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Strategic development for promoting schools as innovative educational institutions under local government organization, Chiang Rai province

Malaiporn Wongchaiya[1,*], Yongyouth Yaboonthong[1], Tharn Thong-ngok[1], and Choocheep Puthaprasert[1]

[1]**Education Program, Educational Administration, Faculty of Education, Chiang Mai University, Chiang Mai, Thailand**

Abstract

The objectives of this research were to: 1) study and synthesize the core components and sub-components of innovative educational institutions under local government organizations, Chiang Rai province; 2) investigate states, problems, and conditions supporting schools as innovative educational institutions under local government organizations, Chiang Rai province; and 3) develop strategies for promoting schools as innovative educational institutions under local government organizations, Chiang Rai province. The instruments used in this research were a component synthesis, an in-depth interview agenda, a recording form, and meeting agendas. Data were analyzed by content analysis, synthesis, and summarizing. The research results were as follows: 1) The study and synthesis of the core components and sub-components of innovative educational institutions under local government organizations, Chiang Rai province consisted of 5 core components with 31 sub-components. They were confirmed by nine experts participating in connoisseurship by using consensus. 2) The investigation results of the most important states, problems, and conditions supporting schools as innovative educational institutions under local government organizations, Chiang Rai province consisted of administrators, learners, curriculum, teachers, and facilities. 3) the development strategies for promoting schools as innovative educational institutions under local government organizations, Chiang Rai province consisted of 5 strategies with 16 measures.

Keywords: strategic development, innovative educational institutions, local government organization, Chiang Rai province

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1. Introduction

Due to UNESCO Education Strategy 2014 – 2021 [1] which further recognized that cross-cutting themes such as education for sustainable development, global citizenship education and health education, it calls for teachers to adapt to new learner-centered ways of teaching. UNESCO thus supported ministries of education in the search for innovation and curricular entry points to employ transformative pedagogy, training and systemic reforms so as to empower teachers to use interactive and skill-building methods in their classroom.

Later, the Office of the National Economic and Social Development Board [2] stipulated 20-year National Strategy (2017-2036) as a national strategy on developing and strengthening human capital that modernized roles of teachers by adjusting their existing roles as a "teacher" to a "coach" or a "learning facilitator" who could stimulate, incentivize, provide guidance regarding learning process and knowledge management, and design effective learning activities and innovation.

Hence, the Office of the National Economic and Social Development Board [3] determined that the period of The Twelfth National Economic and Social Development Plan (2017 – 2021) would be an extremely challenging time for Thailand to undertake substantial reforms by accelerating the development of science, technology, research and development, and innovation as key factors in empowering the development of all aspects needed to increase the country's competitiveness with an exceedingly competitive global economy. In order to elevate Thailand to be a developed country with security, prosperity and sustainability, Thailand must accelerate the improvement of its fundamental strategic development factors in all respects, such as: increasing investment in research and development, and developing science, technology, and innovation.

Correspondingly, the Office of the Education Council (ONEC) [4] in The National Scheme of Education B.E. 2560 – 2579 (2017 – 2036) defined that Strategy 3 concerned the proficiency development for people of all ages and the promotion of a lifelong learning society. One of the main aims included high quality and standards learning centers, textbooks, educational innovations, and learning media which resource people

*Corresponding author; email: m_wongchaiya@hotmail.com

could access without limitation

Similarly, the Organization for Economic Co-operation and Development (OECD) [5] had launched "The Future of Education and Skills 2030 Project". Children entering school in 2018 would need to abandon the notion that resources were limitless and available for exploitation. They would need to value common prosperity, sustainability and well-being. Moreover, new sources of growth were urgently needed to achieve stronger, more inclusive, and more sustainable development. Innovation could offer vital solutions, at an affordable cost, to offset economic, social and cultural dilemmas. Innovative economies were more productive, more resilient, more adaptable, and better able to support higher living standards.

In addition, the Organization for Economic Co-operation and Development (OECD) [6] identified the innovation strategy for education and training as three main sets of skills for innovation which consisted of 1) technical skills (know-what and know-how); 2) behavioral and social skills (self-confidence, energy, perseverance, passion, leadership, collaboration, communication); and 3) creative and critical thinking skills (creativity, critical thinking, observation, imagination, curiosity, connections, metacognition).

In Department for Education, UK. [7] Debra Gray, Principal of Grimsby Institute of Further and Higher Education, wrote that the English education sector was alive with innovation and cutting-edge developments in EdTech. Outstanding use of technology could help level the playing field for learners with barriers to learning and provide the 21^{st}. century solutions to closing skill gaps and raising achievement.

Nevertheless, Sucharitrak and Pilachai [8] identified that the school development for a model school to promote students' thinking skills composed of 7 innovations and 41sub-innovations as follows: 1) school management strategy with six innovations; 2) organizational structure of school management with five innovations, 3) school management system with six innovations, 4) school leadership with five innovations, 5) teacher and staff, 6) teaching and learning, and 7) shared values.

As a researcher, a Director of Education Division under local government organizations, Chiang Rai province involving with the educational management of schools, I intend to promote schools as innovative educational institutions in the 21^{st} century. The purpose is to create learners with the future creative innovation, by not only focusing on knowledge, but also on innovative skills necessary for the 21^{st}. century. Therefore, it is necessary to conduct research studies to develop strategies for promoting schools as innovative educational institutions for local government organizations to improve educational management

2. Research Questions

2.1 What are the results of studying, synthesizing, and confirming components of development of the innovative educational institutions under local government organizations, Chiang Rai province?

2.2 What are the states, problems, and conditions supporting schools as innovative educational institutions under local government organizations, Chiang Rai province?

2.3 What should be the results of the development of strategies for promoting schools as innovative educational institutions under local government organizations, Chiang Rai province?

3. Research Objectives

3.1 To study, synthesize, and confirm the core components and sub-components of innovative educational institutions under local government organizations, Chiang Rai province.

3.2 To investigate states, problems, and conditions supporting schools as innovative educational institutions under local government organizations, Chiang Rai province.

3.3 To develop strategies for promoting schools as innovative educational institutions under local government organizations, Chiang Rai province.

4. Materials and Methods

The research process was divided into three phases as follows:

Phase 1: The study, synthesis, and confirmation of core components and sub-components of innovative educational institutions under local government organizations, Chiang Rai province was divided into 2 steps:

Step 1.1: The researchers studied the documents, concepts, theoretical papers, and articles, both Thai and foreign researches, for synthesizing core components and sub-components of innovative educational institutions under local government organizations, Chiang Rai province. The obtained data were studied from documents of innovative organizations, thesis (2005 – 2016), research articles from ThaiJo/Google Scholar and authoritative electronically published documents. The instrument used was a component synthesis table. Data were analyzed by content synthesis.

Step 1.2: The core components and sub-components were confirmed by experts from innovative educational institutions under local government organizations, Chiang Rai province. Nine key informants selected by purposive sampling, consisting of three faculty members, three administrators, and three teachers who were involved with the best practice of

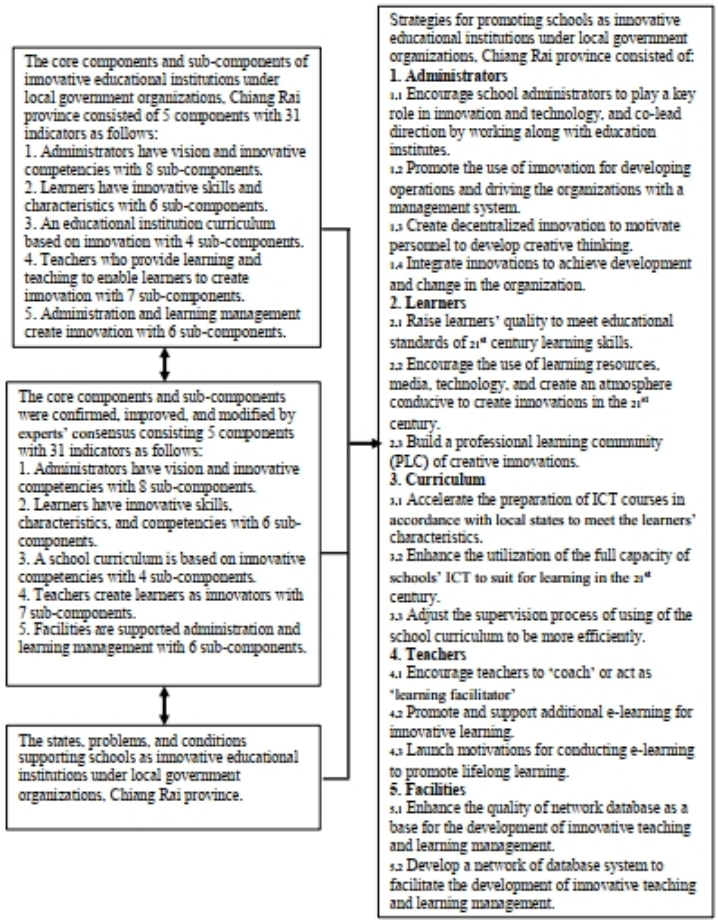

Figure 1: Research framework.

innovation, participated in connoisseurship. The instruments used were a recording form and meeting agendas. Data were analyzed by consensus.

Phase 2: The investigation of states, problems, and conditions supporting schools as innovative educational institutions under local government organizations, Chiang Rai province. The key informants selected by purposive sampling consisting of five school administrators under local government organization, Chiang Rai province were interviewed. The instrument used was an in-depth interviewing agenda derived from core components and sub-components. Data were analyzed by content summarizing.

Phase 3: The development of strategies for promoting schools as innovative educational institutions under local government organizations, Chiang Rai province. The obtained data from Phase 1 and Phase 2 were used to draft strategies and measures. The key informants in a workshop selected by purposive sampling were thirty-nine school administrators under local government organizations, Chiang Rai province. The instruments used were agendas and a meeting record. Data were analyzed by content synthesis. The research framework was as shown in Figure 1.

5. Results and Discussion

The results of this research were as follows:

Phase 1: Results of the study, synthesis, and confirmation of the core components and sub-components of innovative educational institutions under local government organizations, Chiang Rai province were divided into 2 steps:

Step 1.1: Results of studying and synthesizing the core components and sub-components of innovative educational institutions under local government organizations, Chiang Rai province from documents of innovative organizations, thesis (2010 – 2019), research articles from ThaiJo/Google Scholar and authoritative electronic published documents consisted of 5 core components with 31 sub-components as follows: 1) administrators have vision and innovative competencies with 8 sub-components; 2) learners have innovative skills and characteristics with 6 core components; 3) an educational institution curriculum is based on innovation with 4 core components; 4) teachers provide learning and teaching to enable learners to create innovation with 6 core components; and 5) administration and learning management create innovation with 7 core components.

Step 1.2: The confirmative results of core com-

ponents and sub-components of innovative educational institutions under local government organizations, Chiang Rai province by nine experts in connoisseurship were improved and modified into 5 components with 31 indicators as follows: component 2 was improved to 'Learners have innovative skills, characteristics, and competencies'; component 3 was improved to 'A school curriculum is based on innovative competencies'; component 4 was modified to 'Teachers create learners as innovators'; and component 5 was changed to 'Facilities are supported administration and learning management'. Step 1.1 and 1.2 as shown in table 1.

Pagaura [9] who studied the innovative leadership attributed of school administrators in the Philippines with regard to the implications for educational management, it was alleged that the visionary attributes of administrators as rated by the teachers. The teachers strongly agree that their administrators had visionary attributes which meant that administrators were very much highly innovative. This implied that the school administrator must be a visionary leader, he must set a clear vision for the institution and support the teachers in making it happen.

In accordance with the Office of the National Economic and Social Development Board [3], the period of the Twelfth National Economic and Social Development Plan (2017 – 2021) would be an extremely challenging time for Thailand to undertake substantial reforms by accelerating the development of science, technology, research and development, and innovation as key factors in empowering the development of all aspects needed to increase the country's competitiveness in an exceedingly competitive global economy.

Similarly, to achieve the vision and objectives, the National Scheme of Education B.E. 2560-2579 (2017 – 2036) by Office of the Education Council (ONEC) [4] identified learner aspirations that were meant to develop learners who had high qualifications and 21st century skills in the following areas: 3Rs: Reading, Writing, and Arithmetic; and 8Cs: Critical Thinking and Problem Solving, Creativity and Innovation, Cross-cultural Understanding, Collaboration, Teamwork and Leadership, Communications, Information, and Media Literacy, Computing and ICT Literacy, Career and Learning Skills, and Compassion.

Phase 2: Results of the investigation of the important states, problems, and conditions supporting schools as innovative educational institutions under local government organizations, Chiang Rai province as shown in Table 2.

Similarly, in Department for Education, UK [7] Debra Gray, Principal of Grimsby Institute of Further and Higher Education, wrote that the English education sector was alive with innovation and cutting-edge developments in EdTech. Outstanding use of technology could help level up the playing field for learners with barriers to learning and provide the 21st century solutions to closing skill gaps and raising achievement.

Additionally, the Organization for Economic Co-operation and Development (OECD) [5] stated that new sources of growth were urgently needed to achieve stronger, more inclusive and more sustainable development. Innovation could offer vital solutions, at affordable cost, to economic, social, and cultural dilemmas. Innovative economies were more productive, more resilient, more adaptable, and better able to support higher living standards.

As mentioned by Phonmanee and Ariratana [10], the development of an administration model for creating learning management innovations in secondary schools under the office of the Basic Education Commission revealed that the highest need for the index was the innovation process, followed by the innovation measurement in schools, and the creative culture and innovative leadership, respectively. The aspect with the lowest need was the strategic planning for innovations.

In addition, Pangthai [11] found roles of administrators implementing educational innovation to practice in the Kukampitayasan school. The context of Kukampittayasan School was used as a pilot school for using innovative classroom education by the University of Khon Kaen under the dream school project of the Basic Education Commission Office, and factors were determined including a budget allocation for the innovative use of schools by providing facilities, such as media, equipment and buildings. In addition, administrators participated in every innovative process, and from the results of the use of such innovation, schools were selected as innovative models.

Phase 3: Results of the development of strategies for promoting schools as innovative educational institutions under local government organizations, Chiang Rai province consisted of 5 strategies and 16 measures as shown in table 3.

Likewise, according to 20-year National Strategy (2017 – 2036) [2], Thai citizens would, thus, be physically, mentally, and intellectually prepared, with all-rounded development and well-being adequate for each age group; would be publicly conscious and responsible to others and society, financially prudent, generous and caring, righteous, good citizens with right and ethical mindsets, equipped with skills required by the 21st century, as well as communication skills in English, the third language, and local dialect; learners with life-long learning skills who would become highly skilled Thai citizens, innovators, thinkers, entrepreneurs, smart farmers, and more with career paths suitable for their proficiency.

The Organization for Economic Co-operation and Development (OECD) [5] stated in its innovation strategy for education and training, three main sets of skills for innovation which consisted of: 1) technical skills (know-what and know-how); 2) behavioral and social skills (self-confidence, energy, perse-

Table 1. Results of the study, synthesis, and confirmation of the core components and sub-components of innovative educational institutions under local government organizations, Chiang Rai province

Synthesized core components	**Confirmative core components**	**Sub-components**
1. Administrators have vision and innovative	1. Administrators have vision and innovative	1.1 Define vision 1.2 Construct vision 1.3 Implement vision 1.4 Disseminate vision 1.5 Build motivation skills 1.6 Communication skills 1.7 Creative thinking skills 1.8 Innovative leadership skills
2.Learners have innovative skills and characteristics.	2. Learners have innovative skills, characteristics, and competencies.	2.1 Learners intend to create new tasks. 2.2 Learners have creative thinking skills. 2.3 Learners have communication and technology skills. 2.4 Learners have innovative skills. 2.5 Learners have teamwork skills. 2.6 Learners have innovative presentation skills.
3. An educational institution curriculum is based on innovation.	3. A school curriculum is based on innovative competencies.	3.1 A school curriculum creates critical thinking solving skills. 3.2 A school curriculum builds creative thinking skills and creates innovation. 3.3 A school curriculum encourages integrated learning. 3.4 A school curriculum promotes competencies of information and communication technology.
4. Teachers provide learn ing and teaching to enable learners to create innovation.	4. Teachers create learners as innovators.	4.1 Teachers have competencies of teaching and learning management to create innovation. 4.2 Teachers are able to encourage learners to create self-knowledge. self-knowledge. 4.3 Teachers are able to provide and apply innovative technology in learning management. 4.4 Teachers encourage learners to have creative and innovative thinking. 4.5 Teachers provide learning to promote critical thinking and problem solving. 4.6 Teachers are promoted to be a ‘coach’ or a ‘learning facilitator’.
5. Administration and learning management create innovation.	5. Facilities are supported administration and learning management.	5.1 Have learning environment to create new knowledge. 5.2 Analyze and synthesize the learning management. 5.3 Provide productivity classrooms for creative thinking. 5.4 Use media and technology. 5.5 Have learning resources both inside and outside the classroom. 5.6 Promote scholarships, study, research, or new innovation. 5.7 Have an innovative management strategy.

verance, passion, leadership, collaboration, communication); and 3) creative and critical thinking skills (creativity, critical thinking, observation, imagination, curiosity, connections, metacognition).

Similarly, Wanhakij *et al.* [12] studied the operation of information and communication technology for education in schools under Loei Primary Educational Service Area Office 1. They determined that the analyzing data on the operation of ICT for education found that the utilization of ICT to support the administration and provisions of education services were at a high level, followed by cultivation of personnel who were capable of using ICT creatively, promotion and support of the education with ICT to increase education’s efficiency, and development of the infrastructure for ICT that supported education were at a moderate level

Besides, Pangnitikanakorn *et al.* [3] studied the innovative model for integrated education management of municipal schools under the Department of Local Administration, and found that there were six elements of integrated education management of municipal schools under the Department of Local Administration as follows: 1) leadership, 2) strategic plan, 3) management information system, 4) measurement and evaluation, 5) academic management, and 6) stake-

Table 2. Results of the investigation of the important states, problems, and conditions supporting schools as innovative educational institutions under local government organizations, Chiang Rai province.

Components	States	Problems	Conditions supporting for the promotion schools
1. Administrators have vision and innovative competencies.	Administrators define objectives, goals, and create an organizational culture for schools based on the general local context.	School visions do not clearly define an innovative school.	Local government organizations, communities, and stakeholders should be supportive to define school visions and strategies.
2. Learners have innovative skills, characteristics, and competencies.	Most learners are unable to apply the knowledge and understanding to benefit themselves and society.	Learners do not have innovative skills to benefit themselves and society.	Encourage learners to acquire innovative skills according to the world of the 21st century.
3. A school curriculum is based on innovative competencies.	A school curriculum stipulated from local government organizations.	A school curriculum is not amended to create innovative skills.	Local government organizations should have a manual plan to amend school curriculum to create innovative skills.
4. Teachers create learners as innovators.	Teachers design teaching and learning management according to school curriculum.	Lesson plans do not focus on the use of innovative technology and create innovators.	Local government organizations should allocate budget for teachers' development in terms of creating innovations.
5. Facilities are supported administrations and learning management.	There are learning resources both inside and outside the school that can encourage learners to learn from real situations.	Teachers and learners use innovative resources unwisely.	Local government organizations should facilitate innovative resources conductive for creating innovation.

Table 3. Results of drafting strategies for promoting schools as innovative educational institutions under local government organizations, Chiang Rai province.

Strategies	Measures
Strategy 1: Administrators: Administrators have vision and innovative competencies.	1.1 Encourage school administrators to play a key role in innovation and technology, and co-lead direction by working along with education institutes. 1.2 Promote the use of innovation for developing operations and driving the organizations with a management system. 1.3 Create decentralized innovation to motivate personnel to develop creative thinking. 1.4 Integrate innovations to achieve development and change in the organization.
Strategy 2: Learners: Learners have innovative, characteristics, and competencies.	2.1 Raise learners' quality to meet educational standards of 21st century learning skills. 2.2 Encourage the use of learning resources, media, technology, and create an atmosphere conducive to create innovations in the 21st century. 2.3 Build a professional learning community (PLC) of creative innovations.
Strategy 3: Curriculum: An educational institution curriculum is based on innovative competencies.	3.1 Accelerate the preparation of ICT courses in accordance with local states to meet the learners' characteristics. 3.2 Enhance the utilization of the full capacity of schools' ICT to suit for learning in the 21st century. 3.3 Adjust the supervision process of using of the school curriculum to be more efficiently.
Strategy 4: Teachers: Teachers create learners as innovators.	4.1 Encourage teachers to 'coach' or a 'learning facilitator'. 4.2 Promote and support additional e-learning for innovative learning. 4.3 Launch motivations for conducting e-learning to promote lifelong learning.
Strategy 5: Facilities: Facilities are supported by administrations and learning management.	5.1 Enhance the quality of network database as a base for the development of innovative teaching and learning management. 5.2 Develop a network of database system to facilitate the development of innovative teaching and learning management. 5.3 Encourage to create innovation in the organization and set the direction for administrative development.

holder management.

6. Conclusion

It can be summarized that the developed strategies for promoting schools as innovative educational institutions under local government organizations, Chiang Rai province would be an advantage for educational management. Local government organizations can provide the quality education and concern for the local community's ways of life. As these results, it will be accepted by parents and communities. The key success conditions are school administrators under local government organizations are visionary and realize the importance of educational innovations as well as teachers who use innovations to assist teaching and learning in the classroom.

7. Recommendations

From this research, the recommendations are as follows:

7.1 These developed strategies for promoting schools as innovative educational institutions under local government organizations, Chiang Rai province can be applied to other provinces. The office of local government organizations should emphasize on creating innovative schools all over Thailand equally.

7.2 There should be a utilization of the full capacity of schools' ICT to learners under local government organizations in accordance with learning in the 21st century and monitor the operations closely.

8. Recommendation for Further Research

8.1 There should be a study of strategies which promote schools as innovative educational institutions under local government organizations, Chiang Rai province in the other provinces as guidelines to inspire all educational institutions under local government organizations for self-development.

8.2 There should be a study of strategies which promote schools as innovative educational institutions under local government organizations, Chiang Rai province in terms of administrative innovations to propose that local government organizations cope with the changing world of education.

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