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Innovative Leadership Affecting High-Performance Organization of Schools under the Secondary Educational Service Area Office Bangkok 2

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Abstract

The objectives of this study were to investigate the level of innovative leadership of school administrators, the level of high-performance organization, and the relationship between innovative leadership and high-performance organization of schools under the Secondary Educational Service Area Office Bangkok 2 and to create a prediction equation for the innovative leadership affecting the high-performance organization of those schools. The sample size consisted of 357 teachers in the 2024 academic year. They came from multi-stage random sampling. The research instrument was a five-rating scale questionnaire with a validity of 0.8 -1.0, discriminatory power of 0.6 -1.0, and a reliability of 0.98 comprised of 4 components about innovative leadership which were 28 items and 4 components about HPOs which were 28 items. The statistics used in the data analysis were frequency, percentage, mean, standard deviation, Pearson's product moment correlation coefficient, and stepwise multiple regression analysis.

The results showed that the innovative leadership of school administrators overall and in each element was at a high level, the high-performance organization of the school overall and in each element was at a high level, the innovative leadership and high-performance organization of the school showed a positive $r_{xy} = 0.796$ and a significant correlation at the 0.01 level, and the prediction equation of innovative leadership of school administrators had an 86.40 percent variance of high-performance organization, with the following equation.

The equation of raw score: $Y' = 1.130 + 0.394X_1 + 0.236X_4 + 0.144X_3$

The equation of standard score: $ZY' = 0.445Z_1 + 0.292Z_4 + 0.200Z_3$

Keywords: Innovative Leadership, High-performance Organization, Schools under the Secondary Educational Service Area Office Bangkok 2

Introduction

We are living in an era of change and innovation where technology and artificial intelligence (AI) play a key role in many areas, such as disease diagnosis, business data analysis, and the development of educational platforms. AI has the potential to encourage lifelong learning, which is essential in a rapidly changing world where people need to acquire new abilities to become knowledgeable, competent, skillful, and situationally adaptive. In order to adapt to changes, educational quality needs to be improved. Thailand's education policy focuses on equipping youth with the skills they need in accordance with Thailand's 20-year National Strategy. However, the quality of Thai education remains low compared to international standards. For example, Thailand's average PISA scores in 2022 in reading, science, and mathematics were 379, 409, and 394, respectively. These scores are lower than the PISA scores in 2018 (The Institute for the Promotion of Teaching Science and Technology (IPST), 2024); this is due to how the Thai education system prioritizes content-based instruction above the development of skills and creativity and lacks analysis and real-life application.

Administrators are a very important role in raising the standard of education, and administrator with innovative leadership can bring about changes (Chongcharoen, 2019). Because innovative leadership refers to the behavior of leaders who introduce new ideas and practices to bring about organizational change or solve problems. Promoting learning that emphasizes innovation in schools (Praphanphat, 2017), builds good relationships, and trust among personnel, which inspires them to achieve the organization's vision. If administrators possess innovative leadership, they can drive the school's mission to achieve the objectives of Education 4.0, which emphasizes creating and promoting innovations for market value and simplifying complex innovations. A high-performance organization (HPO) is an organization that adjusts and builds a strong organizational culture that values innovation through human resource management to achieve more effective operations without strict directives in response to the growing competition in the modern world (Khocharanon, 2019). Schools must be transformed into high-performance institutions to improve their capacity to adjust to societal and technological shifts. In order to produce employees with the skills and competencies in line with future economic and social development, it is important to enhance teaching and learning processes that address the needs of students in the 21st century and to foster an atmosphere that encourages creativity and lifelong learning. In addition, in order to handle organizational challenges and enable the organization to reach its

objectives and development in a sustainable way, executives must employ both management and innovative leadership (Thamthun, 2014).

The Secondary Educational Service Area Office Bangkok 2 envisions its administration as a hub for enhancing educational quality, utilizing modern innovations, and achieving sustainable excellence. It encourages schools to adopt various innovations in teaching and learning, particularly during emergencies, to address individual students' learning loss. However, the monitoring and evaluation report found that schools have not met the set targets. Several issues contribute to this underachievement, including Staff readiness, Lack of knowledge in media production, Insufficient experience with innovation, Inadequate funding, Unsuitable physical environments, and Continued use of traditional teaching methods without incorporating innovations or technologies (The Secondary Educational Service Area Office Bangkok 2, 2024).

The transformation of schools under the Secondary Educational Service Area Office Bangkok 2 into High-Performance Organizations (HPOs) remains a challenge. Despite ongoing efforts to promote innovation and development, issues related to resource management, individual development, and adopting innovations in teaching and learning persist. Therefore, administrators need to demonstrate innovative leadership, take proactive steps, and drive these changes toward success, focusing on enhancing adaptability and ensuring effective transformation into HPOs.

Given the aforementioned issues and the significance of innovative leadership and HPOs, the researcher is interested in studying innovative leadership affecting on HPOs under the Secondary Educational Service Area Office Bangkok 2 in order to gather data that will be used as guidelines for improving school administrators' management abilities and raising the potential of Thai education to an international level.

Research objectives

1. To study the level of innovative leadership of school administrators under the Secondary Educational Service Area Office Bangkok 2.
2. To study the level of high-performance organization of schools under the Secondary Educational Service Area Office Bangkok 2.
3. To study the relationship between innovative leadership and high-performance organization of schools under the Secondary Educational Service Area Office Bangkok 2.
4. To create a prediction equation for the innovative leadership affecting the high-performance organization of schools under the Secondary Educational Service Area Office Bangkok 2.

Research hypotheses

1. Innovative leadership of school administrators and high-performance organization of schools under the Secondary Educational Service Area Office Bangkok 2 have a significant positive correlation.
2. The high-performance organization of schools under the Secondary Educational Service Area Office Bangkok 2 is affected by at least one element of school administrators' innovative leadership.

Conceptual framework

In this study, the documents and studies relating to innovative leadership of school administrators were reviewed and synthesized, e.g., Grady and Malloch (2010), McMillan (2010), Nanthasi (2020), Chaiyaphet (2020), Yuenying (2020), Soisangwan (2021), Chaiyatha (2021), Jemu (2021), Koloasae (2022), Huansanit (2022), Sutiyatno (2022), and Malaithong (2023). The studies have shown that school administrators' innovative leadership consists of four components: vision for change, use of information and communication technology, team and collaborative innovation, and innovative thinking. In addition, an HPO prioritizes four components: strategic focus, focus on personnel development, focus on students and stakeholders, and learning organization (Sophin, 2020).

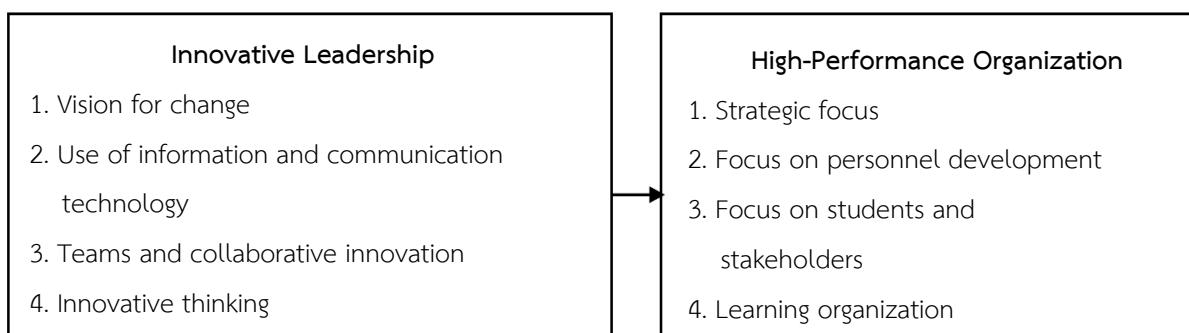


Figure 1 Conceptual framework

Methodology

This study utilized a survey in its research. The research methodology was as follows:

Population and sample

The population consisted of 5,534 teachers working in schools under the Secondary Educational Service Area Office Bangkok 2 in the 2024 academic year. The sample consisted of 357 teachers and was obtained using Cohen's table (Cohen et al., 2011) and multi-stage stratified random sampling on each cluster. and simple random sampling was performed.

Research Instrument

The research instrument used in this study was a 5-level rating scale questionnaire.

Part 1: 28-item questionnaire on innovative leadership of school administrators in four components.

Part 2: 28-item questionnaire on high-performance organization of schools in four components.

Part 3: Other suggestions, i.e., a 5-point Likert rating scale (very high, high, moderate, low, and very low) used in Parts 1 and 2 of the questionnaires.

Instrument Validation

The content validity of the developed questionnaire was determined by five experts in educational administration and mathematical statistics and data analysis in order to determine the consistency of definitions and specific terms used in items. The Index of Item Objective Congruence (IOC) was between 0.8 and 1.0.

In regard to reliability, the questionnaire was sent to 30 teachers who were teaching during the academic year 2024 in the Secondary School under the Secondary Educational Service Area Office Bangkok 2. This group of teachers was not in the sample group but shared characteristics similar to those of the sample population. The discrimination power was then determined through the analysis of item-total correlation, with a resulting discrimination power between 0.6 and 1.0. The questionnaire reliability was analyzed by determining Cronbach's alpha coefficient, which was found to be 0.980.

Data Analysis

The mean (M) and standard deviation (SD) were determined and interpreted using the criteria of the interpretation of mean scores when measuring both teachers' opinions on the innovative leadership of school administrators and their opinions on HPOs.

Criteria for Interpreting Mean Values (Vongratana, 2011)

4.51-5.00 means the level of innovative leadership of school administrators/high-performance organization of schools is at the highest level.

3.51-4.50 means the level of innovative leadership of school administrators/high-performance organizations of schools is high.

2.51-3.50 means the level of innovative leadership of school administrators/high-performance organizations of schools is moderate.

1.51-2.50 means the level of innovative leadership of school administrators/high-performance organizations of schools is low.

1.00-1.50 means the level of innovative leadership of school administrators/high-performance organizations of schools is at the lowest level.

Regarding the relationship between innovative leadership and HPOs, Pearson's Product Moment Correlation Coefficient (r_{xy}) was determined and interpreted using the criteria of the interpretation of correlation coefficient.

Criteria for Interpreting Correlation Level (Vongratana, 2011)

0.91-1.00 means innovative leadership and the school's high-performance organization are strongly positively correlated.

0.71-0.90 means innovative leadership and the school's high-performance organization have a high correlation level.

0.31-0.70 means innovative leadership and the school's high-performance organization have a moderate correlation.

0.01-0.30 means innovative leadership and the school's high-performance organization have a low correlation.

Finally, stepwise multiple regression analysis was performed to measure how innovative leadership affected the high-performance organization of schools under the Secondary Educational Service Area Office Bangkok 2.

Research results

Teacher's opinions on the innovative leadership revealed overall ($M = 4.29$), and each element was at a high level. Considering each element, vision for change ($M = 4.35$), use of information and communication technology ($M = 4.29$), team and collaborative innovation ($M = 4.27$), and innovative thinking ($M = 4.25$) showed high mean scores (Table 1).

Table 1 Mean and standard deviation of innovative leadership of school administrators under the Secondary Educational Service Area Office Bangkok 2.

Element	Innovative leadership of school administrators	$n = 357$		Level	Rank
		M	SD		
1	Vision for change	4.35	0.592	High	1
2	Use of information and communication technology	4.29	0.702	High	2
3	Team and collaborative innovation	4.27	0.728	High	3
4	Innovative thinking	4.25	0.650	High	4
	Total	4.29	0.510	High	

Teacher's opinions on the HPOs showed overall ($M = 4.46$), and each element of schools under the Secondary Educational Service Area Office Bangkok 2 was at a high level. Considering each element, focus on personnel development ($M = 4.50$), strategic focus ($M = 4.48$), learning organization ($M = 4.45$), and focus on students and stakeholders ($M = 4.42$) showed high mean scores (Table 2).

Table 2 Mean and standard deviation of high-performance organization of schools under the Secondary Educational Service Area Office Bangkok 2.

Element	High-performance organization of schools	n = 357		Level	Rank
		M	SD		
1	Strategic focus	4.48	0.523	High	2
2	Focus on personnel development	4.50	0.552	High	1
3	Focus on students and stakeholders	4.42	0.569	High	4
4	Learning organization	4.45	0.562	High	3
	Total	4.46	0.524	High	

An analysis of the relationship between innovative leadership of school administrators and high-performance organization of schools revealed that innovative leadership and high-performance organization showed a positive and significant correlation ($r_{xy} = 0.796$) at the 0.01 level in line with the hypothesis (Table 3).

Table 3 Correlation coefficients between innovative leadership of school administrators and high-performance organization of schools under the Secondary Educational Service Area Office Bangkok 2.

Innovative leadership	High-performance organization				
	Y_1	Y_2	Y_3	Y_4	Y_{tot}
X_1	.806**	.752**	.782**	.805**	.827**
X_2	.111*	.110*	.127*	.131*	.126*
X_3	.699**	.688**	.682**	.694**	.726**
X_4	.774**	.703**	.775**	.790**	.800**
X_{tot}	.767**	.724**	.760**	.777**	.796**

Note: * statistically significant at the 0.05 level; ** statistically significant at the 0.01 level.

The prediction equation for the innovative leadership affecting the high-performance organization of schools developed in this study using stepwise multiple regression analysis and revealed that the variables that could explain the variation in the high-performance organization of schools included vision for change (X_1), team and collaborative innovation (X_3), and innovative thinking (X_4). This equation could explain the 86.40% of variation in high-performance organization of schools ($R^2 = 86.40$) with statistical significance at the 0.01 level in line with the research hypothesis. The predictive variables show a correlation coefficient (R) of 0.747 (Table 4). The prediction equation in the raw score form is $Y' = 1.130 + 0.394X_1 + 0.236X_4 + 0.144X_3$, while the prediction equation in standard score form is $ZY' = 0.445Z_1 + 0.292Z_4 + 0.200Z_3$

Table 4 Stepwise multiple regression analysis of innovative leadership of school administrators and high-performance organization of schools under the Secondary Educational Service Area Office Bangkok 2.

Source of variation	SS	df	MS	F	sig
Regression	73.098	3	24.366	346.524	.000
Residual	24.821	353	.070		
Total	97.920	356			
Variables included	b	Beta	S.E	t	sig
Constant	1.130				
1. Vision for change (X_1)	.394	.445	9.044	.000**	.394
2. Innovative thinking (X_4)	.236	.292	5.913	.000**	.236
3. Team and collaborative innovation (X_3)	.144	.200	4.933	.000**	.144

R = .747 R Square = .864 Adjusted R Square = .744 F = 24.338**

Note: ** statistically significant at 0.01 level.

New Knowledge

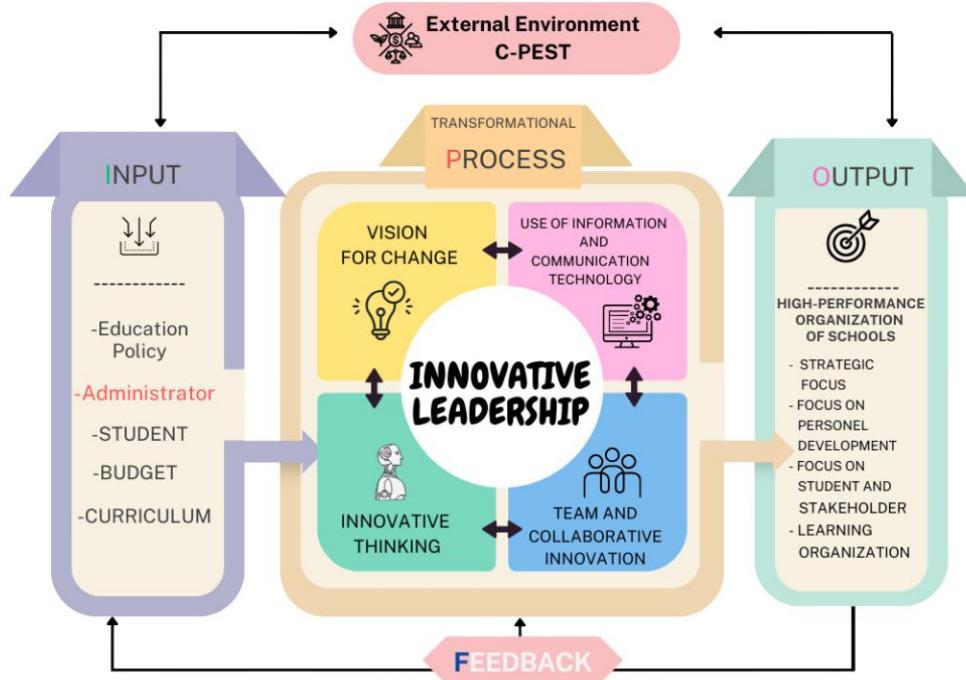


Figure 2 Innovative leadership affecting high-performance organization of schools under the Secondary Educational Service Area Office Bangkok 2

Figure 2 illustrates the elements of innovative leadership of school administrators in terms of vision for change (X_1), which has the most significant impact on the school becoming a high-performance organization. If the vision for change increases by one standard unit, the level of being a high-performance organization increases by 0.445 standard units, assuming all other variables remain constant. The second most influential factor is innovative creativity (X_4). If innovative creativity increases by one standard unit, the level of being a high-performance organization increases by 0.292 standard units, again assuming all other variables remain constant. The third factor is innovative teamwork and participation (X_3). If innovative teamwork and participation increase by one standard unit, the level of being a high-performance organization increases by 0.200 standard units, with all other variables held constant. These three factors combined can predict the high-performance organization level of schools under the Secondary Education Service Area Office, Bangkok Area 2, by 86.40%, with statistical significance at the 0.01 level.

These results show that an HPO is affected by innovative leadership, innovative leadership affects a school's high-performance organization, and a high level of innovative leadership of school administrators will contribute to an HPO. For these reasons, school administrators need to be innovative leaders. To transform a school into an HPO, an administrator must have a clear vision and the ability to adapt and lead the organization to grow in response to changes, develop new strategies, encourage the use of technology and innovation for organization development, and advocate for decentralization, which enables everyone to collaborate, create, and make decisions that will help the organization grow.

Conclusion and Discussion

The opinions of teachers on innovative leadership of school administrators were collected in a survey of teachers. The mean scores of the innovative leadership, overall and in each element, of the school administrators were at a high level. This could be due to school administrators who have created a positive work environment, viewed problems as challenges, invented or created new innovations to use in work or problem-solving, given staff and related persons opportunities to participate, and monitored and evaluated the school's performance.

They are also aware of and understand the rapid changes in global society. Furthermore, the government has placed a strong emphasis on the transformation of the educational management model in order to create and innovate new ways to improve student performance in every area and enable school administrators to grow personally and guide the institution to success. This is in line with Sen and Eren (2012), who stated that innovative leaders can bring in novel approaches, concepts, procedures, methodologies, or discoveries that address present issues or satisfy people's demands now and in the future. Nanthasi (2020) asserted that innovative leaders must employ innovations to advance education by inspiring educators and other staff members. Additionally, Phongnet's (2017) study examined the innovative leadership of school administrators under the Primary Educational Service Area Office Pathum Thani 2 and concluded that the overall innovative leadership was at a high level. The results were also consistent with Chansuai (2021, who examined the innovative leadership of school administrators under the Office of the Primary Educational Service Area Office Lop Buri 2. The study concluded that the leaders' overall innovative leadership was at a high level.

The opinions of teachers on HPOs were collected via a survey of teachers. The mean scores of HPOs, overall and in each element, were at a high level. This may be because schools set up an administrative structure in line with the original affiliation and regularly prepared annual performance reports to ensure transparent administration and traceability of development efficiency. They strongly

emphasized extensive information sharing and communication using easily accessible channels. In order to improve the quality of education and school services, the schools placed a high value on building positive connections with service users through solid partnerships and efficient communication. This is in line with De Waal (2007), who stated that HPOs may swiftly adjust to their surroundings by focusing on their people, processes, structures, and strategies. Sakchaiwatthana (2021) claimed that organizations that have specific objectives and look for ways to accomplish them efficiently and on schedule can become innovative organizations and have a clear plan of action for adapting to changing circumstances. Sophin (2020) examined the effects of creative leadership of school administrators on the high-performance organization of schools under the Secondary Educational Service Area Office 21 and found that the overall high-performance organization was at a high level. This is also in line with Sitthiphongsakul (2021), who examined the leadership of administrators and the high-performance organizations of educational institutions under the Primary Educational Service Area Office Samut Songkhram and concluded that the overall high-performance organization of educational institutions under the Primary Educational Service Area Office Samut Songkhram was at the highest level.

The findings on the relationship between innovative leadership and high-performance organization of schools supported the hypothesis, i.e., the innovative leadership of school administrators and high-performance organization of schools showed a high positive correlation. This may be the result of the organizational development concept for school administrators that emphasizes teamwork, cooperation and coordination among staff, information disclosure and transparency, and encouragement of creativity and straightforward approaches to problem-solving. These strategies support an organization's long-term, sustainable performance. In order to establish an innovative organizational culture, the administrators have also fostered creativity, are devoted to encouraging and supporting innovation within the organizations, and have a broad perspective that accounts for a variety of elements that may impact their work. This is in line with Horth and Vehar (2012), who asserted that innovative leaders are capable of establishing direction, coordinating, and demonstrating a dedication to developing and utilizing novel ideas. Charoenchai (2019) noted that high-performance organizations are capable of adjusting to change and are prepared to handle pressure. These innovative organizations help ensure that staff members reach their maximum potential, are dedicated to success, and are happy with their jobs. Jongcharoen (2019) also supports this claim, in that innovative leadership is crucial for encouraging employees to be creative and innovative, to have shared objectives within the organization, to have positive relationships among individuals within the organization, and to motivate personnel to strive toward the organization's vision. Thamthun's (2014) study discovered a positive correlation with

statistical significance at the 0.05 level between the high-performance organization of schools under the Secondary Educational Service Area Office 21 and the innovative leadership of school administrators. This study is in line with Yangsuay (2021), who examined how innovative school administrators' leadership affected the high-performance organization of schools under the Primary Educational Service Area Office Udon Thani and found that the innovative leadership of school administrators and the high-performance organization of schools had a high positive correlation.

When studying how innovative leadership affects the high-performance organization of schools, it was found that the elements of innovative leadership of school administrators with the highest predictive power in descending order on the high-performance organization of schools were vision for change (X_1), innovative thinking (X_4), and team and collaborative innovation (X_3). These elements explain the 86.40% variation in the high-performance organization of schools under the Secondary Educational Service Area Office Bangkok 2. The findings support the hypothesis, i.e., at least one element of the innovative leadership of school administrators affects the high-performance organization of schools. This may be a result of the Secondary Educational Service Area Office Bangkok 2 school administrators' acceptance of the shift as they have focused on improving schools' quality through contextually appropriate innovations and the adoption of new management concepts and technologies. Additionally, school administrators have encouraged innovation, continuously enhanced staff potential, and developed a clear plan to transform the organization into an HPO by developing new approaches to problem-solving, adapting operational procedures to technological advancements, fostering an environment that is open to collaboration, and encouraging participation. According to Phanthong (2011), creativity, innovation, planning, openness to feedback, and decentralization are critical traits that leaders must have. All of these actions satisfy stakeholders and help the school achieve its objectives. This is in line with Parker (2001), who defined collaboration as when a group of individuals establish a relationship with one another and rely on one another to accomplish goals and create educational innovations for desired outcomes. Phromarak (2021) found that vision for change, an element of innovative leadership of administrators, could explain the 80% variance in high-performance organization of schools under the Secondary Educational Service Area Office 21 with statistical significance at the 0.05 level. In addition, Chueakphrom (2021) discovered that the high-performance organization of schools under the Pattaya City Education Office was affected by vision for change, an element of innovative leadership.

Recommendations

Practical Implications

In terms of innovative leadership, school administrators can develop and demonstrate their innovative leadership and creative thinking through the development of an open environment, the encouragement of teachers and students to express their creativity through collaborative projects, the use of digital media or online platforms to increase learning efficiency, and the ongoing monitoring and evaluation of performance.

In order to transform their organizations into HPOs, school administrators should have a prompt and constructive complaint-handling process, including a platform that makes it simple for students and stakeholders to voice their thoughts and recommendations, as well as an evaluation system for student and stakeholder participation.

In regard to the relationship between innovative leadership and the HPO, to improve administration and teaching efficiency, school administrators should concentrate on enhancing staff members' information and communication technology capability. Teachers and staff should also participate in seminars or trainings to encourage the efficient use of new technologies and technology that aligns with educational objectives.

For the innovative leadership of school administrators affecting a school's high-performance organization, the development and use of technology in schools should be prioritized for systematic and high-quality management in accordance with the operational strategy of the school. The promotion of information and communication technology use should also focus on improving staff members' abilities to use digital tools and online platforms to improve communication and innovation within the organization.

Recommendation for further research

First, best practices for innovative leadership among school administrators under the Secondary Educational Service Area Office Bangkok 2 should be studied based on the size of successful educational institutions with widely recognized accomplishments. Second, the desired and actual conditions and needs should be studied in order to develop a model of innovative leadership for school administrators that is suitable for the current circumstances. Finally, participatory action research or development research methodologies should be used to examine the results of transforming schools into HPOs by incorporating influencing predictor variables into the equations.

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