



Transforming Educational Leadership Curriculum Management Practices in Malaysian Secondary Schools

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ARTICLE INFO

Received March 4, 2025
Revised March 10, 2025
Accepted April 11, 2025
Available April 24, 2025

Keywords:

curriculum management, educational leadership, secondary schools, Malaysia, instructional quality

ABSTRACT

This study examines curriculum management practices in Malaysian secondary schools, investigating how school leaders navigate curriculum planning, implementation, monitoring, and evaluation within the context of ongoing educational reforms and increasingly diverse student populations. Employing a mixed-methods approach involving surveys of 380 school administrators and teachers from 52 secondary schools across Peninsular Malaysia, complemented by case studies of eight schools demonstrating varied curriculum management effectiveness, this research explores organizational structures, leadership approaches, collaborative processes, and accountability mechanisms shaping curriculum quality. Findings reveal significant variation in curriculum management sophistication, with high-performing schools characterized by distributed leadership, systematic planning processes, data-informed decision-making, continuous professional learning, and strong stakeholder engagement. Conversely, challenges persist including centralized control limiting local adaptation, insufficient instructional leadership capacity, time constraints for collaborative curriculum work, and assessment pressures narrowing curriculum breadth. Analysis identifies critical

success factors including principal instructional leadership, professional learning communities, alignment between national standards and local contexts, and balanced accountability emphasizing both compliance and innovation. This research contributes empirical evidence regarding effective curriculum management in Southeast Asian educational contexts.

INTRODUCTION

Curriculum management represents a critical dimension of educational leadership encompassing the systematic processes through which schools plan, organize, implement, monitor, and evaluate instructional programs to achieve desired learning outcomes for all students. Effective curriculum management extends beyond mere administrative compliance with mandated syllabi to encompass strategic leadership ensuring curriculum coherence, instructional quality, responsiveness to student needs, and continuous improvement based on evidence of learning effectiveness (Muhsyanur et al., 2021; Muhsyanur, 2024b). According to Glatthorn et al. (2018), curriculum management involves coordinating multiple components including written curriculum documents, taught curriculum in classrooms, assessed curriculum through examinations, learned curriculum reflected in student outcomes, and hidden curriculum embedded in school culture and practices. The complexity of aligning these elements while responding to diverse stakeholder expectations, policy mandates, and student needs requires sophisticated leadership capacities often underdeveloped in school administrators trained primarily as teachers rather than instructional leaders.

Malaysian education has undergone substantial reform over recent decades, with curriculum management assuming heightened importance as schools navigate implementation of various national initiatives including the Malaysia Education Blueprint 2013-2025, revised national curricula emphasizing higher-order thinking skills, 21st-century competencies, and STEM education priorities. These reforms position curriculum not as static content to be delivered but as dynamic framework requiring continuous adaptation, innovation, and improvement aligned with national development goals and global competitiveness demands. The Ministry of Education Malaysia (2013) articulates ambitious aspirations for curriculum transformation emphasizing student-centered pedagogies, authentic assessment, technology integration, and values education alongside academic excellence. However, substantial gaps often exist between policy intentions and implementation realities, with curriculum management quality varying considerably across schools based on leadership capacity, resource availability, organizational culture, and contextual factors (Muhsyanur et al., 2022).

Malaysian secondary schools face distinctive curriculum management challenges stemming from the country's multi-ethnic, multilingual society, streaming systems separating students by perceived ability and language medium,

centralized examination culture, and tensions between international benchmarking aspirations and local cultural values. Secondary curriculum encompasses diverse pathways including academic streams preparing students for university entry, vocational and technical programs, religious education tracks, and various medium of instruction options reflecting Malaysia's linguistic diversity. Harris and Jones (2019) describe how Malaysian school leaders must balance national curriculum standards ensuring consistency with local adaptation addressing specific student populations, community contexts, and school capacities—a challenging equilibrium requiring curriculum management expertise often not systematically developed through leadership preparation programs.

Theoretical frameworks for understanding effective curriculum management draw upon educational leadership, organizational learning, and instructional improvement literatures (Muhsyanur, 2023). Instructional leadership theory emphasizes principals' roles in defining school mission, managing instructional programs, and promoting positive learning climates—dimensions directly relevant to curriculum management. Distributed leadership perspectives recognize that curriculum work involves multiple actors beyond principals including heads of departments, subject coordinators, teacher teams, and external specialists, requiring coordination and shared responsibility. Marsh and Willis (2007) propose systematic curriculum management models encompassing needs assessment, goal setting, program design, implementation support, monitoring, evaluation, and revision—cyclical processes requiring both technical expertise and collaborative capacity (Muhsyanur, 2023).

Despite extensive research on curriculum and leadership independently, empirical investigations of curriculum management as integrated practice in specific national contexts remain limited, with most existing studies conducted in Western settings potentially limited in applicability to Malaysian educational realities. Malaysian education research has examined curriculum policy, instructional practices, and school leadership separately but rarely investigates the management processes linking these elements. Furthermore, much curriculum research focuses on classroom-level implementation without adequate attention to school-level organizational and leadership factors shaping what occurs in classrooms. Hussein (2020) notes that Malaysian educational administration research often emphasizes structural and procedural aspects while giving insufficient attention to the substantive instructional leadership work of curriculum management.

This study addresses these gaps by comprehensively examining curriculum management practices in Malaysian secondary schools, investigating how school leaders approach curriculum planning, implementation support, quality monitoring, and improvement, what organizational structures and processes characterize effective curriculum management, and what challenges impede curriculum management effectiveness. Research questions guiding this investigation include: What curriculum management practices do Malaysian secondary school leaders employ? How do high-performing schools' curriculum management approaches

differ from lower-performing schools? What factors facilitate or constrain effective curriculum management? How do school leaders balance centralized curriculum mandates with local adaptation needs? According to Hallinger (2018), answering these questions requires methodological approaches examining both formal management structures and actual leadership practices while accounting for contextual factors shaping implementation possibilities and outcomes.

METHODE

This research employed a convergent mixed-methods design integrating quantitative survey data with qualitative case study investigation to provide comprehensive understanding of curriculum management practices in Malaysian secondary schools. The quantitative phase involved administering online surveys to 380 participants including principals (n=52), senior assistants for curriculum (n=52), heads of academic departments (n=156), and teacher representatives (n=120) from 52 government secondary schools across five states in Peninsular Malaysia: Selangor, Penang, Johor, Perak, and Kelantan. Schools were selected through stratified random sampling ensuring representation across urban and rural locations, diverse student socioeconomic profiles, varied academic performance levels based on national examination results, and different school types including daily schools, boarding schools, and technical/vocational institutions. The survey instrument assessed curriculum management practices across five dimensions: strategic planning and goal setting, curriculum design and adaptation, implementation support and monitoring, professional development for curriculum delivery, and evaluation and continuous improvement. Items were adapted from validated leadership practice inventories and curriculum management frameworks, with reliability analysis in pilot testing yielding Cronbach's alpha coefficients ranging from 0.84 to 0.92 across subscales, indicating strong internal consistency.

The qualitative phase involved in-depth case studies of eight purposively selected schools representing diverse contexts and curriculum management quality levels based on survey results and academic performance data. Case study data collection included semi-structured interviews with school leaders (principals, senior assistants, department heads) and teachers, totaling 64 individual interviews and 16 focus group discussions with teacher teams. Additional data sources comprised document analysis of curriculum plans, meeting minutes, monitoring reports, and professional development records, alongside observation of curriculum-related meetings and professional learning activities across 48 sessions. Data analysis employed hierarchical linear modeling for survey data to account for nesting of respondents within schools, examining relationships between curriculum management practices and school performance outcomes while controlling for student socioeconomic composition and other contextual variables. Qualitative data underwent systematic thematic analysis using NVivo software, with initial coding conducted independently by multiple researchers to establish reliability before collaborative theme development. Integration of quantitative and qualitative

findings occurred during interpretation, using qualitative insights to explain statistical patterns and contextualize survey results while employing quantitative data to assess generalizability of themes emerging from cases. Ethical approval was obtained from the University of Malaya Research Ethics Committee and Malaysian Ministry of Education Educational Planning and Research Division, with informed consent secured from all participants and confidentiality protections implemented throughout data collection and reporting.

RESULT AND DISCUSSION

Curriculum Management Practice Patterns and School Performance

Survey data analysis reveals substantial variation in curriculum management practice sophistication across Malaysian secondary schools, with hierarchical cluster analysis identifying three distinct practice profiles based on patterns across the five curriculum management dimensions. High-capacity curriculum management schools (23% of sample) demonstrated strong practices across all dimensions, characterized by systematic strategic planning processes involving multiple stakeholders, evidence-based curriculum adaptation addressing student needs, regular monitoring of implementation quality, sustained professional learning focused on instructional improvement, and data-informed evaluation driving continuous refinement. These schools averaged significantly higher scores across all curriculum management subscales ($M = 4.2-4.6$ on 5-point scales) compared to moderate-capacity schools (52% of sample, $M = 3.1-3.5$) and low-capacity schools (25% of sample, $M = 2.1-2.7$).

Examining relationships between curriculum management practices and student academic outcomes reveals significant positive associations even after controlling for student socioeconomic composition and prior achievement. Schools scoring one standard deviation above the mean on overall curriculum management quality showed student examination pass rates approximately 12 percentage points higher than average-performing schools ($\beta = 0.48, p < 0.001$). Disaggregating by specific curriculum management dimensions, implementation monitoring and support showed strongest associations with student outcomes ($\beta = 0.54, p < 0.001$), followed by professional development quality ($\beta = 0.47, p < 0.001$) and strategic planning rigor ($\beta = 0.41, p < 0.01$). These patterns suggest that while all curriculum management dimensions matter, those directly supporting teachers' instructional capacity and ensuring quality implementation prove particularly consequential for learning outcomes.

However, qualitative case study data provides important nuance to these statistical relationships, revealing that curriculum management's influence on student learning operates through complex pathways rather than direct linear relationships. High-performing schools demonstrated curriculum management serving as foundation for instructional coherence – ensuring teachers across subjects and grade levels pursued aligned learning goals through coordinated approaches rather than operating in isolation. One principal from a high-capacity school

described: "Our curriculum management systems ensure everyone understands where we're heading and how their teaching contributes. Teachers aren't just covering content; they're building toward specific competencies we've identified as priorities." This coherence appeared to enhance cumulative learning as students progressed through grade levels, with knowledge and skills building systematically rather than fragmenting across disconnected experiences.

Leadership Approaches and Organizational Structures Supporting Curriculum Management

Analysis of leadership practices reveals that effective curriculum management in Malaysian schools depends critically on principals who combine instructional leadership expertise with capacity to build distributed leadership structures engaging multiple actors in curriculum work. High-capacity schools featured principals who personally demonstrated deep understanding of curriculum, pedagogy, and assessment while simultaneously creating organizational systems distributing curriculum management responsibilities across senior leadership teams, department heads, and teacher teams. Survey data indicates principals in high-capacity schools spent significantly more time on instructional leadership activities including classroom observation ($M = 6.8$ hours/week) and curriculum review ($M = 5.2$ hours/week) compared to moderate-capacity (4.1 and 3.3 hours respectively) and low-capacity schools (2.4 and 1.9 hours respectively), $F(2, 49) = 18.7, p < 0.001$.

Organizational structures supporting curriculum management showed clear patterns distinguishing high-performing schools, particularly regarding collaborative time allocation and meeting structures (Ahmad Nur, Muhsyanur Muhsyanur, 2024; Muhsyanur, 2024a). High-capacity schools built regular, protected time for curriculum-focused collaboration into schedules, with teacher teams meeting weekly to plan instruction, examine student work, and refine teaching approaches. One senior assistant for curriculum explained: "We protect Wednesday afternoons for subject department meetings focused on curriculum. No other meetings can be scheduled then. This sends a message that curriculum work is our priority." These structured collaboration opportunities contrasted sharply with low-capacity schools where curriculum discussions occurred sporadically if at all, with teachers largely working individually (Ahmad Nur, Muhsyanur Muhsyanur, 2024). Meeting observations revealed that productive curriculum collaboration required skillful facilitation, clear protocols, and focus on student learning evidence rather than merely administrative coordination.

The role of middle leaders—particularly heads of academic departments and subject coordinators—emerged as critical yet often underdeveloped in Malaysian school curriculum management. High-capacity schools invested substantially in developing middle leaders' curriculum expertise through targeted professional development, mentoring, and distributed authority for instructional decisions. These middle leaders served as bridges between school-level strategic planning and classroom-level implementation, translating curriculum goals into subject-specific

approaches, supporting teachers' instructional development, and monitoring implementation quality. However, survey data revealed that 67% of department heads across all schools felt inadequately prepared for curriculum leadership responsibilities, with most receiving no formal training for these roles beyond subject matter expertise. This preparation gap appeared to significantly limit curriculum management effectiveness, particularly in moderate and low-capacity schools where principals lacked capacity to provide ongoing instructional leadership support.

Table 1. Curriculum Management Practices and Student Outcomes by School Capacity Level (N=52 schools)

Curriculum Management Practice Dimension	High-Capacity Schools (n=12)	Moderate-Capacity Schools (n=27)	Low-Capacity Schools (n=13)	Statistical Significance
Strategic Planning & Goal Setting	4.4 (SD=0.5)	3.3 (SD=0.7)	2.3 (SD=0.8)	F(2,49)=42.3, p<0.001
• Stakeholder involvement in planning	4.6 (SD=0.4)	3.5 (SD=0.8)	2.1 (SD=0.9)	
• Clear, measurable curriculum goals	4.5 (SD=0.5)	3.4 (SD=0.7)	2.4 (SD=0.8)	
• Alignment with school improvement plans	4.2 (SD=0.6)	3.1 (SD=0.8)	2.4 (SD=0.9)	
Curriculum Design & Adaptation	4.3 (SD=0.6)	3.2 (SD=0.7)	2.2 (SD=0.7)	F(2,49)=38.6, p<0.001
• Adaptation to student needs	4.4 (SD=0.5)	3.1 (SD=0.8)	2.0 (SD=0.7)	
• Integration across subjects	4.2 (SD=0.7)	3.3 (SD=0.7)	2.3 (SD=0.8)	
• Balance of academic & 21st-century skills	4.3 (SD=0.6)	3.2 (SD=0.8)	2.3 (SD=0.9)	
Implementation Support & Monitoring	4.6 (SD=0.4)	3.4 (SD=0.7)	2.1 (SD=0.8)	F(2,49)=51.2, p<0.001
• Regular classroom observations	4.7 (SD=0.4)	3.2 (SD=0.8)	1.9 (SD=0.7)	
• Instructional coaching & feedback	4.6 (SD=0.5)	3.5 (SD=0.7)	2.1 (SD=0.9)	
• Resource provision for implementation	4.5 (SD=0.5)	3.5 (SD=0.8)	2.3 (SD=0.8)	
Professional Development	4.5 (SD=0.5)	3.1 (SD=0.8)	2.3 (SD=0.9)	F(2,49)=44.8, p<0.001
• Job-embedded learning opportunities	4.6 (SD=0.4)	3.0 (SD=0.9)	2.1 (SD=0.9)	

Curriculum Management Practice Dimension	High-Capacity Schools (n=12)	Moderate-Capacity Schools (n=27)	Low-Capacity Schools (n=13)	Statistical Significance
• Focus on instructional improvement	4.5 (SD=0.5)	3.2 (SD=0.8)	2.4 (SD=0.9)	
• Collaborative professional learning	4.4 (SD=0.6)	3.1 (SD=0.8)	2.4 (SD=0.9)	
Evaluation & Continuous Improvement	4.2 (SD=0.6)	3.5 (SD=0.7)	2.7 (SD=0.8)	F(2,49)=28.4, p<0.001
• Systematic data collection & analysis	4.3 (SD=0.6)	3.6 (SD=0.7)	2.6 (SD=0.9)	
• Evidence-based decision making	4.2 (SD=0.7)	3.4 (SD=0.8)	2.7 (SD=0.8)	
• Curriculum revision based on evaluation	4.1 (SD=0.7)	3.5 (SD=0.7)	2.8 (SD=0.9)	
Student Examination Pass Rate (%)	87.4 (SD=6.8)	76.2 (SD=9.3)	64.8 (SD=11.2)	F(2,49)=22.7, p<0.001

Note. Practices rated on 5-point scales (1=rarely/not at all, 5=consistently/extensively). School capacity classification based on cluster analysis of practice patterns.

Implementation Challenges and Contextual Constraints

Despite evidence of effective practices in high-capacity schools, analysis reveals numerous systemic and contextual challenges constraining curriculum management across Malaysian secondary education. Centralized curriculum control emerged as a primary tension, with teachers and school leaders describing limited autonomy to adapt national curricula to local contexts, student needs, or school capacities. While official policy rhetoric encourages contextual adaptation, interview participants consistently reported that rigid examination specifications, external monitoring emphasizing compliance, and accountability pressures created incentives for standardized implementation rather than responsive adaptation. One principal articulated the dilemma: "The Ministry tells us to be creative and adapt curriculum to our students, but then evaluates us based on how well students perform on standardized examinations testing predetermined content. The real message is clear – teach to the test."

Time constraints represented another pervasive challenge limiting curriculum management effectiveness, with school leaders and teachers describing overwhelming workloads that crowd out sustained curriculum work. Beyond teaching responsibilities, Malaysian educators face extensive administrative duties, co-curricular activity supervision, examination invigilation, and various documentation requirements that consume time potentially devoted to collaborative curriculum planning, instructional improvement, or professional learning. Survey

data indicated that teachers averaged only 2.3 hours per week for collaborative curriculum work even in high-capacity schools, compared to 18-20 hours spent on direct instruction and 8-12 hours on administrative tasks. Principals acknowledged this time scarcity but felt constrained by staffing limitations and policy requirements: "I know teachers need more time for collaboration, but I can't create time that doesn't exist. We're already stretched thin covering classes."

Assessment and examination pressures fundamentally shaped curriculum management priorities and practices (Muhsyanur and Mustapha, 2023), often in ways that narrowed curriculum breadth and undermined holistic educational goals articulated in policy documents. The high-stakes nature of national examinations – particularly SPM (Sijil Pelajaran Malaysia) determining university access – created intense pressure for examination-focused teaching that marginalized non-tested subjects and broader competencies emphasized in curriculum frameworks. Teachers described reducing attention to critical thinking, creativity, and values education that were nominally curriculum priorities but not centrally assessed in examinations. One teacher explained: "We know 21st-century skills are important, but students and parents judge us on examination results. If I spend too much time on skills not tested, I'm failing my students." This assessment-driven narrowing appeared most pronounced in low-capacity schools serving disadvantaged students, where examination performance represented primary pathway to social mobility, creating tensions between equity aspirations and examination pressures.

CONCLUSION

This study demonstrates that curriculum management quality varies substantially across Malaysian secondary schools, with high-capacity schools characterized by systematic planning processes, instructional leadership expertise, distributed leadership structures, collaborative professional cultures, and evidence-informed continuous improvement producing significantly better student outcomes compared to schools with weaker curriculum management practices, though effectiveness is constrained by systemic factors including centralized control limiting local adaptation, time scarcity for collaborative curriculum work, examination pressures narrowing instructional focus, and inadequate leadership preparation for curriculum management responsibilities.

Findings reveal that effective curriculum management requires principals who combine deep instructional expertise with capacity to build organizational systems and collaborative cultures supporting curriculum coherence, responsive adaptation, and continuous improvement, alongside middle leaders with sophisticated curriculum and pedagogical knowledge who can bridge school-level planning and classroom-level implementation. Based on these findings, recommendations for educational practice include investing in comprehensive leadership development programs preparing principals and middle leaders specifically for curriculum management responsibilities including instructional leadership, collaborative facilitation, data-informed decision-making, and change management; creating

protected time for collaborative curriculum work by reducing administrative burdens, streamlining documentation requirements, and establishing clear priorities valuing instructional improvement over bureaucratic compliance; developing distributed leadership structures clarifying roles and responsibilities for curriculum management across principal, senior assistants, department heads, and teacher teams while building capacity of all actors to fulfill these roles effectively; implementing systematic curriculum review and planning cycles involving stakeholder input, needs assessment, evidence analysis, goal setting, implementation monitoring, and continuous refinement rather than static compliance with mandated documents; establishing professional learning communities focused on instructional improvement through examining student work, sharing effective practices, collaborative lesson planning, and peer observation and feedback; and developing balanced assessment systems measuring broader competencies beyond examination performance to align accountability with holistic curriculum goals.

For policy and systemic reform, recommendations include providing schools greater autonomy to adapt national curricula to local contexts while maintaining accountability for learning outcomes rather than implementation compliance; reforming examination systems to assess critical thinking, creativity, and 21st-century competencies alongside content knowledge; allocating resources supporting curriculum management infrastructure including time, personnel, professional development, and instructional materials; establishing national curriculum leadership standards and preparation programs ensuring all school leaders possess requisite expertise; creating networks enabling schools to share effective curriculum management practices and collaboratively solve implementation challenges; and conducting ongoing research examining curriculum management's influence on diverse student outcomes to build evidence base guiding continuous improvement. Future research should employ longitudinal designs tracking curriculum management development and effects over time, investigate how effective practices can be scaled across diverse school contexts, examine curriculum management for specific student populations including English language learners and students with special needs, explore how technology can support curriculum management processes, investigate relationships between district-level and school-level curriculum leadership, and examine Malaysian curriculum management in comparative perspective with other national systems to identify culturally specific and universal effective practices.

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