



A Study of the General Conditions of Educational Administration in Pilot Schools within the Educational Innovation Area, Phuket Province Primary Education Level under the Office of the Basic Education Commission

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Abstract

Background and Aim: Educational innovation areas represent a crucial policy initiative in Thailand's educational reform, requiring effective management frameworks for successful implementation. This study analyzed the general conditions of educational administration in pilot schools within Phuket Province's educational innovation area, examining the current implementation levels of Planning, Organizing, Leading, and Controlling (POLC) dimensions to assess administrative effectiveness and identify development opportunities.

Materials and Methods: This descriptive research employed questionnaire surveys with all 49 pilot elementary schools under the Office of the Basic Education Commission. The 5-point Likert scale questionnaire comprised demographic information, POLC framework assessment, and recommendations sections. Content validity was examined by five experts using Index of Objective Congruence (IOC), achieving Cronbach's Alpha reliability coefficients of 0.88 or higher. Data were analyzed using descriptive statistics and thematic content analysis of qualitative responses.

Results Overall pilot school management operated at a "High" level ($M=4.38$, $SD=0.48$). Leading achieved the highest performance at the "Highest" level ($M=4.52$, $SD=0.53$), demonstrating administrators' clear vision, effective motivation creation, and strong teamwork culture. Planning ($M=4.31$, $SD=0.50$), Organizing ($M=4.34$, $SD=0.54$), and Controlling ($M=4.35$, $SD=0.51$) all operated at "High" levels. Key strengths included participatory planning processes, transparent decision-making, continuous personnel development, and systematic monitoring efforts. However, significant challenges persisted, including limited personnel understanding of sustainable planning, heavy workloads, lack of specialized innovation skills, personnel discontinuity due to transfers, insufficient systematic supervision, and absence of standardized measurement tools.

Conclusion: This comprehensive analysis reveals that pilot schools demonstrate varied implementation levels across POLC dimensions, with Leading achieving the highest performance while Planning, Organizing, and Controlling require targeted improvements. The study provides empirical evidence of current administrative conditions and specific areas requiring enhancement to optimize educational innovation implementation. These findings contribute to the broader educational innovation discourse in Thailand by providing detailed assessment of administrative effectiveness and highlighting the critical importance of balanced POLC implementation for sustainable educational transformation in innovation areas.

Keywords: Phuket Province; Office of the Basic Education Commission; Educational Administration; Educational Innovation Area; Primary Education Level

Introduction

Educational development in the 21st century represents a significant challenge that Thailand must confront to ensure learners possess skills and capabilities aligned with digital age transformations. The Thai government has established educational reform policies through Education Sandbox areas under the Education Sandbox Act B.E. 2562 (2019), serving as experimental spaces for new, flexible, and creative educational management approaches (Office of the Secretary of the Education Council, 2019; Thailand Development Research Institute, 2021).

The Ministry of Education has designated Phuket Province as one of 19 national-level educational innovation areas, recognizing its potential as a diverse learning hub for tourism, culture, and economics. As a world-class tourist destination, Phuket necessitates developing personnel with multilingual communication skills, creative thinking abilities, and cultural diversity understanding, aligning with educational management concepts within innovation areas.

The POLC framework (Planning, Organizing, Leading, and Controlling) provides a comprehensive approach to analyzing educational administration effectiveness. Planning involves strategic direction-setting that aligns with innovation area policies and community contexts. Organizing requires flexible structural arrangements and optimal resource allocation to support innovative practices. Leading





emphasizes transformational approaches that create inspiration, foster participation, and build collaborative cultures. Controlling focuses on qualitative assessment mechanisms that ensure continuous improvement while maintaining educational standards (Daft, 2018; Griffin, 2019). This framework proves particularly suitable for educational innovation contexts as it captures both managerial efficiency and adaptive capacity required for sustainable educational transformation.

Despite the crucial role of educational innovation areas in Thai educational development, a significant gap exists in empirical research examining the actual management conditions within these unique educational contexts. Preliminary surveys indicate that pilot school administration lacks systematic studies regarding current administrative effectiveness, particularly at the primary education level where foundational learning experiences shape students' lifelong educational trajectories (Office of the Secretary of the Education Council, 2020; Education Innovation Center, 2021). This research addresses this critical knowledge gap by providing comprehensive analysis of management conditions specifically within Phuket Province's educational innovation area context.

Therefore, this study aims to analyze the general conditions of educational administration in pilot schools within Phuket Province's Educational Innovation Area at the primary education level under the Office of the Basic Education Commission, specifically examining the current implementation levels of Planning, Organizing, Leading, and Controlling dimensions in pilot school management.

Objectives

This study aims to analyze the general conditions of educational administration in pilot schools within the Educational Innovation Area, Phuket Province, at the primary education level under the Office of the Basic Education Commission through the following specific objectives: To examine the current implementation levels of Planning, Organizing, Leading, and Controlling dimensions in pilot school management.

Literature review

The P-O-L-C Management Framework

The POLC framework (Planning, Organizing, Leading, and Controlling) represents fundamental management principles rooted in Henri Fayol's classical management theory from "Administration Industrielle et Générale" (1916). This framework has evolved into an essential tool for analyzing and developing organizational management in contemporary educational contexts, offering systematic approaches to understanding complex administrative processes (Robbins & Coulter, 2021).

Application of the POLC Framework in Educational Context

Planning in Educational Management

Educational planning within innovation areas requires multidimensional approaches that balance policy compliance with contextual responsiveness. Lunenburg (2010) demonstrated that effective educational planning must begin with comprehensive environmental analysis, establishing clear vision and mission statements, and developing strategies aligned with organizational resources and community needs. Bush (2020) emphasized that contemporary educational planning must consider technological changes, 21st-century student requirements, and organizational sustainability, particularly within innovation contexts where rapid adaptation is essential.

The Thai educational innovation context presents unique planning challenges, as schools must integrate national policy directives with local community needs while maintaining flexibility for continuous adaptation. This requires planning processes that emphasize stakeholder participation, sustainable resource allocation, and systematic monitoring mechanisms that can respond to changing educational landscapes.

Organizing in Educational Management

Organizational effectiveness in educational innovation areas requires structures that support both efficiency and adaptability. Harris & Jones (2018) found that network structures and distributed leadership models prove more effective than traditional bureaucratic approaches in educational institutions pursuing innovative practices. Effective organizational management requires building diverse teams, clearly defining roles and responsibilities, and utilizing resources efficiently while maintaining flexibility for emerging opportunities.

Spillane & Diamond (2021) proposed "Resource Mapping" as a strategic tool for managing resources aligned with educational goals, demonstrating that schools with systematic resource allocation achieve higher student learning outcomes than those without clear management systems. Within Thai educational innovation contexts, organizing must account for cultural factors, community partnerships, and the integration of traditional educational values with innovative practices.

Leading in Educational Management

Leadership within educational innovation areas requires transformational approaches that inspire change while maintaining organizational stability. Leithwood & Sun (2012) found that transformational educational leaders must possess abilities to create shared vision, inspire personnel, and promote organizational learning cultures that embrace continuous improvement. Robinson (2018) proposed "Student-Centered Leadership" emphasizing leadership approaches where all decisions consider students' best interests, showing clear improvements in academic performance and educational quality in implementing schools.

Thai educational innovation contexts require leaders who can navigate between traditional hierarchical expectations and collaborative innovation demands. This necessitates leadership skills that build consensus, manage cultural transitions, and maintain stakeholder engagement across diverse community groups while pursuing educational transformation goals.

Controlling in Educational Management

Educational control within innovation areas represents a complex process requiring balance between accountability and creative freedom. Scheerens & Bosker (2017) proposed "Multi-Level School Effectiveness" emphasizing evaluation approaches that consider multiple organizational levels, from individual students and classrooms to entire institutional systems. Hopkins & Craig (2015) found that schools with systematic data collection, analysis, and decision-making processes demonstrate more continuous and effective development than those without structured control mechanisms.

However, there exists tension between traditional control mechanisms and innovation requirements. Educational innovation areas require control systems that maintain quality standards while providing sufficient flexibility for experimentation and adaptation. This synthesis reveals gaps in existing literature regarding how control systems can simultaneously ensure accountability and foster innovation within specific cultural contexts such as Thai educational environments.

Critical Analysis and Synthesis

While the POLC framework provides comprehensive management analysis tools, its application to Thai educational innovation contexts requires careful consideration of cultural factors, policy environments, and community expectations. Existing literature predominantly reflects Western organizational contexts, potentially limiting direct applicability to Thai educational systems that emphasize relationship-building, consensus decision-making, and hierarchical respect structures.

Furthermore, most POLC research focuses on established organizational contexts rather than innovation environments characterized by uncertainty, experimentation, and continuous adaptation. This creates a critical need for empirical research examining how traditional management frameworks operate within educational innovation contexts, particularly at the primary education level where foundational learning experiences significantly impact long-term educational outcomes.

The integration of these theoretical perspectives directly informed this study's methodology through the development of questionnaire items that capture both universal management principles and context-specific factors relevant to Thai educational innovation areas. The POLC framework's emphasis on systematic analysis enables comprehensive examination of management effectiveness while remaining sensitive to local cultural and policy contexts that influence educational administration practices

Conceptual Framework

This study applies the POLC Management Framework (Planning, Organizing, Leading, and Controlling) as developed by Henri Fayol and refined by contemporary management scholars to analyze pilot school management effectiveness in educational innovation areas.

The POLC framework proves most appropriate for analyzing educational administration in Thailand's innovation areas because it provides comprehensive coverage of essential management

functions while maintaining flexibility for contextual adaptation. Unlike single-dimension management theories, POLC captures the multifaceted nature of educational administration that requires simultaneous attention to strategic planning, organizational efficiency, inspirational leadership, and quality control. This framework's systematic approach enables identification of specific management strengths and improvement areas, providing actionable insights for educational stakeholders while accounting for the unique challenges and opportunities present within Thai educational innovation contexts.



Figure 1 Conceptual Framework

Methodology

Population and Sample

The research population consists of all 49 pilot elementary schools in Phuket Province's educational innovation area under the Office of the Basic Education Commission. This study employed census sampling to ensure comprehensive coverage of all pilot schools, eliminating sampling bias and providing complete representation of the target population. Each school served as the unit of analysis, with school administrators serving as primary respondents due to their comprehensive understanding of institutional management practices.

Research Instruments

The research instrument was a questionnaire concerning the general conditions of pilot school administration in the educational innovation area of Phuket Province at the elementary level under the Office of the Basic Education Commission. The questionnaire employed a 5-point rating scale and open-ended questions, divided into three sections as follows:

Section 1: Demographic information of respondents and educational institutions

Section 2: Questionnaire regarding the general overview of pilot school administration in the educational innovation area, utilizing a 5-point Likert-type rating scale

Section 3: Additional suggestions and recommendations

Development and Validation of Data Collection Instruments

The researcher utilized analytical findings to develop the questionnaire through the following process:

1. Literature Review: Comprehensive knowledge compilation regarding pilot school administration in the educational innovation area of Phuket Province at the elementary level under the Office of the Basic Education Commission through content analysis and content synthesis
2. Variable Definition: Establishment of variables and question items for each variable
3. Draft Development: Creation of a 5-point rating scale questionnaire, presented to the research advisor for language appropriateness review and other recommendations, followed by revisions based on feedback
4. Quality Validation: Content validity examination by five experts using the Index of Objective Congruence (IOC) technique to determine consistency between questions and variable definitions. Questions with IOC values of 0.5 or higher were retained, while those below 0.5 were eliminated
5. Pilot Testing: The revised questionnaire was pilot-tested with 30 individuals from the population who were not part of the sample group. Reliability analysis was conducted using Cronbach's Alpha Coefficient, yielding reliability values of 0.88 or higher

Data Collection

Data collection was conducted through the My Office system of Phuket Primary Educational Service Area Office, ensuring systematic and standardized procedures. This approach provided several methodological advantages: (1) utilization of official administrative channels that enhanced response credibility and institutional support, (2) standardized electronic distribution ensuring all 49 pilot schools received identical instruments simultaneously, and (3) systematic collection procedures that maintained data integrity while respecting administrative protocols.

The data collection timeline spanned six weeks (March-April 2024), allowing sufficient time for thorough completion while maintaining momentum. School administrators were provided with detailed instructions, contact information for technical support, and clear deadlines to ensure consistent participation. Follow-up communications were conducted through official channels to maintain high response rates and address any implementation concerns. All responses were collected electronically through secure platforms, ensuring data confidentiality and facilitating immediate preliminary analysis.

Data Processing and Analysis

Quantitative Data Analysis:

Quantitative data underwent comprehensive statistical analysis using SPSS version 28.0. Descriptive statistics including means, standard deviations, frequencies, and percentages were calculated for all POLC dimensions and individual indicators. Data interpretation utilized Best's (1970) criteria for 5-point Likert scales:

- 4.21-5.00: Highest implementation level
- 3.41-4.20: High implementation level
- 2.61-3.40: Moderate implementation level
- 1.81-2.60: Low implementation level
- 1.00-1.80: Lowest implementation level

Internal consistency was verified through Cronbach's Alpha coefficients for each POLC dimension, with all dimensions achieving reliability coefficients exceeding 0.88. Data normality was assessed through Kolmogorov-Smirnov tests, and appropriate parametric or non-parametric procedures were selected based on distribution characteristics.

Qualitative Data Analysis:

Qualitative responses from open-ended questions underwent systematic thematic content analysis following Braun and Clarke's (2006) six-phase approach: (1) data familiarization through multiple readings, (2) initial code generation based on recurring concepts, (3) theme identification through code clustering, (4) theme review and refinement, (5) theme definition and naming, and (6) final report production with supporting evidence.

Two independent researchers conducted initial coding to enhance reliability, with inter-rater agreement achieving 89% consistency. Discrepancies were resolved through discussion and consensus-building. Analysis focused on identifying recurring patterns, implementation challenges, successful practices, and specific recommendations across all participating schools. Qualitative findings were triangulated with quantitative results to provide comprehensive understanding of management conditions and enhance overall research validity.

Results

Analysis of General Conditions of Pilot School Management in the Educational Innovation Area of Phuket Province at the Elementary Level under the Office of the Basic Education Commission

Table 1 Mean, Standard Deviation, and Implementation Level of Pilot School Management in the Educational Innovation Area of Phuket Province under the Phuket Primary Educational Service Area Office - Overall

Pilot School Management Aspects	Implementation Level		
	Interpretation	SD	Interpretation
1. Planning	4.31	.50	High
2. Organizing	4.34	.54	High
3. Leading	4.52	.53	Highest
4. Controlling	4.35	.51	High
Overall	4.38	.48	High

Table 1 Overall Assessment Results: The overall analysis reveals that pilot school management in the educational innovation area of Phuket Province operates at a "High" level ($M=4.38$, $SD=0.48$). Leading achieved the highest mean score ($M=4.52$, $SD=0.53$) at the "Highest" level, followed by Controlling ($M=4.35$, $SD=0.51$), Organizing ($M=4.34$, $SD=0.54$), and Planning ($M=4.31$, $SD=0.50$), all at "High" levels. This indicates that administrators demonstrate outstanding leadership qualities but still need to enhance planning efficiency.

Table 2 Planning Dimension

Planning Aspects	Implementation Level		
	M	SD	Interpretation
1. Promoting clear strategic/operational plans aligned with innovation area guidelines	4.31	.683	High
2. Comprehensive data and environmental analysis in planning processes	4.31	.683	High
3. Clear goal setting and performance indicators	4.35	.694	High
4. Personnel participation in planning and operational guidelines	4.49	.582	High
5. Appropriate budget planning and resource allocation	4.43	.677	High
6. Technology and innovation integration for enhanced management efficiency	4.29	.645	High
7. Mechanisms for plan monitoring and adaptation to environmental changes	4.16	.657	High
8. Continuous and concrete implementation of school development plans	4.20	.612	High
9. Planning alignment with student, parent, and community needs	4.33	.555	High
10. Problem-solving approaches for planning obstacles	4.22	.550	High
Overall	4.31	.50	High

Table 2 Planning Analysis: Planning implementation operates at a "High" level overall ($M=4.31$, $SD=0.50$). The highest scoring item was personnel participation in planning and operational guidelines ($M=4.49$, $SD=0.582$), followed by budget planning and resource allocation ($M=4.43$, $SD=0.677$). The lowest scoring item was mechanisms for plan monitoring and adaptation to changes ($M=4.16$, $SD=0.657$), indicating that schools prioritize participatory processes but need to enhance plan monitoring and improvement systems.

Key Planning Strengths:

- Comprehensive stakeholder engagement in goal-setting processes
- Systematic use of SWOT analysis tools for environmental assessment
- Clear alignment between institutional plans and innovation area policies
- Appropriate budget allocation mechanisms supporting planned activities

Planning Improvement Areas:

- Plan monitoring and adaptation mechanisms scored lowest ($M=4.16$, $SD=0.657$)
- Problem-solving approaches for planning obstacles require enhancement ($M=4.22$, $SD=0.550$)
- Sustainable planning knowledge limitations among newly appointed personnel
- Innovation designs not always addressing genuine community needs

Table 3 Organizing Dimension

Organizing Aspects	Implementation Level		
	M	SD	Interpretation
1. Clear and appropriate administrative structure	4.08	.672	High
2. Systematic role and responsibility definition	4.29	.707	High
3. Clear and fair task assignment and accountability	4.29	.736	High
4. Transparent decision-making with personnel participation	4.51	.649	High
5. Effective teamwork and inter-departmental coordination mechanisms	4.41	.674	High
6. Technology and innovation utilization for organizational management	4.29	.707	High
7. Appropriate resource allocation (budget, personnel, materials)	4.37	.636	High
8. Effective internal communication and information dissemination	4.45	.580	High
9. Organizational development strategies aligned with innovation area policies	4.45	.580	High
10. Problem-solving approaches for organizational obstacles	4.29	.577	High
Overall	4.34	.54	High

Table 3 Organizing Analysis: Organizing implementation operates at a "High" level overall ($M=4.34$, $SD=0.54$). The highest scoring item was transparent decision-making with personnel participation ($M=4.51$, $SD=0.649$), followed by internal communication and organizational development strategies ($M=4.45$, $SD=0.580$ for both). The lowest scoring item was administrative structure clarity ($M=4.08$, $SD=0.672$), indicating strong decision-making processes and communication but potential need for administrative structure improvements.

Key Organizing Strengths:

- Transparent, participatory decision-making processes
- Effective internal communication and information dissemination systems
- Strong organizational development strategies aligned with innovation policies
- Comprehensive multi-stakeholder participation in organizational activities

Organizing Improvement Areas:

- Administrative structure clarity scored lowest ($M=4.08$, $SD=0.672$)
- Heavy personnel workloads limiting innovation project implementation capacity
- Lack of specialized skills for educational innovation requirements
- Operational discontinuity due to frequent personnel transfers

Table 4 Leading Dimension

Leading Aspects	Implementation Level		
	M	SD	Interpretation
1. Transformational and innovative leadership	4.49	.617	High
2. Motivation creation for personnel performance	4.45	.614	High
3. Clear vision communication and implementation	4.53	.581	Highest
4. Organizational culture promoting creativity and teamwork	4.53	.581	Highest
5. Personnel participation in policy and operational decision-making	4.61	.571	Highest
6. Continuous personnel development support	4.55	.580	Highest
7. Collaborative and harmonious work atmosphere	4.57	.577	Highest
8. Effective conflict management	4.49	.617	High
9. Leadership style alignment with educational innovation guidelines	4.49	.617	High
10. Problem-solving approaches for leadership challenges	4.47	.616	High
Overall	4.52	.53	Highest

Table 4 Leading Analysis: Leading demonstrates the highest performance level at "Highest" overall ($M=4.52$, $SD=0.53$), ranking highest among all dimensions. The highest scoring item was personnel participation in decision-making ($M=4.61$, $SD=0.571$), followed by collaborative work atmosphere ($M=4.57$, $SD=0.577$) and personnel development support ($M=4.55$, $SD=0.580$). The lowest scoring item was motivation creation for personnel ($M=4.45$, $SD=0.614$), indicating strong leadership capabilities and positive work environments.

Leading Excellence Indicators:

- Outstanding personnel participation in policy and operational decision-making
- Strong collaborative and harmonious work atmosphere
- Continuous personnel development through PLC and Lesson Study approaches
- Clear vision communication and organizational culture promoting creativity
- Effective transformational and innovative leadership approaches

Leading Development Opportunities:

- Some administrators lacking deep understanding of innovation implementation roles
- Need for enhanced innovation leadership expertise among new personnel
- Requirement for more qualified facilitators and comprehensive multi-dimensional connections

Table 5 Controlling Dimension

Controlling Aspects	Implementation Level		
	M	SD	Interpretation
1. Effective monitoring and evaluation systems	4.22	.715	High
2. Personnel supervision measures aligned with innovation area goals	4.29	.577	High
3. Continuous quality assurance for teaching and student achievement	4.39	.640	High
4. Budget and resource control systems for maximum benefit	4.43	.612	High
5. Clear standards and criteria for personnel performance evaluation	4.45	.542	High
6. Monitoring and plan adaptation systems for changes	4.35	.597	High
7. Compliance monitoring with innovation area regulations	4.45	.580	High
8. Data utilization for concrete management improvements	4.37	.566	High
9. Effective problem prevention and solution approaches	4.27	.730	High
10. Solutions for controlling system obstacles	4.29	.612	High
Overall	4.35	.51	High

Table 5 Controlling Analysis: Controlling implementation operates at a "High" level overall ($M=4.35$, $SD=0.51$). The highest scoring items were clear performance evaluation standards ($M=4.45$, $SD=0.542$) and budget/resource control systems ($M=4.43$, $SD=0.612$). The lowest scoring item was monitoring and evaluation systems ($M=4.22$, $SD=0.715$), indicating good evaluation standards and resource control but need for enhanced monitoring and evaluation system efficiency.

Key Controlling Strengths:

- Clear standards and criteria for personnel performance evaluation
- Effective budget and resource control systems ensuring maximum benefit
- Strong compliance monitoring with innovation area regulations
- Continuous quality assurance for teaching and student achievement

Controlling Improvement Areas:

- Monitoring and evaluation systems effectiveness scored lowest ($M=4.22$, $SD=0.715$)
- Absence of standardized monitoring tools for concrete operational improvements
- Interference from other policy workloads affecting primary innovation work focus
- Need for systematic supervision approaches and measurement tool standardization



Summary and Recommendations Content Analysis of Pilot School Management in Educational Innovation Areas

1. Planning

Schools demonstrate systematic and structured operations, beginning with detailed problem analysis and cause identification to establish desired student characteristics development goals. Most schools utilize SWOT analysis tools to examine organizational strengths, weaknesses, opportunities, and threats. Participatory processes represent a key strength, with school personnel, parents, community members, and stakeholders collaboratively analyzing data, setting goals, and planning operations. Network partnership meetings facilitate collaborative integration, producing concrete annual action plans with projects and activities aligned with innovation areas and responsive to learner, parent, and community needs.

However, significant challenges persist, particularly personnel lacking sustainable planning knowledge and understanding, as many are newly appointed teachers with insufficient experience. Innovation designs sometimes fail to address genuine community needs. Some personnel lack understanding of educational innovation area concepts, compounded by limited budget and resources, as well as personnel transfers that disrupt work continuity.

2. Organizing

Organizational management demonstrates efforts to create systematic administrative structures with clear responsibility assignments for curriculum and activity development. Personnel allocation includes clear work scope awareness and concrete responsibility distribution. Most schools employ a four-division management model: academic affairs, budget management, personnel administration, and general affairs. Participation and support represent crucial dimensions where all sectors engage in operations and decision-making, with adequate budget and technology support, continuous technology development promotion, and organizational technology integration. Organizational culture access and community social context remain important factors enabling appropriate and environmentally aligned organization.

Nevertheless, significant challenges remain, particularly heavy personnel workloads limiting development time for assigned tasks. Personnel lack appropriate skills for educational innovation project implementation. Educational innovation curriculum personnel operations lack continuity due to personnel changes and new assistant teacher recruitment. Teacher experience and understanding remain incomplete. Island areas face additional challenges including personnel limitations and transportation obstacles, along with students from diverse cultural and linguistic backgrounds.

3. Leading

Leadership demonstrates important leadership qualities among administrators and lead teachers. Administrators possess clear leadership vision and systematic work direction capabilities, with determined commitment to developing innovations that enhance learning. They create work motivation for personnel and provide continuous personnel development support, particularly using Q-Info information systems for learner quality analysis and development. Motivation creation and teamwork represent key strengths, with strong teamwork culture and participatory management that builds teacher academic leadership capacity. Teacher competency development utilizes PLC and Lesson Study approaches with concrete policy implementation. Administrators participate in support, consultation, positive reinforcement, and collaborative practice.

However, significant problems and challenges persist, particularly administrators and some teachers lacking understanding of continuous and clear innovation implementation roles. Deep understanding of educational innovation area concepts remains insufficient. New personnel may lack innovation leadership expertise, resulting in projects lacking clear direction and motivation for change. Qualified facilitators and comprehensive multi-dimensional connections remain inadequate.

4. Controlling

Control operations demonstrate efforts to create effective monitoring and evaluation systems through continuous supervision, monitoring, and evaluation. Concrete supervision occurs both formally and informally. Schools monitor, inspect, and evaluate personnel performance aligned with innovation area goals using internal supervision processes and professional learning community development. Evaluation utilization represents a key strength, with monitoring and evaluation for work plan

improvement, innovation implementation evaluation committee appointments, and PLC-based learning exchange meetings. Technology utilization in control represents an interesting dimension, with administrators implementing digital platforms to promote standard-based teacher development work, facilitating work progress monitoring.

Significant problems and obstacles persist, particularly systematic supervision deficiencies, lacking clear measurement tools for concrete operational improvements. Absence of standardized monitoring and evaluation systems may complicate problem analysis and operational improvement, especially with students from diverse linguistic backgrounds potentially affecting academic achievement measurement. Other policy work interference increases workloads and affects primary work control.

Discussion

Leadership Excellence as a Foundation for Educational Innovation

The study findings reveal that Leading operates at the "Highest" level ($M=4.52$, $SD=0.53$), reflecting administrators' exceptional capacity for driving educational transformation within innovation contexts. This superior leadership performance aligns with Kouzes and Posner's (2017) leadership practices of "modeling the way" and "inspiring a shared vision," where effective leaders create organizational energy and commitment toward common goals. The exceptional performance in personnel participation in decision-making ($M=4.61$, $SD=0.571$) demonstrates administrators' success in implementing collaborative leadership approaches that foster ownership and engagement among all stakeholders.

The leadership effectiveness observed in this study supports Fullan's (2016) assertion that successful educational change leaders build trust, promote collaborative learning cultures, and genuinely stimulate innovation from within organizations. Thai educational innovation contexts benefit from leaders who successfully navigate traditional hierarchical expectations while fostering collaborative innovation, creating environments where both respect for authority and creative participation coexist. This cultural synthesis represents a significant achievement in educational transformation, suggesting that effective leadership in Thai contexts requires integration of traditional values with innovative practices rather than replacement of one with the other.

Planning Effectiveness and Sustainability Challenges

Planning operates at a "High" level ($M=4.31$, $SD=0.50$) with notable strengths in participatory approaches and stakeholder engagement. The high performance in personnel participation in planning ($M=4.49$, $SD=0.582$) reflects successful implementation of Bryson's (2018) participatory strategic planning principles, where comprehensive stakeholder involvement creates robust plans with broad organizational support. Schools effectively utilize analytical tools such as SWOT analysis and develop concrete action plans aligned with innovation area objectives, demonstrating systematic approaches to strategic management.

However, planning faces significant sustainability challenges that require immediate attention. The lower performance in plan monitoring and adaptation mechanisms ($M=4.16$, $SD=0.657$) indicates gaps in implementation oversight and responsiveness to changing conditions. These findings reveal tension between comprehensive planning processes and adaptive implementation capacity, suggesting that while schools excel at creating plans, they struggle with dynamic plan management required in innovation environments. This aligns with Mintzberg's (1994) critique of rigid planning while supporting his recognition that effective planning must allow for learning and adaptation during implementation.

The sustainability challenges stem primarily from knowledge limitations among newly appointed teachers and resource constraints that limit plan implementation effectiveness. This highlights the critical importance of systematic knowledge transfer mechanisms and continuous professional development to ensure planning capability continuity despite personnel changes common in Thai educational contexts.

Organizational and Control Systems: Balancing Efficiency with Innovation

While Organizing ($M=4.34$, $SD=0.54$) and Controlling ($M=4.35$, $SD=0.51$) achieve "High" levels, they reveal systematic challenges requiring comprehensive attention. Organizing demonstrates

excellent performance in transparent decision-making ($M=4.51$, $SD=0.649$) and communication effectiveness ($M=4.45$, $SD=0.580$), indicating strong collaborative processes and information flow. However, administrative structure clarity scores lowest ($M=4.08$, $SD=0.672$), suggesting that while communication and participation are strong, formal organizational arrangements may not adequately support innovation requirements.

The organizational challenges, particularly heavy personnel workloads and lack of specialized innovation skills, reflect broader systemic issues in Thai educational management. These findings align with Daft's (2020) organizational effectiveness principles, emphasizing that structural design, role definition, and resource allocation must align with organizational objectives. The persistent workload issues suggest that current organizational structures may not adequately account for the additional demands created by innovation implementation, requiring systematic restructuring rather than incremental adjustments.

Controlling demonstrates strength in evaluation standards ($M=4.45$, $SD=0.542$) and resource control ($M=4.43$, $SD=0.612$) while revealing deficiencies in monitoring systems ($M=4.22$, $SD=0.715$). This pattern suggests that schools understand accountability requirements and maintain quality standards, but lack systematic approaches to continuous improvement and adaptive management. The absence of standardized monitoring tools and interference from competing policy priorities creates conditions where schools maintain compliance without achieving optimization, limiting their capacity for continuous improvement and innovation sustainability.

Theoretical and Practical Implications

These findings advance understanding of educational management by demonstrating how traditional management frameworks operate within innovation contexts, particularly in non-Western cultural environments. The study reveals that POLC framework application requires cultural adaptation, with leadership approaches proving most transferable while planning and control systems requiring significant contextual modification. The exceptional leadership performance combined with moderate planning and control effectiveness suggests that relationship-based management approaches may be more readily implemented than systems-based approaches in Thai educational contexts.

The practical implications for educational administrators, policymakers, and stakeholders are substantial. The findings indicate that investment in systematic training programs, workload restructuring, and standardized monitoring systems could significantly enhance overall management effectiveness. The study provides evidence that while strong leadership creates necessary conditions for educational innovation, sustainable transformation requires balanced attention to all POLC dimensions, with particular emphasis on planning sustainability, organizational efficiency, and control system standardization.

Furthermore, the research demonstrates that educational innovation areas require management approaches that balance accountability with flexibility, traditional values with innovative practices, and individual school autonomy with system-wide coordination. This balance proves critical for maintaining educational quality while fostering innovation capacity necessary for 21st-century educational transformation.

Conclusion

This comprehensive analysis of pilot school management within Phuket Province's educational innovation area reveals a complex landscape of management achievements and persistent challenges across POLC framework dimensions. The study provides significant insights into how traditional management principles operate within educational innovation contexts, particularly within Thai cultural and policy environments.

Planning demonstrates systematic approaches through comprehensive environmental analysis, stakeholder participation, and strategic alignment with innovation area policies. Schools successfully utilize analytical tools such as SWOT analysis and maintain strong participatory processes engaging personnel, parents, and community members in goal-setting and action plan development. However, critical limitations persist in sustainable planning knowledge, particularly among newly appointed teachers, while frequent personnel transfers and resource constraints continue to challenge implementation continuity and effectiveness.

Organizing reveals excellence in communication and participatory decision-making while highlighting structural and capacity challenges. Schools maintain transparent decision-making processes, effective internal communication systems, and strong organizational development strategies aligned with innovation policies. Nevertheless, heavy personnel workloads, lack of specialized innovation skills, and operational discontinuity due to staff changes represent significant obstacles requiring systematic attention and resource allocation.

Leading achieves exceptional performance across all measured indicators, demonstrating administrators' outstanding capacity for vision creation, motivation development, and collaborative culture building. The superior performance in personnel participation, teamwork atmosphere, and continuous development support reflects successful integration of transformational leadership principles with Thai cultural values emphasizing relationship-building and consensus achievement. However, some administrators require deeper understanding of innovation implementation roles, while the system needs enhanced innovation leadership expertise and qualified facilitator development.

Controlling demonstrates systematic monitoring efforts with strong performance evaluation standards and resource control mechanisms, indicating commitment to accountability and quality assurance. Schools effectively utilize evaluation results for improvement planning and implement digital platforms for progress tracking. Yet, supervision systems lack standardization, measurement tools remain inadequately developed, and interference from competing policy priorities affects focus on primary innovation work.

Overall, these findings contribute to the broader educational innovation discourse in Thailand by demonstrating that successful educational transformation requires balanced attention to all management dimensions rather than emphasis on single aspects. The study reveals that while strong leadership creates necessary conditions for innovation, sustainable transformation demands systematic strengthening of planning sustainability, organizational efficiency, and control mechanism standardization. The research provides empirical evidence supporting the need for context-specific management approaches that honor cultural values while pursuing educational innovation goals, offering valuable insights for similar educational innovation initiatives across Thailand and comparable international contexts.

Recommendation

Based on comprehensive analysis of pilot school management conditions within Phuket Province's educational innovation area, this study provides targeted recommendations addressing identified strengths and improvement areas across POLC framework dimensions.

Recommendations for Future Research

1) Future research should focus on developing and validating training formats and professional development curricula that emphasize deep innovation understanding and sustainable planning capabilities. Investigation of effective mentorship models and career development pathways could ensure adequate foundational knowledge and skills for continuous innovation implementation across diverse educational contexts.

2) Research examining mechanisms and organizational systems that enable innovation project sustainability despite personnel changes, budget constraints, and policy shifts would significantly benefit educational innovation areas. Studies should explore organizational resilience factors, knowledge management systems, and institutional memory preservation strategies that reduce dependence on individual personnel while maintaining innovation momentum.

3) Comprehensive research and development of clear, standardized systems for measuring innovation outcomes across different contexts would provide essential tools for educational improvement. Future studies should focus on creating culturally appropriate, contextually relevant measurement instruments that provide meaningful data for decision-making while supporting both accountability and innovation goals.

Recommendations for Research Application

1) **Personnel Development and Training:** Develop comprehensive training programs focusing on deep innovation understanding, sustainable planning methodologies, and educational change management specifically designed for newly appointed teachers and administrators and Create



specialized skill development workshops addressing innovation project implementation, digital technology integration, and community engagement strategies essential for educational transformation

2) Organizational Efficiency and Structure: Adjust workload allocation through systematic analysis of current responsibilities and redistribution to achieve balance between innovation requirements and traditional educational duties and Develop systematic knowledge transfer mechanisms during personnel transitions, including documentation systems, orientation programs, and collaborative handover procedures that maintain institutional memory

3) System Standardization and Quality Assurance: Establish standardized monitoring and evaluation systems with clear, measurable indicators specifically designed for innovation area contexts, enabling consistent assessment across all pilot schools and Create comprehensive measurement tools providing concrete data for operational improvements while maintaining flexibility for contextual adaptation

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