

# SUCCESS FACTORS FOR TRANSFORMING SCHOOLS INTO 21<sup>ST</sup> CENTURY INNOVATIVE IN BANGKOK'S SECONDARY EDUCATIONAL SERVICE AREA

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## Abstract

At present, secondary schools are adapting to become innovative organizations in response to the changing context of the 21st century. The objective of this study is to investigate the success factors of transitioning to innovative schools. A review of concepts and theories concerning innovative schools, both domestically and internationally, reveals eleven key success factors for schools aiming to transform into innovative organizations. These factors include: (1) Shared vision, (2) Appropriate organizational structure, (3) Leadership, (4) Communication, (5) Training and personnel development, (6) Effective teamwork, (7) Innovation habits, (8) Participatory innovation climate, (9) Knowledge management, (10) Creative atmosphere, and (11) Learning organization. The contribution is intended to increase educational quality, innovative schools and ensure school sustainability.

**Keywords:** Success factors, Innovative school organization, 21st century

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## Introduction

Thailand has formulated an educational vision to cope with the rapidly changing global context as part of its strategic preparation for Thailand 4.0. This national vision aspires to build “a stable, prosperous, and sustainable developed country based on the philosophy of sufficiency economy,” aiming to transcend the middle-income trap by reducing income inequality and transforming the economy through innovation (Office of the National Economic and Social Development Council, 2020) [1]. This aligns with Thailand's 21st-century economic development policy, which emphasizes stability, prosperity, and sustainability, and promotes “an innovation-driven economy” (Excise Department, 2024) [2]. The concept of 21st-century learning, as proposed by Vicharn Panich (2012, pp. 16–21) [3], outlines a strategic framework for education management that enhances knowledge, expertise, skills, and competencies necessary for learners to live effectively in a rapidly changing society. It is evident that modern education is consistent with the characteristics of an innovative educational organization, which emphasizes the creation or adaptation of new ideas and practices to improve the effectiveness of teaching and learning activities. This approach increases learners' motivation, accelerates learning processes, promotes transformation, and enhances learning outcomes.

Education is a key mechanism for developing the potential of Thai citizens of all ages, shaping individuals to become virtuous, competent, and high-quality members of society. Human resource development emphasizes individual potential, interests, aptitudes, and multiple intelligences, recognizing that each person's intellectual abilities are diverse and developable. This also involves nurturing outstanding talents, reforming educational systems, instructional management, and skill development. According to the Master Plan under the National Strategy (12th Strategy: Learning Development, 2018–2037) [4], it is crucial to promote technology and innovation to enable Thailand to own and advance its technological capabilities on the global stage. The 13th National Economic and Social Development Plan (2023–2027) identifies a strategic shift towards an innovation-based economy by restructuring the production and service sectors, enhancing competitiveness through innovation, technology, and creativity that meet the demands of a modern, environmentally friendly society. It emphasizes developing individuals with knowledge, behavioral skills, and social norms aligned with the modern world and prioritizes the readiness of the workforce to meet labor market demands (Office of the National Economic and Social Development Council, 2017) [5]. These changes, as outlined in the 12th (2017–2021) and 13th (2023–2027) National Economic and Social Development Plans, reflect the dynamic global context of the 21st century driven by the digital revolution and the transition to Industry 4.0. Accordingly, the National Education Plan (2017–2036) was developed to provide strategic direction in human capital development, research, and innovation to enhance national competitiveness. One of its goals is for educational institutions to produce highly specialized graduates and foster institutions capable of excellence (Office of the Education Council, 2017) [6].

Educational institutions must adapt in response to evolving government policies and external environmental conditions to remain effective. This includes developing new management models that foster innovation habits among all members of the institution—including teachers, students, and staff—and encouraging a culture of creativity and innovation. These models support new teaching methods, instructional media, and curriculum management to improve educational outcomes. As Adams and Bessant (2006) [7] suggest, creativity is the foundation of innovation, which is essential for educational organizations in the current era of rapid change. It is therefore crucial for educational organizations to be prepared for unforeseen situations by establishing proactive policies and cultivating a shared sense of responsibility toward innovation. Teachers, students, and school staff should be encouraged to develop innovative thinking and practices. This includes reforming administrative models, work processes, curriculum management, instructional design, and evaluation methods to promote personalized learning, ultimately fostering future innovators.

### **Concepts and Theories Related to Innovative Schools**

Innovation refers to ideas, actions, or new objects that are perceived as novel by individuals or groups adopting them. What may be considered innovative in one society may not necessarily be viewed the same way in another, as the perception of innovation is subjective and context dependent. Furthermore, a concept or practice does not need to be entirely new to be considered innovative. It may involve reviving or adapting an older idea or method that has been discontinued but proves to be effective under new circumstances. According to Rogers (1995) [8], innovation can be categorized into three types:

1. Completely new ideas or practices that have never been implemented before.
2. Formerly practiced ideas that were abandoned but later revived due to their appropriateness.

### 3. Existing ideas that have been modified or developed into new forms.

Morton (1998) [9] emphasizes that innovation involves renewal. It is not solely about inventing new things but also about improving or transforming what already exists. Even a small step beyond the current state can provide momentum and foster long-term growth, enhancing future competitiveness. While macro- and micro-level changes are significant drivers of innovation, business competition also plays a vital role. As Porter (1990) [10] explains, innovation is a strategic advantage that allows organizations to differentiate themselves from competitors. Innovation entails doing things in new ways, whether by changing thoughts, production processes, or organizational structures. These changes may stem from radical transformation or gradual improvement. Innovation is distinct from invention or creativity in that it refers to successfully applied creative ideas, often producing clear novelty and value. McKeown (2008) [11] asserts that the goal of innovation is to bring about positive change, increasing productivity and contributing to economic prosperity.

The National Innovation Agency of Thailand (2014) [12] defines innovation as the application of knowledge and creativity to generate new, beneficial outcomes for the economy and society. Innovation encompasses problem-solving processes within an organization and interactive processes between organizations. These interactions may occur formally or informally, through collaborative networks or diversified learning methods such as learning by using, learning by doing, and learning by sharing. Knowledge exchanged may be tacit (personal, experience-based) or codified (documented), and both types are crucial in forming an innovative ecosystem. According to Thon Suntharayut (2010) [13], innovation includes newly implemented practices or modifications of existing ones that result in improved efficiency and effectiveness, saving time and labor. Innovations typically emerge through structured, creative processes that lead to positive changes, ultimately producing new products, services, or systems with economic and social value. As Surisa Rimkiri (2019) [14] Innovation is also a process of creativity, invention, and development that can be practically implemented and disseminated to the community. It may take the form of something entirely new that has never existed before, or it may be an improvement or enhancement of a pre-existing idea or object that has been upgraded to possess economic value and commercial applicability. (Keerati Yodyingyong, 2009) [15]

In summary, an innovative school organization must be capable of independently developing new ideas and practices. This begins with establishing new administrative structures, designing curricula, creating instructional materials and methods, and improving evaluation systems to enhance learning outcomes. School administrators must demonstrate strong leadership by defining vision and direction, embracing change, managing risks, fostering open communication, and cultivating an innovative environment. Meanwhile, teachers and staff must continuously generate educational innovations to prepare for future challenges.

### **The Importance of Innovative School Organizations**

The rapid global changes in economic, social, and technological landscapes have prompted all sectors to adapt for survival. The concept of an innovative organization has emerged as a new organizational management paradigm that responds effectively to globalization. This aligns with the perspective of Monsit Sittisomboon (2009) [16], who stated that educational institutions must develop into innovative organizations by starting with planning and defining learning roles. Innovation capability is a key factor influencing the performance of schools or educational institutions. Such institutions are referred to as “Educational Innovative Organizations,” characterized by diversity and the ability to create or adapt innovations that significantly enhance educational activities and learning effectiveness. This, in

turn, fosters learner motivation and facilitates meaningful and rapid learning, resulting in maximum efficiency and effectiveness for students.

Educational innovative organizations play a vital role. Therefore, schools must have the capacity to develop new ideas and processes, starting from operational procedures to the production of educational outputs, with students at the core of all educational management efforts. These institutions must ensure high-quality development of learners. However, in order to establish an educational organization as an innovative institution, it must be led by an administrator who acts as a guiding force. Such leadership includes transformational leadership, the ability to take risks, the willingness to listen to staff feedback, and the ability to foster an innovative climate through adequate support mechanisms. In addition, a flexible organizational structure that promotes open and free knowledge sharing is essential. It is equally important to focus on developing teachers and educational personnel to become knowledgeable and capable of creating innovations. Ultimately, educators must cultivate “innovation habits.” Therefore, when an educational organization has a competent and visionary leader, fosters an innovation-friendly environment, and equips teachers and personnel with innovative habits, it becomes an educational innovative organization capable of continuously generating innovation. This empowers the institution with sustainable competitiveness and long-term value creation (Ong-orn Prajunktet, 2014) [17].

In conclusion, innovative school organizations are of paramount importance. The accelerating pace of economic and social change, along with the emergence of modern technologies worldwide, has created a wave of transformation that all sectors must adapt to. Educational institutions must continuously respond to these changes, starting with leadership that embraces transformation, articulates vision, manages risks, and fosters a collaborative and innovative environment. Furthermore, it is critical to develop teachers and educational personnel to become knowledgeable and capable innovators. With these essential components in place, educational institutions will be well-prepared to face emerging challenges and sustainably create value for their organizations.

### **Current Status of Schools under the Secondary Educational Service Area Office, Bangkok**

Thailand's education system has long faced multiple challenges. According to a study conducted by the Independent Committee for Education Reform (under the intent of the Educational Innovation Area Act B.E. 2562, 2019) [18], three critical problems in educational management have been identified:

1. Lack of integration among organizations responsible for curriculum development, instructional media, assessment and evaluation, teacher personnel management, finance, and administrative operations.
2. Absence of mechanisms and processes for policy implementation.
3. Educational innovations and effective outcomes occur in only a limited number of schools and are not widely scaled across the education system.

These issues led to the proposal and enactment of the Educational Innovation Area Act B.E. 2562 (2019). The main objective of this legislation is to establish “Educational Innovation Areas” with the following purposes:

1. To develop and implement educational innovations that improve students' academic achievement and can be scaled to other basic education institutions.
2. To reduce educational inequality.
3. To decentralize authority and grant autonomy to educational agencies and pilot schools within the innovation areas, enhancing flexibility and the quality and efficiency of education management.

4. To establish mechanisms for collaborative education management involving the public sector, local governments, the private sector, and civil society in the designated innovation areas.

These innovation areas function as educational sandboxes—experimental spaces for testing new educational models. If successful, these models may be scaled to other schools. This legal mechanism represents a new dimension in Thailand’s basic education management and should be well understood by education stakeholders. According to the Cabinet meeting resolution on November 29, 2022, chaired by Prime Minister Gen. Prayut Chan-o-cha and Minister of Education Ms. Treenuch Thienthong, eleven additional provinces—including Bangkok—were designated as educational innovation reform areas, as proposed by the National Committee on Educational Innovation Areas, chaired by Deputy Prime Minister Prof. Dr. Wissanu Krea-ngam. The newly designated provinces include: Sukhothai, Mae Hong Son, Krabi, Trat, Sa Kaeo, Bangkok, Chanthaburi, Phuket, Songkhla, Surat Thani, Ubon Ratchathani and These additions supplement the original eight innovation provinces: Si Sa Ket, Chiang Mai, Rayong, Kanchanaburi, Narathiwat, Pattani, Yala, Satun

There are currently 541 pilot schools operating in the eight innovation provinces, including 444 under the Office of the Basic Education Commission (OBEC), 45 under the Office of the Private Education Commission (OPEC), and 52 under local administrative organizations (LAOs), as shown in Table 1.

**Table 1: Number of Pilot Schools in Each Innovation Province**

No.	Province	Number of Schools
1	Si Sa Ket	163
2	Chiang Mai	104
3	Rayong	82
4	Kanchanaburi	60
5	Narathiwat	53
6	Pattani	32
7	Yala	30
8	Satun	17

**Source: Educational Innovation Area (2022)**

The performance review of these eight provinces over the past two years has shown significant changes. For example, many regulatory constraints—especially those related to academic matters—have been lifted. Each province has embraced its identity and taken ownership in development processes. Pilot schools have made notable academic advancements, customized their curricula to suit local contexts, and selected instructional materials that align with their institutional goals. Evaluation and assessment practices have been adapted to allow students to engage in more meaningful learning experiences and apply their knowledge effectively. Moreover, local mechanisms have emerged to listen to stakeholders’ needs and problems, leading to shared goals, collaborative responsibilities, and the practical application of diverse innovations tailored to the area’s challenges and context. While a full-scale evaluation of the innovation areas is currently underway by an independent assessment team, preliminary results will be available at the end of the second semester of the 2022 academic year.

Furthermore, the Minister of Education stated that, after official announcements in the Royal Gazette, governors of the 11 newly designated provinces would appoint selection committees for the provincial Innovation Area Steering Committees (up to 21 members



per province). These names were to be submitted to the Office for Educational Innovation Area Administration (OEA) by mid-December 2022, for approval at the upcoming National Policy Committee meeting on December 26, 2022.

### **Factors Influencing the Success of Innovative Schools under the Secondary Educational Service Area Office, Bangkok**

Promoting and supporting schools to become innovative organizations involves numerous internal and external factors. School administrators must adopt innovative leadership, apply strategic management, establish suitable organizational structures, and cultivate an innovation-friendly culture that becomes embedded in the school's values and practices. These factors align with the twelve core components identified in research on educational innovation organizations, which are detailed as follows:

1. **Shared Vision:** A shared vision refers to collaborative efforts among school administrators and teachers to define the school's strategic direction for innovation. Administrators communicate innovation goals clearly and inspire teachers to develop innovations for improving teaching and learning. Activities and projects are organized to encourage collaborative innovation among staff (Panchanok Duangudom, 2019) [20]. Strategies are formulated and implemented to align with organizational goals (Surisa Rimkiri, 2019) [21].

2. **Appropriate Organizational Structure:** This refers to a flexible and agile structure that supports educational management aligned with innovation goals. The organizational design promotes ongoing innovation and clearly defines roles and responsibilities, empowering teachers to make decisions based on their assigned duties. The structure allows effective communication and coordination within the school (Surisa Rimkiri, 2019; Panchanok Duangudom, 2019) [20][21].

3. **Leadership:** Transformational leadership plays a critical role in educational innovation. It involves the leader's influence on staff potential, encouraging individual commitment to achieve organizational goals, and fostering high-quality leader-member exchanges (LMX). Such leadership builds loyalty, trust, and mutual support, fostering innovation in the organization (Ong-orn Prajunktet, 2014) [17].

4. **Communication:** Establishing effective communication channels using information technology, both formal and informal, is essential for disseminating knowledge, updates, welfare information, and organizational benefits. Schools must offer diverse communication methods that facilitate access to innovation, promote idea exchange among teachers, and support inter-school collaboration to collect and foster innovations (Surisa Rimkiri, 2019; Panchanok Duangudom, 2019) [20][21].

5. **Training and Personnel Development:** Staff development should include motivational programs that enhance knowledge, understanding, and innovative competencies. Schools must encourage creative problem-solving and stimulate interdisciplinary idea integration. Administrators should actively support personnel in developing and implementing new innovations (Surisa Rimkiri, 2019; Panchanok Duangudom, 2019) [20][21].

6. **Effective Teams:** Successful schools are managed by empowered teams capable of decision-making, coordinating operations, and collaborating with external networks. Team dynamics should encourage cooperation, enthusiasm, and mutual trust, leading to efficient communication and conflict resolution. Teams must regularly review their performance to maintain effectiveness (Surisa Rimkiri, 2019; Panchanok Duangudom, 2019) [20][21].

7. **Innovation Habits:** School administrators and teachers must embody innovation habits—perceiving organizational support, including resources, welfare, and encouragement from leadership. This fosters commitment to develop innovative

solutions for improving work performance. Innovators should be curious, visionary, fearless of failure, and capable of recognizing opportunities, acquiring knowledge, and developing expertise through continuous learning (Ong-orn Prajunktet, 2014; Surisa Rimkiri, 2019) [17][21].

8. Participatory Innovation Climate: An innovation-supportive climate encourages creativity and freedom of thought. The work environment should promote experimentation, recognize practical engagement, and reward achievements. Schools should provide sufficient materials, facilitate idea-sharing, present innovations, and involve staff in analyzing and improving innovation strategies (Ong-orn Prajunktet, 2014; Surisa Rimkiri, 2019; Panchanok Duangudom, 2019) [17][20][21].

9. Knowledge Management: A strong knowledge management system enables the acquisition, exchange, transfer, and continuous application of knowledge using information technology. This includes maintaining knowledge repositories such as innovation portfolios, exam banks, research databases, and creating spaces for reflective practice and learning (Surisa Rimkiri, 2019) [21].

10. Creative Atmosphere: Schools must provide an environment that encourages experimentation and tolerates mistakes as part of learning. Administrators should provide guidance and emotional support for teachers undertaking risky tasks. A creative atmosphere promotes open collaboration, peer recognition, regular meetings, and mutual respect to foster innovation (Panchanok Duangudom, 2019) [20].

11. Learning Organization: A school that operates as a learning organization promotes continuous professional development and knowledge exchange. It supports innovation through internal policies, digital tools, and open-access platforms for sharing institutional knowledge. Schools should encourage teachers to reflect on practices, engage in innovation projects, and share lessons learned across institutions (Panchanok Duangudom, 2019) [20].

In summary, based on the synthesis of concepts and theories, the success of innovative schools under the Secondary Educational Service Area Office, Bangkok, relies on the following eleven core components: (1) Shared vision, (2) Appropriate organizational structure, (3) Leadership, (4) Communication, (5) Training and personnel development, (6) Effective teamwork, (7) Innovation habits, (8) Participatory innovation climate, (9) Knowledge management, (10) Creative atmosphere, and (11) Learning organization. These elements serve as a conceptual framework to assess current conditions, identify desired innovation characteristics, and develop models that enable secondary schools in Bangkok to transform into innovative organizations.

## References

- [1] Office of the National Economic and Social Development Council. (2020). *20-Year National Strategy (2018–2037)* (2nd ed.). Bangkok: Secretariat of the National Strategy Committee.
- [2] Excise Department. (2024). *What is Thailand 4.0? How does this policy help develop our country?* Retrieved February 12, 2024, from <https://www.excise.go.th/cs/groups/public/documents/document/dwnt/mjgy/~edisp/uatucm282681.pdf>
- [3] Panich, V. (2012). *The Learning Way for Students in the 21st Century*. Bangkok: Sodsri-Saridwong Foundation.

- [4] Office of the National Economic and Social Development Council. (2020). Master Plan under the 20-Year National Strategy (Issue 12): Learning Development (2018–2037) (2nd ed.). Bangkok: Secretariat of the National Strategy Committee.
- [5] Office of the National Economic and Social Development Council. (2017). The 13th National Economic and Social Development Plan (2023–2027). Bangkok: Office of the Prime Minister.
- [6] Office of the Education Council. (2017). National Education Plan (2017–2036). Bangkok: Ministry of Education.
- [7] Adams, R., Bessant, J., & Phelps, R. (2006). Innovation management measurement: A review. *International Journal of Management Reviews*, 8(1), 21–47.
- [8] Rogers, E. M. (1995). *Diffusion of Innovations* (4th ed.). New York: Free Press.
- [9] Morton, J. A. (1998). *Organizing for Innovation: A System Approach to Technical Management*. New York: McGraw-Hill.
- [10] Porter, M. E. (1990). *The Competitive Advantage of Nations*. New York: Free Press.
- [11] McKeown, M. (2008). *The Truth About Innovation*. London: Prentice Hall.
- [12] National Innovation Agency. (2014). *Innovation Management for Executives*. Bangkok: Ministry of Science and Technology.
- [13] Suntharayut, T. (2010). *Psychological Management: Principles, Applications, and Case Studies*. Bangkok: Netikul Printing.
- [14] Rimkiri, S. (2019). *Development of Indicators for Innovative Educational Organizations in Secondary Schools under the Basic Education Commission*. Doctoral dissertation, Faculty of Education, Burapha University.
- [15] Yodyingyong, K. (2009). *Organizations of Innovation: Concepts and Processes*. Bangkok: Chulalongkorn University.
- [16] Sittisomboon, M. (2009). *Development of Educational Innovation*. Faculty of Education, Naresuan University.
- [17] Prajunktet, O. (2014). Innovative educational organizations: A new alternative for educational management. *Royal Thai Army Nursing Journal*, 15(1), 45–51.
- [18] Secretariat of the Council of State. (2019). *The Intent of the Educational Innovation Area Act B.E. 2562*. Bangkok: Office of Legal Affairs on Education and Culture.
- [19] Educational Innovation Area. (2022). *Cabinet Resolution Approved! Bangkok and 10 Provinces Added as Educational Innovation Areas*. Retrieved November 30, 2022, from [https://www.edusandbox.com/30th\\_nov\\_2022\\_provinces\\_news/](https://www.edusandbox.com/30th_nov_2022_provinces_news/)
- [20] Duangudom, P. (2019). *A Study on the Status of Educational Innovation Organizations Based on Opinions of School Administrators under the Primary Educational Service Area Office, Phra Nakhon Si Ayutthaya Area 2*. Master's thesis, Faculty of Education, Phranakhon Si Ayutthaya Rajabhat University.
- [21] Rimkiri, S. (2019). *Development of Indicators for Educational Innovation Organizations in Secondary Schools under the Basic Education Commission*. Doctoral dissertation, Faculty of Education, Burapha University.