

A MANAGEMENT MODEL OF ADMINISTRATIVE INNOVATION IN THAI EDUCATION INSTITUTIONS

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Abstract

The purpose of this research was to develop a management model of administrative innovation in Thai education institutions. The research method is divided into 3 steps: 1) Studying components and guidelines for developing a management model of administrative innovation in education institutions. 2) Creating and evaluating the appropriateness of a management model of administrative innovation in education institutions. And 3) Assessing the feasibility and the usefulness of a management model of administrative innovation in education institutions. The results showed that a management model of administrative innovation education institutions consisted of five components: 1) objectives, 2) principles 3) input factors in administrative innovation, 4) process of administrative innovation, and 5) innovative output. The results of the suitability assessment of the model, the experts agreed that the model is appropriate. The results of the feasibility and the usefulness assessment of the model from the school administrators, confirmed that both were at the highest level.

Keywords: management; innovation; school

Introduction

Nowadays, innovation has been used as a key tool for differentiating and gaining a competitive advantage in many industries including in education. As Thailand has been facing with rapid changes, disruptive technology, national economy as well as the crisis of covid-19. All these factors have generated challenges toward many educational institutions in Thailand. Therefore, the National Education Plan and education standards need to be adjusted. According to the learning development in national strategic plan 2018 – 2037. The goal is to develop learners' learning skills and a desire to learn based on characteristics of Thai people 4.0 from early childhood education, basic education, vocational education, and tertiary education. Thai people 4.0's characteristics categorized into three categories: 1) learners, 2) co-innovators, and 3) strong citizens. (Office of the Education Council, 2018). However, the

overall situation of the Thai education system in the changing context of the 21st century, which occurred rapidly, suddenly, and violently, resulted in problems with curriculum, teaching, and learning management, as well as assessment. This is confirmed further by Sukanya Chaemchoy (2020), who highlighted the difficult work currently confronting school directors and teachers, who must develop students' new skill and characteristic to meet the changing world rather than merely gaining basic literacy and academic abilities. As a result, school administrators must be prepared to implement new strategies to ensure the success of their schools. Also, school administrators must be closely aware of changes and innovations in the field of education (JunratSiththisomjin, 2020).

Back in 2018 Ministry of Education announced Edusandbox project in pilot schools of six provinces in Thailand hoping to develop and transform education into an innovative way. However, there are

currently few references or models to assist them on innovating to improve school performance (JunratSithisomjin,2020). As a result, it is critical to study the factors and construct structural modelling to demonstrate how school administrators can ground the development of innovation management aspects

To address the gap above, the school administrator plays an importance role in managing the school, guides and support teachers, students, and educational stakeholders to reaching goals. Therefore, the objective is (1) to study components and guidelines for developing an administration innovation management for Thai education institutions by synthesizing documents, interviewing experts, and studying from Best-Practice schools. (2) to create and review the appropriateness of the model of developing administration innovation management for Thai education institutions and to (3) Assess the feasibility and the usefulness of the model of developing administration innovation management in Thai education institutions.

Literature review

Factor in administrative innovation:

Tanya Eschberger (2018) stated that there for seven important success factors for managing innovation in organization as facing with rapid change in 21st century. 1) Management commitment from top to bottom, is the basis of the innovation process, also support, time and budgets are necessary fuels for the success of innovation, which can only be achieved through commitment to innovation. 2) Strategic orientation; the innovation strategy must be defined based on future trends, opportunities, risks, and challenges as well as the corporate strategy. 3) clear responsibilities; project roles are defined in individual innovation projects and must be perceived with commitment. 4) Innovation culture; This requires different values and attitudes, for example openness to try out new and new things, willingness to take risks, thinking across borders, accepting mistakes and much more. 5) Change management 6) Integration of all employees and 7) Collaboration.

Kenesha Wilson (2020) stated that there are four factors affecting the management in innovation as follows, 1) Human resource;

the involvement and participation of employees within an organization. It also deals with the training and resources required to develop the skills that would be essential for the change process. 2) Structural; considers the functions and relationships of all stakeholders, on the basis that the organisation exists to achieve specified goals and efficiency can be improved through clear guidelines of roles and responsibilities 3) Political and 4) innovation culture frame focuses on getting people to unite in one accord.

Therefore, factors in administrative innovation consist of 1) Leaders' innovative traits 2) Innovative Characteristics of teachers and staff 3) Innovation management committee 4) Learning resources, media, and technology and 5) Innovation culture.

Innovation Management Process: Key elements in developing competence and gaining a competitive advantage, as well as the increasing flow of information and new technologies, which we refer to as 'innovation.' The following are the innovation management processes and factors that influence an organization's ability to be innovative.

David Kelley (2020) stated that the process of creating innovation through the Design Thinking process consists of five steps: 1) Empathize mean identify innovation opportunities, creating a framework that aims to address unresolved problems. This will lead to innovation that is truly valuable, 2) define means analyze to summarize the design's key points and goals in order to obtain a framework that is clear, valuable, meaningful, challenging, and comprehensive, 3) ideate means synthesis of several new solutions or alternatives, 4) prototype means conveying ideas to form/model, and 5) test means process to develop and redefine ideas.

ISO (2020) stated that innovation management processes are carried out using a PDCA (Plan-Do-Check-Act) cycle, which can be implemented entirely or partially with an innovation management system. 1) Planning entails defining objectives as well as the actions required to manage opportunities and risks, such as the factors that influence the success of innovations. 2) Action (Do) entails taking the pattern from

step 1 and putting it into action through a process tailored to the organization's context and resources. to support and run. 3) Follow-up (Check), and compare results to objectives and 4) Continuous improvement of the efficiency of the innovation management system is referred to as action to improve (Act).

Jitima Wannasri (2020) stated that the process of innovation involves the application of ideas from various sources. However, educationally, there are similar and different procedures. It can be summarized into 3 steps as follows: 1) Step 1: Synthesis, investigate current conditions, problems, and development requirements. 2) Step 2: Design, build and evaluate educational management innovations 3) Step 3: Experimenting with the management innovation model and 4) Step 4: assess, summarize, and improve the management innovation model.

Therefore, the innovation management process is the process of studying, analyzing, synthesizing, designing, and planning actions that focus on the success of innovation consists of five steps as follows: 1) Study and analyze the problem, 2) Plan and Design, 3) Implementing, 4) Evaluating and 5) Publishing Innovations.

Materials and Methods

This study was research and development with 3 steps as follows:

Step 1: Studying components and guidelines for developing a management model of administrative innovation in Thai education institutions by synthesizing documents, as well as interviewing with

five educational institutions administrators, and studying from Best-Practice schools by interviewing three pilot school administrators in Edusandbox project area. The research tools were semi-structured interview and content analysis were used to analyzed data.

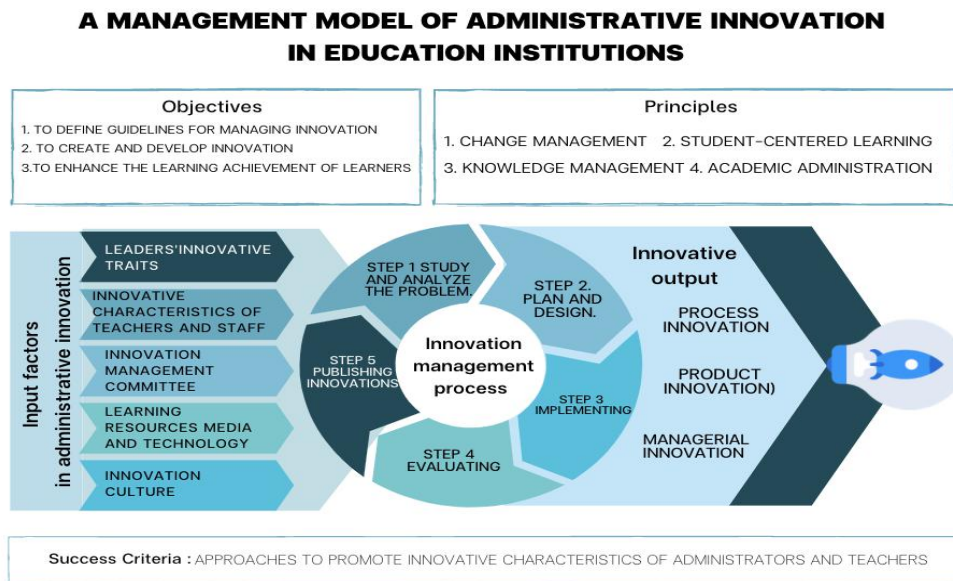
Step 2: Creating and evaluating the appropriateness of a management model of administrative innovation in Thai education institutions by drafting the model based on the research result in step 1. The model was then examined using (focus-group discussion) of nine experts with expertise or experiences in innovation. Content analysis and consensus based on experts' comment were used to analyze the data.

Step 3: Assessing the feasibility and the usefulness of a management model of administrative innovation in Thai education institutions was assessed by collecting data from 30 school administrator the research tool was a questionnaire

to assess the feasibility and the usefulness of a management model of administrative innovation in Thai education institutions on a 5-level scale. The data were analyzed using mean and standard deviation.

Results

A management model of administrative innovation in school found that there were 5 components: 1) Objectives, 2) Principles, 3) Input factors in administrative innovation, 4) Innovation management process, and 5) Innovative output. The detail was shown as the following **figure 1**.

Figure 1: A management model of administrative innovation in education institutions

Component 1 objectives consists of: 1.1 To define guidelines for managing innovation, 1.2 To create and develop innovation, and 1.3 To enhance the learning achievement of learners

Component 2 Principle consists of: 2.1 Change management 2.2 Student-centered learning, 2.3 knowledge management, and 2.4 academic administration

Component 3 Input factors in administrative innovation consists of: 3.1 Leaders' innovative traits 3.2 Innovative Characteristics of teachers and staff 3.3 Innovation management committee 3.4 Learning resources, media and technology and 3.5 Innovation culture.

Component 4 Innovation management process consists of 5 steps: Step 1: Study and analyze the problem, 2) Plan and Design, 3) Implementing, 4) Evaluating and 5) Publishing Innovations.

Component 5 Innovative Output consists of: 5.1 Process Innovation 5.2 Product Innovation and 5.3 Management Innovation

The model evaluation results found that overall, the model was appropriate, feasible and useful at the highest level.

Discussion

The results of the research could be discussed on the following important issues:

Input factors in administrative innovation consist of 1) Leaders' innovative traits, 2) Innovative Characteristics of teachers and staff, 3) Innovation management committee, 4) Learning resources, media, and technology, and 5) Innovation culture. A school administrator is someone who sets a clear direction and vision to drive school innovation. As well as focusing on and supporting the development of creative and innovative activities in the school, the school administrator must have leadership ability to manage people through creativeness and motivated

ways and be capable of communicating. Teacher is play an important role in creating and enhancing innovation skill in school as 'coaching' method will be a new way of enhancing and guiding learners. Therefore, understanding innovative characteristics are necessary. Learning resources, media, and technology are part of motivating learner's interests to understand new context and generate new ideas. Consistent with Wiwat Meesuwat (2020) stated that support in learning center, equipment, technologies and knowledge from school administrator will promote creativity and it is an opportunity to expand the ideas of both students and teachers along with Vuttipong Phakdeelao (2018)'s research result stated that

characteristics of school administrators and teachers is important in creating innovation in school. Therefore, understanding innovation and developing new skill is essential.

Innovation management process consists of five steps. Step 1: Study and analyze the problem, 2) Plan and Design, 3) Implementing, 4) Evaluating and 5) Publishing Innovations. This is because the efficient implementation of the action plan will result from well planned, designed, and clearly defined roles and responsibilities to try out and evaluate the innovation. As a result, when assigning tasks, it is critical that school administrator and those involved are aware of the situation and assign the appropriate people to do the job. Consistent with PunyaLertgrai (2019) and KannikaSittichai (2018) stated that innovation management systems can be continually developed according to the PDCA cycle principle.

Innovative Output consists of 1) Process Innovation, 2) Product Innovation, and 3) Management Innovation. This is due to change of teaching and learning in the twenty-first century which aims to make a child-center and develop each individual to their full potential. To achieve this, the management of school must be adjusted. The goal is to improve teaching and learning management and directly improve school quality. Process innovation (teacher learning management) must be implemented, as the teacher is a person who directly supports the students and as a change agent, consistent with National Reform Plan (2021) stated that teacher must enhance their knowledge and skill to improve their teaching and meet with 21st century characteristics. This leads to product innovation (teacher teaching material/student work) of teacher and student. As a result, from above, teacher and student should be able to generate new ideas and be inspired by new experiences. Lastly, the National Reform Plan (2021) indicated that in order to enhance and develop their school, school administrators should seek out new opportunities, be an innovative leader, and be a change agent. As a result, managerial innovation is critical.

Conclusion

A management model of administrative innovation in school consisted of 5 components: Component 1 Objectives consists of: 1.1 To define guidelines for managing innovation, 1.2 To create and develop innovation, and 1.3 To enhance the learning achievement of learners. Component 2 consists of: 2.1 Change management 2.2 Student-centered learning, 2.3 knowledge management, and 2.4 academic administration Component 3 Input factors in administrative innovation consists of: 3.1 Leaders' innovative traits 3.2 Innovative Characteristics of teachers and staff 3.3 Innovation management committee 3.4 Learning resources, media, and technology and 3.5 Innovation culture. Component 4 Innovation management process consists of 5 steps: Step 1: Study and analyze the problem, 2) Plan and Design, 3) Implementing, 4) Evaluating and 5) Publishing Innovations. Component 5 Innovative Output consists of: 5.1 Process Innovation 5.2 Product Innovation and 5.3 Management Innovation

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