



Educational Administrative Crisis and Student Performance in Northeast Thailand: A Mixed-Methods Research and Development Study of Four Provinces¹

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Abstract:

Background: Educational administrative crises significantly impact student performance across developing nations, with Thailand's northeast region experiencing particular challenges due to resource constraints, leadership instability, and policy implementation gaps following the National Education Reform Act of 1999.

Purpose: This research and development study examines the relationship between educational administrative crises and student performance in four northeast Thai provinces (Kalasin, Khon Kaen, Udon Thani, and Nong Khai), aiming to develop evidence-based interventions for improving educational outcomes.

Methods: A mixed-methods research and development approach was employed with 384 quantitative participants (calculated using Taro Yamane formula) including teachers, administrators, and students across 48 schools, and 30 qualitative participants through purposive sampling. Data collection utilized validated questionnaires, semi-structured interviews, and focus group discussions. Statistical analysis included descriptive statistics, correlation analysis, multiple regression, and structural equation modeling using SPSS 28.0 and AMOS 24.0.

Results: Findings revealed significant negative correlations between administrative crisis indicators and student performance metrics ($r = -0.672$, $p < 0.001$). Leadership instability ($\beta = -0.445$, $p < 0.001$), resource misallocation ($\beta = -0.389$, $p < 0.001$), and policy inconsistency ($\beta = -0.321$, $p < 0.001$) emerged as primary predictors explaining 68.4% of variance in student performance decline. The developed intervention model demonstrated significant improvements in pilot implementation (Cohen's $d = 1.23$).

Conclusions: Educational administrative crises substantially impede student performance in northeast Thailand. The study's developed intervention framework, emphasizing leadership training, resource optimization, and policy coherence, provides actionable solutions for educational stakeholders and policymakers seeking to enhance educational quality in resource-constrained environments.

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1. INTRODUCTION

Educational systems worldwide confront multifaceted challenges that significantly influence student outcomes, with developing nations experiencing particularly acute administrative difficulties (UNESCO, 2022). Thailand's educational landscape, especially in the economically disadvantaged northeast region, exemplifies these challenges through persistent administrative instabilities that undermine educational quality and student achievement (Wongwanich et al., 2021). The northeast region, comprising 20 provinces and representing approximately one-third of Thailand's population, faces unique educational challenges stemming from economic disparities, resource limitations, and geographical constraints that exacerbate administrative inefficiencies (Sirisamphan & Hanchana, 2020).

The National Education Reform Act of 1999 (B.E. 2542) marked a pivotal transformation in Thailand's educational governance, transitioning from centralized teacher-focused methodologies toward decentralized student-centered approaches (Fry & Bi, 2013). However, implementation challenges have persisted for over two decades, particularly in rural northeastern provinces where administrative capacity remains limited and educational outcomes lag behind national averages (Kanjanaawasee, 2019). These ongoing difficulties manifest through leadership turnover, inadequate resource allocation, inconsistent policy implementation, and insufficient professional development opportunities for educational personnel (Tanakit & Vonganusorn, 2022).

Educational administrative crises encompass systematic disruptions in educational governance, typically characterized by leadership instability, financial mismanagement, contradictory policy directives, and inadequate strategic planning (Hargreaves & Fink, 2012). These crises create cascading effects that deteriorate educational environments, compromise instructional quality, and ultimately diminish student academic performance (Leithwood et al., 2020). In Thailand's northeast region, such crises have been particularly pronounced due to limited economic resources, inadequate infrastructure, and historical underinvestment in educational capacity building (Liamthong & Arphattananon, 2018).

Research examining the relationship between educational administration and student outcomes has consistently demonstrated strong correlations between effective leadership and improved academic performance (Robinson et al., 2021). However, limited empirical evidence exists specifically addressing administrative crises' impact on student performance in Thailand's northeast region, creating a critical knowledge gap that this study addresses. Understanding these relationships is essential for developing targeted interventions that can improve educational outcomes in resource-constrained environments (Marzano et al., 2022).

This research and development study investigates the complex relationship between educational administrative crises and student performance across four northeast Thai provinces: Kalasin, Khon Kaen, Udon Thani, and Nong Khai. These provinces were selected based on their representative characteristics of the broader northeast region, including





economic indicators, educational infrastructure, and administrative challenges. The study employs a mixed-methods approach to comprehensively examine crisis manifestations, their impacts on student outcomes, and potential intervention strategies.

The significance of this research extends beyond academic inquiry to practical policy implications for educational stakeholders throughout Thailand and similar developing contexts. By identifying specific crisis factors and their relationships with student performance, this study provides evidence-based foundations for developing targeted interventions that address systemic inefficiencies and promote educational quality improvements in underserved regions.

2. LITERATURE REVIEW

2.1 Theoretical Framework of Educational Administrative Crises

Educational administrative crises represent complex phenomena encompassing multiple interconnected factors that disrupt normal educational operations and compromise institutional effectiveness (Boin et al., 2017). Crisis theory in educational contexts suggests that these disruptions occur when organizational systems fail to adapt to internal or external pressures, resulting in decreased performance and stakeholder confidence (Mitroff & Anagnos, 2019). The theoretical foundation for understanding these crises draws from organizational management theory, systems theory, and educational leadership literature.

Contemporary research identifies several crisis typologies relevant to educational settings. Kovačević and Zulfikarpašić (2020) categorize educational crises into systemic crises, arising from broader socioeconomic or political instabilities, and organizational crises, stemming from internal management failures. This categorization proves particularly relevant for understanding Thailand's educational challenges, where both external economic pressures and internal administrative weaknesses contribute to crisis conditions (Prasertcharoensuk et al., 2021).

The crisis lifecycle model proposed by Smith and Elliott (2019) identifies four distinct phases: pre-crisis conditions, crisis emergence, crisis management, and post-crisis recovery. Each phase presents unique challenges and opportunities for intervention, with research suggesting that proactive crisis prevention and early intervention strategies prove more effective than reactive crisis management approaches (Farazmand, 2021).

2.2 Educational Administration in Thailand's Context

Thailand's educational administrative structure reflects the country's complex political and social dynamics, with the 1999 National Education Reform Act establishing decentralized governance while maintaining centralized oversight mechanisms (Hallinger & Kantamara, 2018). This hybrid approach has created tensions between local autonomy and national standardization, particularly evident in rural regions where administrative capacity limitations hinder effective implementation of educational reforms (Sukpan et al., 2020).





Historical analysis reveals persistent challenges in Thailand's educational administration, including frequent policy changes, inadequate funding mechanisms, and limited professional development opportunities for educational leaders (Thongthew & Hallinger, 2019). These challenges have been particularly pronounced in the northeast region, where economic disadvantages compound administrative difficulties and create barriers to educational improvement (Arphattananon, 2018).

Research by Ngang and Cheah (2021) highlights the importance of contextual factors in understanding educational administration effectiveness in Southeast Asian contexts. Their findings suggest that Western-derived administrative models often require significant adaptation to address local cultural, economic, and social conditions. This perspective proves crucial for understanding why standardized administrative approaches may fail in Thailand's diverse regional contexts.

2.3 Student Performance and Educational Outcomes

Student performance measurement in educational research encompasses multiple dimensions, including academic achievement, engagement levels, and long-term educational attainment (Hattie, 2019). Contemporary approaches to performance assessment emphasize holistic evaluations that consider cognitive, social, and emotional development outcomes rather than solely focusing on standardized test scores (Darling-Hammond et al., 2020).

Research examining factors influencing student performance consistently identifies school leadership and administrative effectiveness as critical determinants of educational outcomes (Day et al., 2021). Meta-analytical studies demonstrate that effective educational leadership can account for up to 25% of variance in student learning outcomes, highlighting the importance of administrative quality for educational success (Grissom et al., 2021).

In the Thai context, student performance has been measured through various national and international assessments, including the National Educational Test (NET), Ordinary National Educational Test (O-NET), and international comparisons such as PISA and TIMSS (Kantabutra, 2020). These assessments reveal persistent achievement gaps between Thailand's regions, with northeast provinces consistently performing below national averages across multiple academic domains (Liamthong & Arphattananon, 2018).

2.4 Crisis Impact on Educational Outcomes

Empirical research examining crisis impacts on educational outcomes provides valuable insights into the mechanisms through which administrative disruptions influence student performance. Studies conducted in various international contexts demonstrate that educational crises typically manifest through reduced instructional quality, decreased student engagement, and compromised learning environments (Weiner et al., 2021).

The COVID-19 pandemic provided a natural experiment for examining crisis impacts on education, with research revealing significant learning losses and increased educational inequalities (Betthäuser et al., 2023). These findings highlight the vulnerability of educational systems to external shocks and underscore the importance of administrative resilience for maintaining educational quality during crisis periods.





Longitudinal studies examining post-crisis educational recovery suggest that administrative quality significantly influences recovery speed and effectiveness (Reimers, 2022). Schools with strong administrative foundations demonstrate greater resilience and faster recovery rates compared to institutions with weak administrative structures, emphasizing the critical role of effective leadership during crisis periods.

2.5 Northeast Thailand's Educational Context

The northeast region of Thailand, comprising 20 provinces and representing approximately 32% of the national population, faces unique educational challenges rooted in historical, economic, and geographical factors (Sirisamphan & Hanchana, 2020). This region, known locally as Isan, has historically experienced economic disadvantages that have translated into educational disparities compared to more prosperous central and southern regions.

Economic indicators reveal significant disparities between northeast Thailand and other regions, with lower per capita income, higher poverty rates, and limited industrial development constraining educational investment and infrastructure development (Warr & Kohpaiboon, 2021). These economic constraints directly impact educational administration through limited budgets, inadequate facilities, and challenges in attracting and retaining qualified educational personnel.

Geographical factors further complicate educational administration in the northeast region, with rural communities often located far from administrative centers and experiencing limited transportation infrastructure (Jitsuchon & Richter, 2019). These geographical challenges create communication difficulties, limit access to professional development opportunities, and complicate resource distribution and coordination efforts.

3. RESEARCH QUESTIONS

The study addresses the following primary and secondary research questions:

3.1 Primary Research Questions

1. What is the relationship between educational administrative crisis indicators and student performance outcomes in northeast Thailand?
2. Which specific administrative crisis factors most significantly predict student performance decline in the study region?
3. How can evidence-based interventions address identified administrative challenges to improve student performance?

3.2 Secondary Research Questions

1. How do administrative crisis manifestations vary across different school contexts within the study provinces?
2. What are stakeholder perceptions regarding the relationship between administrative quality and student outcomes?





3. Which intervention strategies demonstrate the greatest potential for improving administrative effectiveness and student performance?

4. OBJECTIVES

4.1 Primary Objectives

1. To examine the relationship between educational administrative crisis indicators and student performance in four northeast Thai provinces.
2. To identify and analyze specific administrative factors that significantly impact student academic outcomes.
3. To develop and validate evidence-based intervention strategies for improving educational administration and student performance.

4.2 Secondary Objectives

1. To investigate variations in administrative crisis manifestations across different educational contexts.
2. To explore stakeholder perspectives on administrative challenges and their educational impacts.
3. To pilot-test developed interventions and evaluate their effectiveness in improving educational outcomes.

5. METHODOLOGY

5.1 Research Design

This study employed a mixed-methods research and development (R&D) approach, combining quantitative and qualitative methodologies to comprehensively examine the relationship between educational administrative crises and student performance. The R&D framework facilitated systematic investigation, intervention development, and effectiveness evaluation through iterative cycles of research, development, and testing (Borg & Gall, 2018).

The research design incorporated three distinct phases: (1) exploratory research examining current conditions and relationships, (2) intervention development based on empirical findings, and (3) pilot implementation and evaluation of developed interventions. This sequential approach ensured that intervention strategies were grounded in empirical evidence and validated through systematic testing procedures.

5.2 Study Setting and Population

The research was conducted across four northeast Thai provinces: Kalasin, Khon Kaen, Udon Thani, and Nong Khai. These provinces were selected through purposive sampling based on their representative characteristics of the broader northeast region, including economic indicators, educational infrastructure, demographic composition, and administrative structures.





The target population comprised educational stakeholders across primary and secondary schools within the selected provinces, including school administrators, teachers, students, and educational support personnel. Sampling frames were developed through collaboration with Provincial Education Offices to ensure representative coverage across urban, suburban, and rural school contexts.

5.3 Sample Size Determination

Quantitative sample size was calculated using the Taro Yamane formula for finite population sampling:

$$n = N / (1 + Ne^2)$$

Where:

- n = required sample size
- N = population size (12,847 educational personnel)
- e = margin of error (0.05)

The calculation yielded a minimum sample of 384 participants for quantitative analysis. To ensure adequate representation across provinces and school types, the sample was stratified proportionally, resulting in 96 participants per province distributed across different stakeholder categories.

Qualitative sample size was determined through purposive sampling targeting 30 key informants (7-8 per province) identified through stakeholder mapping and snowball sampling techniques. Qualitative participants included senior administrators, experienced teachers, student representatives, and educational policy implementers selected for their expertise and diverse perspectives.

5.4 Data Collection Instruments

5.4.1 Quantitative Instruments

The study utilized a validated questionnaire comprising four main sections:

Demographic Information Scale: Collecting participant background data including position, experience, education level, and institutional characteristics.

Educational Administrative Crisis Scale (EACS): A 36-item instrument measuring crisis indicators across four dimensions: leadership instability (9 items), resource misallocation (9 items), policy inconsistency (9 items), and communication breakdown (9 items). Items were rated on a 5-point Likert scale (1 = never, 5 = always).

Student Performance Indicator Scale (SPIS): A 24-item instrument assessing student performance outcomes across academic achievement (8 items), engagement levels (8 items), and behavioral indicators (8 items). Items utilized a 5-point Likert scale (1 = very poor, 5 = excellent).

Administrative Effectiveness Scale (AES): A 30-item instrument measuring perceived administrative quality across planning (10 items), implementation (10 items), and evaluation (10 items) dimensions.





All quantitative instruments underwent rigorous validation procedures including expert review, pilot testing, and reliability analysis. Cronbach's alpha coefficients exceeded 0.85 for all scales, indicating acceptable internal consistency.

5.4.2 Qualitative Instruments

Qualitative data collection employed semi-structured interview guides and focus group discussion protocols designed to explore stakeholder perceptions, experiences, and recommendations regarding administrative challenges and student performance impacts.

Interview guides comprised open-ended questions addressing:

Personal experiences with administrative crises

Perceived impacts on educational quality and student outcomes

Barriers to effective administration

Recommendations for improvement

Intervention preferences and feasibility assessments

5.5 Data Collection Procedures

Data collection occurred over a six-month period (January-June 2022) following institutional review board approval and informed consent procedures. Quantitative data were collected through face-to-face surveys administered during school visits, while qualitative data were gathered through individual interviews and focus group discussions conducted at participant-convenient locations.

Research assistants received comprehensive training on data collection procedures, ethical considerations, and quality assurance protocols. Regular supervision and quality checks ensured consistency and accuracy throughout the data collection process.

5.6 Data Analysis

5.6.1 Quantitative Analysis

Quantitative data analysis utilized SPSS 28.0 and AMOS 24.0 software packages to conduct:

Descriptive Analysis: Calculating means, standard deviations, frequencies, and percentages for all variables.

Correlation Analysis: Examining relationships between administrative crisis indicators and student performance measures using Pearson correlation coefficients.

Multiple Regression Analysis: Identifying significant predictors of student performance decline through stepwise regression procedures.

Structural Equation Modeling (SEM): Testing hypothesized relationships between latent constructs and evaluating model fit using standard goodness-of-fit indices.

5.6.2 Qualitative Analysis

Qualitative data analysis followed thematic analysis procedures outlined by Braun and Clarke (2021), including:





Data Familiarization: Repeated reading and preliminary noting of interesting features.
Initial Coding: Systematic coding of relevant data features across the entire dataset.
Theme Development: Collating codes into potential themes and gathering relevant data.
Theme Review: Checking themes against coded extracts and entire dataset.
Theme Definition: Ongoing analysis to refine theme specifics and overall story.
Report Writing: Final analysis and write-up, selecting compelling extract examples.

5.6.3 Mixed-Methods Integration

Integration of quantitative and qualitative findings occurred through triangulation procedures, comparing convergent and divergent results across methodological approaches. Joint displays and meta-inferences facilitated comprehensive understanding of research phenomena and enhanced validity of conclusions.

5.7 Ethical Considerations

The study adhered to international ethical standards for educational research, including:

- Institutional review board approval from relevant educational authorities
- Informed consent procedures for all participants
- Voluntary participation with withdrawal rights
- Confidentiality and anonymity protections
- Data security and storage protocols
- Participant feedback and verification procedures

5.8 Validity and Reliability

Research validity was enhanced through triangulation of data sources, methodological approaches, and analytical techniques. Construct validity of quantitative instruments was established through factor analysis and expert validation procedures. Qualitative validity was ensured through member checking, peer debriefing, and prolonged engagement with participants.

Reliability measures included internal consistency analysis for quantitative scales, inter-rater reliability for qualitative coding, and test-retest procedures for key instruments. All reliability measures exceeded acceptable thresholds, supporting the credibility of research findings.

6. RESULTS

6.1 Participant Characteristics

The quantitative sample comprised 384 participants distributed across four provinces: Kalasin (n=96), Khon Kaen (n=96), Udon Thani (n=96), and Nong Khai (n=96). Participant demographics revealed a diverse representation of educational stakeholders, with 42.7% teachers, 28.9% administrators, 19.8% support staff, and 8.6% student representatives. Gender





distribution was relatively balanced (53.1% female, 46.9% male), with mean age of 38.2 years (SD = 9.7) and average educational experience of 12.4 years (SD = 7.8).

Qualitative participants (n=30) included senior administrators (n=8), experienced teachers (n=12), student representatives (n=6), and educational policy implementers (n=4) selected through purposive sampling across all four provinces. This diverse representation ensured comprehensive perspectives on administrative challenges and student performance impacts.

6.2 Descriptive Statistics

Table 1 presents descriptive statistics for main study variables across all participants.

Table 1: Descriptive Statistics for Main Study Variables

Variable	n	Min	Max	Mean	SD	Skewness	Kurtosis
Leadership Instability	384	1.00	5.00	3.42	0.89	-0.23	-0.45
Resource Misallocation	384	1.22	4.89	3.28	0.76	-0.18	-0.38
Policy Inconsistency	384	1.33	4.78	3.15	0.82	-0.12	-0.52
Communication Breakdown	384	1.11	4.89	3.34	0.85	-0.28	-0.41
Academic Achievement	384	1.25	4.75	2.68	0.73	0.34	-0.29
Student Engagement	384	1.38	4.63	2.72	0.68	0.28	-0.33
Behavioral Indicators	384	1.50	4.50	2.79	0.64	0.21	-0.41
Administrative Effectiveness	384	1.27	4.73	2.63	0.71	0.39	-0.26

Results indicate moderate to high levels of administrative crisis indicators across all dimensions, with leadership instability showing the highest mean score (M = 3.42, SD = 0.89). Student performance indicators demonstrated below-average ratings, with academic achievement showing the lowest mean score (M = 2.68, SD = 0.73). All variables exhibited acceptable normality for parametric analysis procedures.

6.3 Correlation Analysis

Pearson correlation analysis revealed significant relationships between administrative crisis indicators and student performance measures (Table 2).

Table 2: Correlation Matrix for Administrative Crisis and Student Performance Variables

Variable	1	2	3	4	5	6	7	8
1. Leadership Instability	1							
2. Resource Misallocation	.68**	1						
3. Policy Inconsistency	.61**	.59**	1					
4. Communication Breakdown	.73**	.65**	.57**	1				
5. Academic Achievement	-	-	-	-	1			
	.64**	.58**	.52**	.61**				
6. Student Engagement	-	-	-	-	.72**	1		
	.59**	.61**	.48**	.56**				





7. Behavioral Indicators	-	-	-	-	.68**	.71**	1
	.52**	.54**	.44**	.49**			
8. Administrative Effectiveness	-	-	-	-	.79**	.74**	.66**
	.72**	.69**	.58**	.71**			1

Note: ** $p < .01$

Strong negative correlations emerged between all administrative crisis indicators and student performance measures, with the strongest relationship observed between leadership instability and administrative effectiveness ($r = -.72$, $p < .01$). These findings support the hypothesized inverse relationship between administrative crises and educational outcomes.

6.4 Multiple Regression Analysis

Stepwise multiple regression analysis identified significant predictors of student performance decline (Table 3).

Table 3: Multiple Regression Analysis Predicting Student Performance

Model	Predictors	B	SE B	β	t	p	R ²	ΔR^2
1	Leadership Instability	-0.523	0.041	-.634	-12.76	<.001	.402	.402
2	Leadership Instability	-0.367	0.045	-.445	-8.16	<.001	.553	.151
	Resource Misallocation	-0.378	0.052	-.389	-7.27	<.001		
3	Leadership Instability	-0.301	0.043	-.365	-7.00	<.001	.684	.131
	Resource Misallocation	-0.334	0.048	-.343	-6.96	<.001		
	Policy Inconsistency	-0.287	0.039	-.321	-7.36	<.001		

Note: Dependent Variable: Student Performance Composite Score; $F(3,380) = 274.52$, $p < .001$

The final model explained 68.4% of variance in student performance ($R^2 = .684$), with leadership instability ($\beta = -.365$, $p < .001$), resource misallocation ($\beta = -.343$, $p < .001$), and policy inconsistency ($\beta = -.321$, $p < .001$) emerging as significant predictors. Communication breakdown did not contribute significant unique variance after controlling for other predictors.

6.5 Structural Equation Modeling

Structural equation modeling tested the hypothesized relationships between administrative crisis dimensions and student performance outcomes (Figure 1 path coefficients shown below).

SEM Model Fit Indices:

- χ^2 (df) = 847.32 (324), $p < .001$
- RMSEA = 0.066 (90% CI: 0.061-0.072)
- CFI = 0.924
- TLI = 0.911
- SRMR = 0.058

The structural model demonstrated acceptable fit to the data, with all hypothesized paths achieving statistical significance. Administrative crisis showed strong negative effects on student performance ($\beta = -.72$, $p < .001$), mediated through administrative effectiveness ($\beta = -.68$, $p < .001$).





6.6 Provincial Comparisons

ANOVA revealed significant differences across provinces in administrative crisis levels [$F(3,380) = 12.47, p < .001$] and student performance outcomes [$F(3,380) = 8.93, p < .001$]. Post-hoc Tukey tests indicated that Kalasin demonstrated significantly higher crisis levels and lower performance compared to other provinces, while Khon Kaen showed relatively better outcomes across most indicators.

6.7 Qualitative Findings

Thematic analysis of qualitative data revealed five primary themes regarding administrative challenges and student performance impacts:

6.7.1 Leadership Instability and Turnover

Participants consistently identified frequent leadership changes as a primary source of administrative disruption. One senior administrator noted: *"We've had four different principals in six years. Each time someone new comes, they want to change everything, but they leave before seeing results."*

6.7.2 Resource Constraints and Inequitable Distribution

Limited financial resources and inequitable distribution emerged as significant barriers to educational quality. A teacher explained: *"We don't have enough textbooks, computers are outdated, and our building needs repairs. How can we provide quality education without proper resources?"*

6.7.3 Policy Implementation Challenges

Participants described difficulties implementing educational policies due to unclear directives and insufficient support. An administrator stated: *"Policies change so often, and we receive minimal training. We're expected to implement reforms without understanding their purpose or having necessary resources."*

6.7.4 Communication Breakdowns

Poor communication between administrative levels hindered effective coordination and decision-making. A teacher observed: *"Information doesn't flow well between the ministry, province, and schools. We often learn about important changes through informal channels."*

6.7.5 Impact on Student Learning Environment

Participants identified clear connections between administrative problems and deteriorating learning conditions. A student representative shared: *"When teachers are stressed about administrative issues, it affects our classes. Sometimes activities get cancelled because of administrative problems."*





6.8 Intervention Development and Pilot Testing

Based on empirical findings, a comprehensive intervention framework was developed addressing identified crisis factors through targeted strategies:

1. **Leadership Development Program:** Intensive training for educational administrators focusing on crisis management, strategic planning, and effective communication.
2. **Resource Optimization System:** Evidence-based resource allocation procedures and monitoring mechanisms to ensure equitable distribution.
3. **Policy Implementation Support:** Structured support systems including training, mentoring, and feedback mechanisms for policy implementation.
4. **Communication Enhancement Protocol:** Systematic communication channels and procedures to improve information flow and coordination.

Pilot implementation across 12 schools (3 per province) over six months demonstrated significant improvements in administrative effectiveness (Cohen's $d = 1.23$) and student performance indicators (Cohen's $d = 0.87$), supporting intervention validity and potential for broader implementation.

7. DISCUSSION

7.1 Interpretation of Main Findings

The study's findings provide compelling evidence for the significant relationship between educational administrative crises and student performance in northeast Thailand. The strong negative correlations observed between crisis indicators and performance measures ($r = -.672$, $p < .001$) align with international research demonstrating the critical importance of effective educational leadership for student outcomes (Day et al., 2021; Grissom et al., 2021).

The identification of leadership instability as the strongest predictor of performance decline ($\beta = -.365$, $p < .001$) corroborates theoretical frameworks emphasizing leadership continuity for organizational effectiveness (Leithwood et al., 2020). This finding proves particularly relevant for Thailand's northeast region, where frequent administrative turnover has created ongoing disruptions to educational planning and implementation processes.

Resource misallocation emerged as the second strongest predictor ($\beta = -.343$, $p < .001$), reflecting the complex challenges of educational resource management in economically disadvantaged regions. This finding aligns with equity theory suggesting that perceived fairness in resource distribution significantly impacts organizational outcomes and stakeholder satisfaction (Adams, 1965; Colquitt et al., 2019).

7.2 Provincial Variations and Contextual Factors

The significant differences observed across provinces highlight the importance of contextual factors in understanding administrative challenges and their impacts. Kalasin's higher crisis levels and lower performance outcomes may reflect its more rural characteristics and greater distance from regional economic centers, consistent with research on geographical influences on educational quality (Jitsuchon & Richter, 2019).





Conversely, Khon Kaen's relatively better performance may benefit from its status as a regional economic and educational hub, providing greater access to resources, qualified personnel, and administrative support systems. These findings underscore the need for differentiated intervention approaches that account for local contextual factors and varying administrative capacities.

7.3 Theoretical Implications

The study's findings contribute to educational administration theory by demonstrating the applicability of crisis management frameworks to educational contexts in developing nations. The observed relationships between administrative crisis indicators and performance outcomes support systems theory perspectives emphasizing the interconnected nature of organizational components and their collective impact on outcomes (Boulding, 1956; Senge, 2006).

The mediation effects of administrative effectiveness in the relationship between crisis factors and student performance provide empirical support for transformational leadership theory, suggesting that effective administration can buffer against external pressures and maintain educational quality despite challenging circumstances (Bass & Riggio, 2006; Northouse, 2021).

7.4 Practical Implications for Policy and Practice

The research findings offer several important implications for educational policy and practice in Thailand and similar developing contexts:

7.4.1 Leadership Development Priorities

The strong predictive value of leadership instability suggests that investment in leadership development and retention programs should be prioritized. This includes providing competitive compensation packages, professional development opportunities, and career advancement pathways to attract and retain qualified educational administrators.

7.4.2 Resource Allocation Reform

The significant impact of resource misallocation indicates the need for systematic reforms in educational resource distribution mechanisms. This includes developing transparent allocation formulas, implementing monitoring systems, and ensuring equitable access to educational resources across geographical regions.

7.4.3 Policy Implementation Support

The identified challenges with policy inconsistency highlight the importance of providing comprehensive implementation support, including training programs, technical assistance, and ongoing monitoring and feedback systems to ensure effective policy translation into practice.





7.5 Intervention Framework Effectiveness

The successful pilot implementation of the developed intervention framework demonstrates the potential for evidence-based approaches to address administrative challenges and improve educational outcomes. The significant effect sizes observed (Cohen's $d = 1.23$ for administrative effectiveness; $d = 0.87$ for student performance) suggest that targeted interventions can produce meaningful improvements even in resource-constrained environments.

The multi-dimensional approach addressing leadership, resources, policy, and communication simultaneously proved more effective than single-focus interventions, supporting systems thinking approaches to organizational change and improvement (Fullan, 2020; Kotter, 2012).

7.6 Limitations and Future Research Directions

Several limitations should be acknowledged in interpreting these findings. First, the cross-sectional design limits causal inferences, although the mixed-methods approach and theoretical grounding provide strong support for hypothesized relationships. Future research should employ longitudinal designs to examine temporal relationships and change processes over time.

Second, the focus on four northeast provinces may limit generalizability to other regions of Thailand or international contexts. Comparative studies across different geographical and cultural contexts would enhance understanding of factors influencing the relationship between administrative quality and educational outcomes.

Third, while the study included multiple stakeholder perspectives, additional voices such as parents, community leaders, and higher-level policymakers could provide valuable insights into administrative challenges and potential solutions. Future research should expand stakeholder inclusion to develop more comprehensive understanding of educational administration dynamics.

Fourth, the intervention pilot implementation period of six months, while demonstrating initial effectiveness, requires longer-term evaluation to assess sustainability and long-term impacts. Future studies should examine intervention effects over multiple academic years to understand lasting benefits and implementation challenges.

7.7 Contribution to Regional Educational Development

This research contributes significantly to understanding educational challenges in Southeast Asia's developing regions. The findings provide empirical evidence for theoretical relationships that have been assumed but not systematically tested in Thai contexts. The developed intervention framework offers practical tools that can be adapted for similar educational systems facing comparable administrative challenges.

The study's emphasis on contextual factors and regional variations provides important insights for educational development policies that must account for diverse local conditions while maintaining system-wide coherence and quality standards.





8. CONCLUSION

This mixed-methods research and development study provides comprehensive evidence of the significant relationship between educational administrative crises and student performance in northeast Thailand. The findings demonstrate that leadership instability, resource misallocation, and policy inconsistency serve as primary predictors of student performance decline, explaining 68.4% of variance in educational outcomes across four studied provinces.

The research contributes to educational administration theory by validating crisis management frameworks in developing nation contexts and demonstrating the critical importance of administrative effectiveness for educational quality. The successful development and pilot testing of evidence-based interventions provides practical tools for addressing identified challenges and improving educational outcomes in resource-constrained environments.

Key findings include: (1) strong negative correlations between administrative crisis indicators and student performance measures; (2) leadership instability as the strongest predictor of performance decline; (3) significant provincial variations reflecting contextual factors; (4) effectiveness of multi-dimensional intervention approaches; and (5) potential for evidence-based solutions to produce meaningful improvements in educational outcomes.

The study's implications extend beyond Thailand's northeast region to broader discussions of educational development in emerging economies. The developed intervention framework provides replicable strategies for addressing administrative challenges while accounting for local contextual factors and resource constraints.

Future research should examine long-term intervention effects, expand geographical scope, and investigate cultural factors influencing administrative effectiveness. Additionally, comparative studies across different developing nation contexts would enhance understanding of universal versus context-specific factors in educational administration and student performance relationships.

This research demonstrates that systematic, evidence-based approaches to educational administration can significantly improve student outcomes even in challenging circumstances. The findings provide optimism for educational development efforts while highlighting the critical importance of effective administrative foundations for educational quality and equity.

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APPENDICES

Appendix A: Research Instruments

A.1 Educational Administrative Crisis Scale (EACS)

Instructions: Please rate how frequently each situation occurs in your educational institution using the following scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always

Leadership Instability Dimension

1. School leadership positions experience frequent turnover
2. Administrative decisions are frequently reversed by new leadership
3. Leadership changes disrupt ongoing educational programs
4. Staff uncertainty exists regarding leadership expectations
5. Leadership transitions occur without proper planning
6. New leaders lack adequate preparation for their roles
7. Leadership changes result in policy inconsistencies
8. Administrative continuity is disrupted by leadership turnover
9. Leadership instability affects staff morale and performance

Resource Misallocation Dimension 10. Educational resources are distributed unfairly across departments 11. Budget allocations do not match educational priorities 12. Resource decisions lack transparent criteria 13. Essential educational materials are unavailable when needed 14. Infrastructure maintenance is inadequately funded 15. Technology resources are outdated or insufficient 16. Professional development opportunities are limited 17. Resource allocation decisions exclude teacher input 18. Emergency funding requests are frequently necessary

Policy Inconsistency Dimension 19. Educational policies change frequently without notice 20. Policy implementation guidelines are unclear or contradictory 21. Different administrative levels interpret policies differently 22. Policy changes disrupt established educational practices 23. Staff receive insufficient training for new policy implementation 24. Policies conflict with available resources or capacity 25. Policy evaluation and feedback





mechanisms are inadequate 26. Long-term planning is disrupted by policy changes 27. Policy implementation timelines are unrealistic

Communication Breakdown Dimension 28. Information flow between administrative levels is poor 29. Important decisions are communicated inadequately 30. Staff meetings are infrequent or ineffective 31. Feedback mechanisms between administration and staff are limited 32. Communication channels are unclear or inconsistent 33. Administrative announcements are delayed or confusing 34. Inter-departmental communication is problematic 35. Community stakeholder communication is inadequate 36. Technology systems for communication are insufficient

A.2 Student Performance Indicator Scale (SPIS)

Instructions: Please rate the current status of student performance indicators in your institution using the following scale: 1 = Very Poor, 2 = Poor, 3 = Average, 4 = Good, 5 = Excellent

Academic Achievement Dimension

1. Students' standardized test performance
2. Grade distribution across subject areas
3. Academic progress monitoring results
4. Learning objective attainment rates
5. Subject-specific skill development
6. Critical thinking and problem-solving abilities
7. Written and oral communication skills
8. Technology literacy and application

Student Engagement Dimension 9. Class participation and interaction levels 10. Assignment completion rates 11. Extracurricular activity involvement 12. School event participation 13. Student initiative and self-direction 14. Collaborative learning behaviors 15. Curiosity and questioning behaviors 16. Creative expression and innovation

Behavioral Indicators Dimension 17. Attendance and punctuality rates 18. Disciplinary incident frequency 19. Respect for teachers and peers 20. Following school rules and procedures 21. Conflict resolution skills 22. Leadership development among students 23. Social responsibility and citizenship 24. Emotional regulation and maturity

Appendix B: Statistical Analysis Output Tables

B.1 Factor Analysis Results for Educational Administrative Crisis Scale

Table B.1: Principal Component Analysis with Varimax Rotation

Item	Factor 1	Factor 2	Factor 3	Factor 4	Communality
Leadership1	.812	.156	.123	.089	.702
Leadership2	.798	.134	.167	.112	.689
Leadership3	.776	.189	.098	.145	.668
Leadership4	.743	.201	.156	.178	.634





Leadership5	.721	.167	.189	.134	.587
Leadership6	.698	.223	.145	.156	.576
Leadership7	.689	.189	.198	.167	.551
Leadership8	.672	.234	.176	.189	.578
Leadership9	.654	.198	.167	.201	.534
Resource1	.189	.798	.134	.123	.698
Resource2	.156	.776	.167	.145	.672
Resource3	.167	.754	.189	.156	.634
Resource4	.134	.732	.198	.167	.589
Resource5	.189	.698	.156	.189	.578
Resource6	.201	.687	.178	.198	.567
Resource7	.178	.654	.189	.176	.534
Resource8	.156	.643	.201	.189	.523
Resource9	.167	.621	.178	.201	.512

Kaiser-Meyer-Olkin Measure: .926

Bartlett's Test of Sphericity: $\chi^2 = 8,947.32$, $df = 630$, $p < .001$

Total Variance Explained: 68.45%

B.2 Reliability Analysis Results

Table B.2: Internal Consistency Reliability Coefficients

Scale/Dimension	Items	Cronbach's α	McDonald's ω	Mean Inter-item r
Educational Administrative Crisis (Total)	36	.942	.944	.387
Leadership Instability	9	.898	.901	.524
Resource Misallocation	9	.891	.894	.498
Policy Inconsistency	9	.886	.889	.467
Communication Breakdown	9	.893	.896	.512
Student Performance (Total)	24	.924	.926	.423
Academic Achievement	8	.876	.879	.456
Student Engagement	8	.869	.872	.434
Behavioral Indicators	8	.864	.867	.421
Administrative Effectiveness	30	.936	.938	.398

Appendix C: Qualitative Data Analysis Framework

C.1 Interview Guide for School Administrators

Background Information

1. How long have you served in educational administration?
2. What is your current role and responsibilities?
3. How would you describe your school's current administrative situation?





Administrative Challenges 4. What are the most significant administrative challenges your school faces? 5. How do these challenges impact daily operations? 6. Can you describe a specific example of an administrative crisis your school experienced? 7. How did this crisis affect educational quality and student outcomes?

Leadership and Management 8. How do leadership changes affect your school's operations? 9. What factors contribute to leadership instability in your context? 10. How do you maintain continuity during leadership transitions?

Resource Management 11. How would you describe your school's resource allocation processes? 12. What challenges do you face in securing adequate resources? 13. How do resource constraints impact educational quality?

Policy Implementation 14. How do you typically learn about new educational policies? 15. What challenges do you encounter when implementing new policies? 16. How could policy implementation processes be improved?

Student Performance Impact 17. How do administrative challenges affect student performance? 18. Can you provide specific examples of this relationship? 19. What strategies have you used to minimize negative impacts on students?

Recommendations and Solutions 20. What changes would most improve educational administration in your context? 21. What support do you need to address current challenges? 22. How could external stakeholders better support your school's administration?

C.2 Thematic Analysis Coding Framework

Primary Themes and Sub-themes

Theme 1: Leadership Instability and Turnover

- Sub-theme 1.1: Frequent leadership changes
- Sub-theme 1.2: Inadequate leadership preparation
- Sub-theme 1.3: Disruption of ongoing initiatives
- Sub-theme 1.4: Impact on staff morale and continuity

Theme 2: Resource Constraints and Distribution

- Sub-theme 2.1: Inadequate funding levels
- Sub-theme 2.2: Inequitable resource allocation
- Sub-theme 2.3: Infrastructure and technology deficits
- Sub-theme 2.4: Limited professional development opportunities

Theme 3: Policy Implementation Challenges

- Sub-theme 3.1: Unclear policy directives
- Sub-theme 3.2: Insufficient implementation support
- Sub-theme 3.3: Frequent policy changes
- Sub-theme 3.4: Resource-policy misalignment

Theme 4: Communication Breakdowns

- Sub-theme 4.1: Poor information flow
- Sub-theme 4.2: Inadequate feedback mechanisms
- Sub-theme 4.3: Technology communication barriers
- Sub-theme 4.4: Stakeholder engagement deficits





Theme 5: Student Learning Environment Impact

- Sub-theme 5.1: Classroom instruction disruption
- Sub-theme 5.2: Reduced educational opportunities
- Sub-theme 5.3: Student stress and uncertainty
- Sub-theme 5.4: Long-term academic consequences

Appendix D: Intervention Development Framework

D.1 Evidence-Based Intervention Strategies

Strategy 1: Comprehensive Leadership Development Program

Theoretical Foundation: Transformational leadership theory and adult learning principles

Implementation Components:

1. Pre-service leadership preparation (120 hours)
2. Mentorship program with experienced administrators
3. Crisis management training modules
4. Strategic planning and evaluation skills development
5. Communication and stakeholder engagement training
6. Ongoing professional learning communities

Expected Outcomes:

- Reduced leadership turnover rates
- Improved administrative decision-making quality
- Enhanced crisis preparedness and response
- Stronger stakeholder relationships

Strategy 2: Resource Optimization and Monitoring System

Theoretical Foundation: Equity theory and evidence-based resource allocation

Implementation Components:

1. Transparent resource allocation formula development
2. Regular needs assessment procedures
3. Performance-based budgeting implementation
4. Technology-enhanced monitoring systems
5. Community resource mobilization strategies
6. Inter-school resource sharing networks

Expected Outcomes:

- More equitable resource distribution
- Improved resource utilization efficiency
- Enhanced transparency and accountability
- Increased community support and engagement

Strategy 3: Policy Implementation Support Framework

Theoretical Foundation: Implementation science and organizational change theory

Implementation Components:

1. Policy implementation readiness assessment
2. Structured training and technical assistance





3. Pilot testing and feedback mechanisms
4. Ongoing monitoring and adjustment procedures
5. Best practice identification and sharing
6. Stakeholder feedback integration systems

Expected Outcomes:

- Improved policy implementation fidelity
- Reduced implementation barriers
- Enhanced staff capacity and confidence
- Better alignment between policy intent and practice

Strategy 4: Communication Enhancement Protocol

Theoretical Foundation: Communication theory and stakeholder engagement models

Implementation Components:

1. Multi-channel communication system development
2. Regular stakeholder feedback sessions
3. Technology-enhanced information sharing
4. Community engagement initiatives
5. Conflict resolution and mediation training
6. Transparency and accountability mechanisms

Expected Outcomes:

- Improved information flow and coordination
- Enhanced stakeholder satisfaction and trust
- Reduced misunderstandings and conflicts
- Stronger school-community partnerships

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The mixed-methods approach and statistical analyses employed in this research were conducted using appropriate software packages and validated instruments to ensure methodological rigor and reliability of findings. All participants provided informed consent, and confidentiality protocols were maintained throughout the research process.

