Risti Pratami, "Pendekatan Konstruktivisme dalam Kebijakan Pembelajaran Berbasis Proyek: Transformasi Pendidikan Menuju Kreativitas dan Kolaborasi," *Jejaring Administrasi Publik* 16, no. 2 (31 Desember 2024): 76-87, doi 10.20473/jap.v16i2.60539

Vice Principal for Curriculum Affairs and the Curriculum Affairs Head before being used in the teaching and learning process.

In formulating learning objectives, teachers refer to the Learning Outcomes (CP) that have been established. These are then adapted into Learning Objectives Flow (ATP), which serves as a guide for structuring the stages of student competency achievement. One challenge teachers face is making CP more applicable within a semester. Teachers also prepare evaluation methods and tools to measure learning effectiveness. Assessments include formative and summative assessments, aligned with the taught material. Digital platforms such as Quizizz and Kahoot are used to make assessments more interactive and engaging for students.

Each teacher is required to develop annual and semester lesson plans, considering the number of effective months in a semester. By following the provided curriculum framework, teachers can systematically organize content units, ensuring structured learning. Document analysis shows that standard operating procedures (SOPs) and standardized templates are used in lesson planning. This standardization ensures uniformity while allowing teachers flexibility to innovate according to student needs. With a well-structured lesson planning system, SD Muhammadiyah 4 Surabaya ensures that every aspect of the learning process runs effectively and adheres to competency-based education principles.

e. Evaluation, Professional Development Programs for Educators, and Teacher Mentoring

Evaluation is conducted by the curriculum team, the principal, supervisors, and relevant stakeholders to ensure compliance with educational standards. Additionally, professional development programs for teachers, such as competency-based training, workshops, and learning communities, are implemented to enhance pedagogical skills and curriculum adaptation.

Teacher mentoring is also carried out through coaching and mentoring sessions led by the principal, supervisors, or senior educators. Mentoring is conducted as the curriculum plan is implemented in the field to ensure that the teaching process aligns with the intended objectives.

Implementation of an Integrative Curriculum for Developing 21st-Century Student Competencies at SD Muhammadiyah 4 Surabaya

The principal plays a key role in conveying all programs to all stakeholders, including teachers, students, and parents, to ensure that the learning program runs smoothly. This is carried out through socialization, coordination meetings, and internal discussions. Changes in education require the active involvement of all stakeholders through clear

communication and systematic implementation strategies.¹⁶ The curriculum planning document is developed into an implementation program, which is manifested in learning across various subjects and supporting activities. The implementation of the integrative curriculum at SD Muhammadiyah 4 Surabaya consists of two aspects: curriculum implementation programs and supervision of their execution.

a. Curriculum Implementation Program

The curriculum at SD Muhammadiyah 4 Surabaya follows the School Operational Curriculum (KOSP), which serves as a guideline for implementing the curriculum uniformly in all classes. The class coordinator ensures that teaching methods are aligned so that all students receive equal and high-quality learning experiences. While the learning materials are standardized, teaching methods can be adapted to each teacher's teaching style. Learning approaches tailored to students' characteristics can enhance comprehension and motivation. The project-based learning (PBL) approach is widely applied to encourage students to be more active, and creative, and gain a deeper understanding of the material.¹⁷

The learning schedule is structured, beginning with a "zero period" from 07:00 to 07:30 for non-academic activities such as cheerful exercise, prayer, and *murojaah* (Qur'an review). At the end of each session, reflection, prayer, and evaluation take place. Teachers create their own teaching materials to better suit students' needs. Learning is also supported by a Learning Management System (LMS), designed to facilitate access for students, teachers, and parents. The LMS interface differs for each user: students can access digital materials, assignments, and quizzes, while teachers can upload and manage learning content. Parents have limited access to monitor student attendance. The school's facilities and infrastructure support technology-based learning.

Assessment consists of formative and summative evaluations. Formative assessment provides feedback for both educators and students to improve the learning process, while summative assessment ensures the achievement of learning objectives.¹⁸ The assessment model includes written

¹⁶ Agusnani dkk., "Strategi Manajemen Perubahan dalam Meningkatkan Kinerja Pendidik di SMP Se-Kecamatan Sintang," *Jurnal Manajemen Pendidikan Al Hadi* 5, no. 1 (31 Januari 2025): 1–9. DOI <http://dx.doi.org/10.31602/jmpd.v5i1.16538>

¹⁷ Nadia Rehman dkk., "Project-Based Learning as a Catalyst For 21st-Century Skills and Student Engagement in The Math Classroom," *Heliyon* 10, no. 23 (15 Desember 2024): e39988, DOI <https://doi.org/10.1016/j.heliyon.2024.e39988>

¹⁸ Manahan Efendi dkk., "Penerapan Asesmen Formatif dan Sumatif dalam Kurikulum Merdeka di Madrasah Aliyah Swasta Darul Hadits Huta Baringin," *Cognoscere: Jurnal Komunikasi Dan Media Pendidikan* 2, no. 2 (23 Mei 2024): 64–72, DOI <https://doi.org/10.61292/cognoscere.169>

tests, projects, and attitude assessments based on indicators such as teamwork and honesty, in line with the values of the Pancasila Student Profile Strengthening Project (P5). Examinations are conducted online (paperless), following the recommendation of Ningsih¹⁹, who stated that digitalization in academic evaluation enhances efficiency and accuracy. The extracurricular coordinator manages digital registration, ensuring student data is automatically recorded and submitted to homeroom teachers for report evaluation. Student promotion to the next grade is determined through a teacher council meeting, considering academic scores, a minimum attendance rate of 90%, and good behavior.

SD Muhammadiyah 4 Surabaya also implements a positive school culture, reinforced through regular social activities. This cultural approach aims to create a conducive school environment for strengthening student character through the curriculum. With this culture, students are accustomed to applying noble values in their daily lives, both inside and outside of school.²⁰ Although not an inclusive school, SD Muhammadiyah 4 Surabaya accepts students with special needs (*Anak Berkebutuhan Khusus* or ABK) who are assisted by shadow teachers. Initial observations are conducted to identify students' special needs and communicate to parents for mutual understanding. This approach ensures that every student receives appropriate support, allowing them to develop optimally in an inclusive and supportive learning environment.

b. Supervision of Curriculum Implementation

According to Zackariasson & Magnusson²¹, academic supervision helps teachers improve learning quality through various approaches such as classroom observations, reflection, and continuous training. At SD Muhammadiyah 4 Surabaya, supervision is conducted by the principal, the curriculum team, and external supervisors. The supervision model combines traditional and contemporary approaches. Traditional supervision includes direct observation, which consists of a pre-observation phase (initial discussion with teachers), observation (direct monitoring in class), and post-

¹⁹ Wirda Ningsih, "Lecturers' Perceptions of The Use Of E-Evaluation In Assessing The Academic Achievement of Students Of The Islamic Religious Education Study Program," *Fitrah: Journal of Islamic Education* 5, no. 1 (30 Juni 2024): 74-97. DOI <https://doi.org/10.53802/fitrah.v5i1.822>

²⁰ Aninda Tri Safinatun Najah dkk., "Manajemen Kurikulum untuk Penguatan Pendidikan Karakter Gen-Z Muslim di SD Plus Al-Kautsar Malang," *Islamic Management: Jurnal Manajemen Pendidikan Islam* 7, no. 001 (30 November 2024), DOI <https://doi.org/10.30868/im.v7i001.7464>

²¹ Maria Zackariasson dan Jenny Magnusson, *Supervising Student Independence: A Research-Based Approach to Academic Supervision in Practice*, 2024th edition (Cham: Palgrave Macmillan, 2024). DOI <http://dx.doi.org/10.1007/978-3-031-66371-0>

observation (evaluation and reflection). Meanwhile, contemporary supervision, such as clinical supervision, emphasizes a collaborative relationship between the supervisor and teacher to enhance learning quality.

The school also receives external supervision from the local education office. This supervision is conducted monthly and focuses on monitoring the learning process, administrative completeness, and the effectiveness of teaching methods. Education inspectors review learning documents such as teaching modules and evaluation reports before directly observing the learning process in classrooms. The results of the supervision serve as a basis for providing constructive feedback to teachers. Supervision instruments include observation guidelines, interviews, and checklists to assess real classroom conditions. The success of supervision depends on selecting the right instruments, as Adang, et al²² emphasized that supervision must be data-driven and oriented toward teacher professionalism development.

The results of academic supervision are followed up with various teacher competency development programs. The principal motivates students and teachers in various ways, such as during flag-raising ceremonies, before *Dhuha* and *Zuhur* prayers, and before competitions. If students experience learning difficulties or lack motivation, special approaches are applied, including consultations with the Guidance and Counseling (BK) team. SD Muhammadiyah 4 Surabaya provides training, workshops, Focus Group Discussions (FGD), and in-house training for teachers. Moreover, teachers are encouraged to participate in online training programs through platforms such as *Merdeka Mengajar* (PMM). Another approach applied is collaborative learning among teachers through learning communities (*Komunitas Belajar* or *Kombel*) and team teaching. *Kombel* serves as a collaborative platform for teachers to improve learning quality through discussions, curriculum evaluations, and sharing best practices. Senior teachers mentor their colleagues in using educational technology tools such as Canva and Quizziz to enhance teaching effectiveness.

Evaluation of an Integrative Curriculum for 21st-Century Student Competency Development at SD Muhammadiyah 4 Surabaya

Evaluation plays a crucial role in measuring the effectiveness of educational programs in achieving their intended goals. Through systematic assessment, educators can identify strengths, address weaknesses, and make

²² Adang Danial, Mumu, dan Dedi Nurjamil, "Model Supervisi Akademik Berbasis Digital oleh Kepala Sekolah Dalam Meningkatkan Profesionalisme Guru PAUD," *Jurnal Educatio FKIP UNMA* 8, no. 4 (29 Desember 2022): 1514–21, DOI <https://doi.org/10.31949/educatio.v8i4.3922>

necessary improvements to enhance learning outcomes.²³ In the context of SD Muhammadiyah 4 Surabaya, evaluation is conducted to measure the effectiveness of the integrative curriculum in shaping 21st-century student competencies. According to the school principal, evaluations are conducted regularly through various mechanisms, including leadership meetings and learning community meetings (Kombel). Leadership meetings are held every Wednesday to discuss monitoring and evaluation results from each department. If any issues arise, meetings can be rescheduled or conducted urgently outside the regular schedule. Additionally, teacher meetings are held twice a month, and Kombel meetings occur every Saturday to align learning progress in parallel classes.

This evaluation is based on a school-based management (SBM) approach, where all stakeholders actively participate in planning, implementing, and evaluating educational policies.²⁴ In Kombel, evaluation activities cover various aspects, including 1) Reviewing the School Operational Curriculum (KOSP) to align with lesson plans (RPP) and teaching modules, 2) Assessing the suitability of lesson plans and teaching modules with student needs, 3) Reviewing the learning objectives sequence to ensure students' competency achievement aligns with the curriculum, 4) Evaluating teaching materials for relevance, 5) Conducting assessments and report evaluations to measure student achievement, 6) Reviewing modules to develop the Pancasila Student Profile Strengthening Project (P5), 7) Best practices and differentiated learning to share innovative teaching strategies.

Field observations indicate that this evaluation approach, based on routine meetings, successfully maintains alignment in learning across all classes. Teachers actively synchronize teaching materials to prevent disparities among parallel classes. Additionally, student evaluations cover not only academic aspects but also attitudes and behaviors. According to the Vice Principal of Curriculum, students' confidence levels are assessed based on their participation in various class activities. If students are found to lack confidence or perform poorly, the causes are analyzed, and appropriate learning interventions are provided.

Based on the analysis results, the evaluation model implemented at SD Muhammadiyah 4 Surabaya contributes to improving the quality of learning

²³ Aninda Tri Safinatun Najah, "Evaluasi Program Kelas Tahfizh Al-Qur'an dengan Model CIPP di Pondok Pesantren Tahfidz Muhammadiyah Al Fattah Malang," *Jurnal Evaluasi Pendidikan* 15, no. 2 (25 Desember 2024): 51–62.

²⁴ Farida Listyari, Titik Haryati, dan Endang Wuryandini, "Implementasi Manajemen Berbasis Sekolah dalam Meningkatkan Mutu Pendidikan di SMA N 1 Jepon Blora," *Journal on Education* 7, no. 1 (14 Desember 2024): 8307–13. <https://ojs-steialamar.org/index.php/JAA/article/view/193>

by 1) Enhancing curriculum consistency, and ensuring that all parallel classes maintain the same teaching standards. 2) Strengthening coordination among teachers, facilitating active discussions in developing teaching strategies. 3) Ensuring a swift response to learning issues, both academic and non-academic.

SD Muhammadiyah 4 Surabaya applies the principle of "*dipikir bareng, dilakoni bareng, dirasakan bareng*" ("thought through together, implemented together, experienced together"), meaning all school decisions are discussed and executed collectively. This approach aligns with the principles of School-Based Management (SBM), which emphasizes collective decision-making to enhance school effectiveness.²⁵ Every department within the school, including student affairs, public relations, facilities, and curriculum, follows clear standard operating procedures (SOPs). This systematic approach ensures that tasks are carried out efficiently according to established work mechanisms. According to the school principal, this system follows the principle of "*working by system, not by presence*," meaning that tasks are executed based on procedures rather than individual presence alone.

Overall, the evaluation of the integrative curriculum at SD Muhammadiyah 4 Surabaya is conducted through a series of routine meetings, learning community discussions, and a team-based management system. This evaluation focuses not only on students' academic achievements but also on developing 21st-century skills. By implementing a system-based management approach, the school creates a high-quality, adaptive learning environment that is oriented toward continuous improvement in line with modern educational principles. This structured evaluation approach emphasizes continuous improvement based on empirical data. With clear SOPs in place, the school ensures that every decision is made based on effective and sustainable management principles.

Conclusion

Based on the research findings, the integrative curriculum management at SD Muhammadiyah 4 Surabaya is designed to develop 21st-century student competencies by harmonizing six curricula into a unified learning system. The school connects various disciplines, strengthens Islamic character values, and equips students with relevant skills for the modern era. The curriculum planning, implementation, and evaluation processes are conducted collaboratively and data-driven to ensure effective learning outcomes. Additionally, the integration of technology, innovative teaching strategies, and continuous professional development for educators further

²⁵ Yin Cheong Cheng, *School Effectiveness and School-Based Management: A Mechanism for Development*, 2 ed. (London: Routledge, 2022).

enhances a dynamic and globally competitive learning ecosystem. The applied system-based management approach not only enhances academic quality but also fosters character development and 21st-century competencies, including critical thinking, creativity, collaboration, and communication-based on Islamic values. Thus, this study contributes to the development of Islamic Education Management through an integrative curriculum model based on collaboration, continuous evaluation, and adaptation to the needs of modern education.

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