

Education and Literacy Impact of Excellence Quality Management on Innovative Organizations in Basic Schools under Nonthaburi Provincial Administrative Organization, Thailand

Piyapun Santaveesuk*, Samreng Onsampant, Kasinee Sokuma

Faculty of Educational, Shinawatra University, Thailand

Corresponding author: Piyapun Santaveesuk, E-mail: piyapun.s@siu.ac.th

ARTICLE INFO

Article history

Received: January 03, 2024

Accepted: April 05, 2024

Published: April 30, 2024

Volume: 12 Issue: 2

Conflicts of interest: None

Funding: This research project was financially supported by Shinawatra University

ABSTRACT

The objectives of this study were to study (i) the excellence in quality management of basic schools in the Nonthaburi Provincial Administrative Organization, (ii) the innovative organization of basic schools at the Nonthaburi Provincial Administrative Organization, and (iii) the excellence in quality management affecting the innovative organization of primary schools under the Nonthaburi Provincial Administrative Organization. The study involved 240 participants, encompassing administrators, heads of learning groups, and teachers. The research instrument utilized was a questionnaire, and statistical analyses such as frequency, percentage, mean, standard deviation, and stepwise multiple regression analysis were employed to analyze the collected data. Findings reveal significant insights: The study highlights a high level of practice in excellent quality management in basic schools, ranking in descending order as follows: student and stakeholder focus, performance results, strategic planning, faculty, and staff focus, measurement, analysis and knowledge management, process management, and leadership. The innovative organization of basic schools encourages high-level ranking in descending order: key individual, appropriate organizational structure, creative raising climate, effective teamwork, long-term stability, boundary spanning and learning exchange, high-involvement innovation, shared vision, and intention to create innovation. The study excellence quality management five variables: performance results, leadership strategic planning, process management staff focus that affected the innovation organization of primary schools under the Nonthaburi Provincial Administrative Organization, totaling 84.70 percent, written as a regression analysis equation as follows $\hat{Y}_{tot} = 0.080 + 0.269X_7 + 0.091X_1 + 0.231X_6 + 0.164X_2 + 0.133X_5$.

Key words: Excellence Quality Management, Innovative organization, Administrative Organization

INTRODUCTION

Education and literacy stand at the forefront of seismic changes in today's globalized landscape, spanning scientific advancements, societal shifts, a knowledge-driven economy, and the relentless surge of information technology and innovation. This epoch marks the emergence of a borderless digital society, propelled by digital disruption—an unprecedented transformation triggered by digital technology. This phenomenon ushers in new paradigms, innovative business models, and a profound impact on traditional industrial frameworks. Negotiating this rapid shift presents a formidable challenge, requiring a workforce adept in technology, fostering self-reliance, and nurturing quality individuals poised to advance technology (Ngernprasertsri, 2012).

The evolution and assimilation of innovation, technology, and the digital age within organizational frameworks have necessitated adaptive measures. Organizations strive for agility, fostering continuous learning, team synergy, systematic planning, and a shared vision to stay attuned to the

evolving landscape and propel educational quality. In this digital era, the imperative lies in cultivating individuals who can enhance their work and adeptly navigate evolving work systems—an imperative for organizations aspiring to achieve high-performance outcomes and excellence (Onsampant, 2020).

For educational management, the cornerstone rests on enhancing educational quality to align with international standards and national developmental directives. Educational institutions necessitate structural, procedural, and strategic frameworks, underscoring the need for principled, methodical, and strategic educational organizational management (Mongkolvanich, 2012). School administrators wield leadership and professionalism to steer teachers, organizational systems, and support mechanisms toward driving quality development toward excellence.

The Nonthaburi Provincial Administrative Organization Office is responsible for providing quality education at the foundational level within its purview. It aims to raise teaching

and learning standards to meet international benchmarks, focusing on academic quality, teacher proficiency, and research and development, according to the World-Class Standard School principals and the OBECQA quality criteria. The institution has structured its school quality management into a comprehensive system of excellence across seven categories to foster international-level quality development.

As Decharin (2012) outlined, an innovative organization espouses a culture fostering innovation and creativity among educational personnel. Central to this ethos is leadership that encourages enthusiastic engagement and professional knowledge acquisition to drive innovations beneficial to the organization and stakeholders. Joe et al., (2009) delineate eight pivotal components crucial to innovative organization management: shared vision, organizational structure, key individuals, high-involvement innovation, effective teamwork, a creative climate, boundary-spanning, and transcending the status quo.

Despite its dedication to educational excellence, the evaluation of educational management in the academic year 2022 revealed critical areas requiring development within the 57 educational institutions under the Nonthaburi Provincial Administrative Organization Office. Challenges include declining O-NET test results, a shortage of personnel with specialized knowledge like information technology, inadequate digital technology equipment, and the direct academic impact of the COVID-19 pandemic. Notably, non-participation in the World Class Standard School project poses a potential barrier to advancing quality management toward excellence and fostering innovative organizations.

Recognizing the pivotal nature of these challenges, this study aims to explore the impact of quality management toward excellence influenced by innovative organizations within basic schools under the aegis of the Nonthaburi Provincial Administrative Organization Office, Thailand.

1. To study the Excellence Quality Management of Basic Schools the Nonthaburi Provincial Administrative Organization Office
2. To study the Innovative Organization of basic Schools the Nonthaburi Provincial Administrative Organization Office
3. To study Excellence Quality Management affecting Innovative Organization of basic Schools under Nonthaburi Provincial Administrative Organization

CONCEPTUAL FRAMEWORK OF RESEARCH

The researchers have defined the conceptual framework by using excellent quality management based on the principles of the Office of the Basic Education Commission (2010) in 7 categories: (1) Leadership, (2) Strategic Planning, (3) Student and Stakeholder Focus, (4) Measurement, analysis, and knowledge management, (5) Faculty and Staff Focus, (6) Process Management, and (7) Performance Results. In addition, the study of innovative organizations is based on the concept of Joe et al., (2009), in 8 elements as follows: (1) Shared Vision and Will to Innovation, (2) Appropriate Organization Structure, (3) Key Individual, (4) High Involvement Innovation, (5) Effective Team Working, (6) Creative Climate, (7) boundary spanning and learning exchange, and (8) long-term stability. The conceptual framework of the research is shown in Figure 1.

RESEARCH METHODOLOGY

Population and Sample

The population is 57 basic schools under the Local Administrative Organization in Nonthaburi Province, divided into 34 schools under the Nonthaburi Provincial Administrative Organization and 23 schools under the municipality in Nonthaburi Province.

The sample size was determined by using the sample size table of Krejcie and Morgan, totaling 48 basic schools classified as basic schools under the Provincial Administrative Organization have 29 schools and 19 schools under the municipality in Nonthaburi Province, specifying the 5 informants per school, including 1 administrator, 2 heads subject group, and 2 teachers, total 240 informants.

Research Instrument

The research instrument was a questionnaire with content validity values of 0.67-1.00 and a reliability value of 0.982.

Research Statistic

Using Frequency and Percentage to analyze the state of key informants, Mean, and Standard deviation to analyze Excellence Quality Management and Innovative Organization, and Stepwise Multiple Regression Analysis to

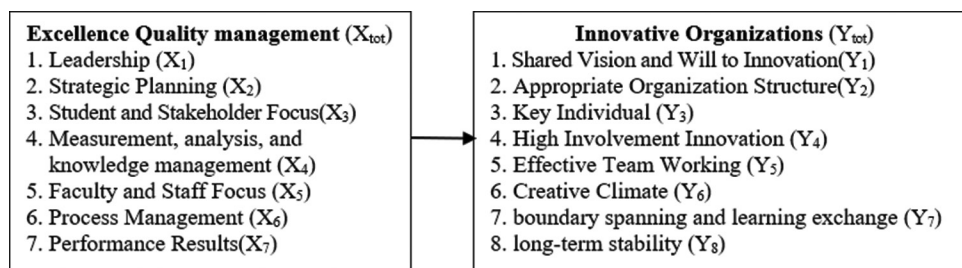


Figure 1. Conceptual Framework

Source: Office of the Basic Education Commission, 2010; Joe et al., 2009; Managing Innovation Integrating Technological Market and Organization, 2009

analyze the excellence quality management that affects innovation organizations.

RESULTS

Table 1 shows that the excellent quality management of basic schools under the Nonthaburi Provincial Administrative Organization is at a high level overall ($M=4.28$, $SD = 0.54$).

When considering each aspect, it was found that the excellent management quality of the basic school under the

Table 1. Mean, and standard deviation of excellence quality management of basic school under nonthaburi provincial administrative organization overall (x_{tot}) ($n = 240$)

No.	Excellence Quality Management	M	SD	Level
1	Leadership (X_1)	4.23	0.62	high
2	Strategic Planning (X_2)	4.30	0.54	high
3	Student and Stakeholder Focus (X_3)	4.33	0.87	high
4	Measurement, Analysis and Knowledge Management (X_4)	4.28	0.57	high
5	Faculty and Staff Focus (X_5)	4.29	0.63	high
6	Process Management (X_6)	4.24	0.62	high
7	Performance Results (X_7)	4.31	0.56	high
Total		4.28	0.54	high

Nonthaburi Provincial Administrative Organization was at an average or high level in every aspect. Sort from highest to lowest as follows: Student and stakeholder focus ($M= 4.33$, $SD = 0.87$) Faculty and Staff Focus ($M= 4.29$, $SD = 0.63$) Measurement, analysis, and knowledge management ($M=4.28$, $SD=0.57$) Process management ($M= 4.24$, $SD = 0.62$) and leadership ($M= 4.23$, $SD = 0.62$).

From Table 2, it was found that Innovative Organization under Nonthaburi Provincial Administrative Organization was at a high level ($M =4.27$, $SD =.57$). When considering each aspect, the Innovative Organization of basic school under the Nonthaburi Provincial Administrative Organization was an average level at a high level in every aspect. Sort from highest to lowest as follows: Key Individual (Y_3) ($M= 4.32$, $SD = 0.60$), Appropriate Organization Structure (Y_2) ($M= 4.29$, $SD = 0.61$), Creative Climate(Y_6) ($M= 4.29$, $SD = 0.64$), Effective Team Working(Y_5) ($M= 4.28$, $SD = 0.61$), Beyond the steady state(Y_8) ($M = 4.26$, $SD = 0.66$), Boundary Spanning (Y_7) ($M= 4.25$, $SD = 0.62$), High Involvement Innovation (Y_4) ($M= 4.25$, $SD = 0.64$) and the lowest was Shared Vision, Leadership and the Will to Innovate (Y_1) ($M= 4.24$, $SD = 0.64$)

Multiple R 0.922, R Square 0.850, Adjusted R Square 0.847, Standard Error 0.224

Table 3 shows that excellent quality management affects the innovation of basic schools under the Nonthaburi Provincial Administrative Organization. Overall (Y_{tot}) ranks

Table 2. Mean, and standard deviation of innovative organization under nonthaburi provincial administrative organization in overall ($n = 240$)

No.	Innovative Organizations	M	SD	Level
1	Shared Vision, Leadership, and the Will to Innovate (Y_1)	4.24	0.64	high
2	Appropriate Organization Structure (Y_2)	4.29	0.61	high
3	Key Individual (Y_3)	4.32	0.60	high
4	High Involvement Innovation (Y_4)	4.25	0.64	high
5	Effective Team Working (Y_5)	4.28	0.61	high
6	Creative Climate (Y_6)	4.29	0.64	high
7	Boundary Spanning (Y_7)	4.25	0.62	high
8	Beyond the steady state (Y_8)	4.26	0.66	high
Total		4.27	0.57	high

Table 3. Results of multiple regression analysis of excellence quality management that affects innovation organization of basic school under nonthaburi provincial administrative organization overall (y_{tot})

Variables	Excellence Quality management variables that selected into the equation				
	Unstandardized Coefficients		Standardized Coefficients	t	p
	B	Std. Error	Beta		
Constant	0.080	0.121		0.657	0.512
Performance Results (X_7)	0.269	0.067	0.531	12.675*	0.000
Leadership (X_1)	0.184	0.040	0.106	2.859*	0.000
Process Management (X_6)	0.231	0.050	0.157	4.439*	0.000
Strategic Planning (X_2)	0.164	0.056	0.132	4.029*	0.004
Faculty and Staff Focus (X_5)	0.133	0.051	0.100	3.645*	0.010

*Statistically significant at the 0.01 level

Multiple R 0.922, R Square 0.850, Adjusted R Square 0.847, Standard Error 0.224

the best predictors of 5 variables: Performance results (X_7), Leadership (X_1), Process Management (X_6), strategic planning (X_2), and Faculty and Staff Focus (X_5) can predict the creation of innovation organizations of basic school under the Nonthaburi Provincial Administrative Organization overall at 84.70 percent, which can be written as a regression analysis equation as follows.

$$\hat{Y}_{tot} = 0.080 + 0.269X_7 + 0.091X_1 + 0.231X_6 + 0.164X_2 + 0.133X_5$$

DISCUSSION AND CONCLUSION

Excellence Quality Management of Schools under Nonthaburi Provincial Administrative Organization: The study revealed that the Excellence Quality Management of schools within the Nonthaburi Provincial Administrative Organization exhibited a high level overall. The ranking of different aspects descended in the following order: student and stakeholder focus, performance results, strategic planning, staff focus, measurement, analysis and knowledge management, process management, and leadership. This outcome underscores the efficacy of current educational management practices within basic schools. The administrators play a crucial role in driving management across three dimensions: personnel, organization, and network administration. Leadership, guided by planning, organizing, leading, empowerment, and controlling principles, forms the backbone of educational management. Basic education school administrators are equipped with the necessary qualifications, holding at least a master's degree in educational administration, and receiving ongoing training. The age distribution of administrators and teachers, primarily between 31-40 years old, aligns with a powerful demographic for fostering creative work. Nonthaburi Province's commitment to education, supported by both government and local administrative centers, further contributes to the city's reputation as an educational hub. This aligns with established definitions of "quality" and resonates with concepts like work, service, and system quality (Ishikawa & Lu, 1985; Chamornman, 2000). The adherence to guidelines such as those set by the Office of the Basic Education Commission (OBEC), the Thailand Quality Award (TQA), and the concept of excellence quality management has yielded successful outcomes, establishing a model for other schools to emulate.

Innovative Organization Creation of Basic Education Schools under Nonthaburi Province: The study found that Innovative Organization Creation within basic education schools under Nonthaburi Province also demonstrated a high overall level. This achievement can be attributed to administrators' adherence to OBEC policies and robust support from the local administrative center. Prioritizing the utilization of innovations and creating efficient operational standards has enabled schools to adapt to the digital era's challenges. Administrators strategically plan for the future, create shared visions, set clear directions, and implement strategies to develop schools with determination. This approach is characterized by a flexible work structure, emphasis on key personnel, and a commitment to developing teachers' innovation and

technology skills. Teachers are encouraged to participate in creating, planning, and applying innovations, fostering effective teamwork and a creative atmosphere. Collaboration, knowledge exchange, and a commitment to innovation are essential elements for creating Innovative Organizations. The study aligns with previous research emphasizing the importance of teamwork, organizational culture, and leadership in fostering innovation (Phakdilao, 2011; Thongwang, 2015; Haygroup, 2006; Suesat, 2006).

Impact of Excellence Quality Management on Innovative Organization: The research established that Excellence Quality Management significantly influences the Innovative Organization of basic educational institutions under the Nonthaburi Provincial Administrative Organization. The five variables identified—results, organizational leadership, process management, strategic planning, and personnel focus—demonstrated predictive power for the creation of an Innovative Organization. With an overall predictive score of 84.70%, the findings underscore the paramount importance of quality management toward excellence. Administrators focusing on quality management are pivotal, utilizing evaluation results to enhance academic administration and financial management while prioritizing students and stakeholders. This aligns with previous studies emphasizing the success of international standard schools and the importance of teamwork, organizational culture, and leadership in fostering innovation and organization leader in quality system management and on the learner's side, creating vision and goals participation of personnel in the organization teamwork and an appropriate working culture will help stimulate personnel to innovate. Develop innovation Promote the organization's development into an innovative one (Meeman & Wangthanomsak, 2016; Thongwang, 2015; Haygroup, 2006; Suesat, 2006).

In conclusion, the study sheds light on the integral relationship between Excellence Quality Management and Innovative Organization Creation within basic schools under the Nonthaburi Provincial Administrative Organization. Both components exhibit high levels of implementation, showcasing the commitment of administrators and the effectiveness of educational management practices. The study emphasizes the interconnectedness of various factors, including leadership, strategic planning, personnel development, and teamwork, in fostering a conducive environment for innovation. The findings contribute valuable insights for educational studies and organizational practices, reinforcing the importance of quality management and innovation for the continual improvement of basic education schools. Future research endeavors could explore the impact of Excellence Quality Management on teacher and student quality by using the Malcolm Baldrige National Quality Award (MBNQA) for education or Thailand Quality. The award, which the Office of the Basic Education Commission adopted in the form of OBECQA, delves into innovative organization models in basic schools and investigates influences on innovative organizations in secondary schools, thereby enriching the understanding of education and literacy dynamics in the evolving landscape.

REFERENCES

- Haygroup. (2006). *The Innovation Organization: Lessons Learned from Most Admired Companies*. Hey Insight Selections, Selection 8, (July 2006), 1-6.
- Ishikawa, K., & Lu, D. J. (1985). *What is Total Quality Control? The Japanese Way*. Prentice-Hall.
- Mongkolvanich, J. (2012). *Organization and Educational Personnel Administration*. Chulalongkorn University Press.
- Thongwang, K. (2015). The relationship of factors that promote the organization to be a learning organization on the level of being a learning organization and the level of being an innovative organization: a case study of National Science and Technology Development Agency. *Business Administration*, 128(October-December), 34-48.
- Ngernprasertsri, N. (2012). *Quality Management*. Kasetsart University Press.
- Office of Higher Secondary Education. (2010). *School Operating Guidelines for International Standards*. Bangkok: Agricultural Cooperative Community of Thailand.
- Office of the Basic Education Commission (OBEC). (2010). *Quality System Management Manual*. Bangkok: Agricultural Cooperative Community of Thailand.
- Office of the Royal Society. (2003). *Office of the Royal Society Dictionary 1999*. Nanmee Book Publications.
- Decharin, P. (2012). *Top New Generation Leaders*. Nam Ak-som Press.
- Onsompant, S. (2020). "Innovative Learning Organizations: Factors in Modern Organization Management." *Journal of Educational Administration Silpakorn University*, 11(1), 12-20.
- Joe, T., Bessant, J. & Pavitt, K. (2009). *Managing Innovation Integrating Technological and Organization Change* (4th ed.). John Wiley and Sons.
- Chamornman, U. (2000). "Documents for the Seminar on Quality Assurance. Basic Education." Vachakarn Institute of Quality Development 21 (April 2000), 8 pages.
- Suesat, W. (2006). *Organization Innovation Development Guidelines: A Case Study of Advanced Info Service Public Company Limited and PTT Public Company Limited*. Term paper for graduate study project in human resources development. National Institute of Development Administration.
- Meeman, W. & Wangthanomsak, M. (2016). Success of International Standard Schools. *Journal of Educational Administration Silpakorn University*, 6(2), 112-121.
- Phakdilao, W. (2011). *Innovative Organization Characteristics Study: A Case Study of an Innovation Award-Winning Organization* [Master of Science Thesis]. Human Resources and Organization Development Program, Graduate School. National Institute of Development Administration.