

The Development Model toward Innovative school under the Office of the Basic Education Mission in Thailand

Veeradej Maneenop

Faculty of Education, Khon Kaen
University, Thailand
laokhamhommv@gmail.com

Dawruwan Thawinkarn

Faculty of Education, Khon Kaen
University, Thailand
dawtha@kku.ac.th

Kanokorn Somprach

Faculty of Education, Khon Kaen
University, Thailand
kanoklin@kku.ac.th

Article Info

Volume 81

Page Number: 2554- 2566

Publication Issue:

November-December 2019

Abstract

The purpose of this research were to 1) study to components of innovative school under the office of the basic education mission 2) school level factors and teacher level factors affecting the innovative school under the office of the basic education mission 3) construct a model toward innovative school under the office of the basic education mission 4) evaluating a model toward innovative school under the office of the basic education mission. The research methodology has been a mixed method research sequential explanatory design. The research was divided into three phases; (I) to study components of innovative school under the office of the basic education mission using synthesis document and in-depth interview from five selected expert (purposive sampling) and CFA analysis . (II) to study school level factors and teacher level factors affecting the innovative school under the office of the basic education mission using HLM (Hierarchical Linear Model) the sample include 1350 Teachers and administrators from 450 schools under the office of the basic education mission in Thailand using multi - stage sampling. (III) construct a model toward innovative school under the office of the basic education mission were draft using synthesis documents and in –depth interview from five selected expert, and were developed using Multi-Attribute consensus reaching with a sample consisting of 11 selected experts. The instrument used in the study were semi-structured interviews and evaluated a model. Data was analyzed using basic statistics such as frequency and percentage which were then summarized.

The research found that;

1) The Innovative school under the office of the basic education mission was composed of seven components; 1) Mutually challenging visions 2) A flexible organizational structure 3) An innovator team 4) Innovation strategies 5) Innovative behaviors 6) culture and open climate and 7) Open communication. The purposed structural equation model of innovative school fit quite well with the empirical data set. $\chi^2 = 112.489$, $df = 92$, $RMSEA = 0.011$, $SRMR = 0.017$, $CFI = 0.999$, $TLI = 0.997$

2) The teacher level; academic level of teacher, experience teaching, using media and technology, and creative teaching affecting innovative school in significant .01 and school level; school as learning community and school curriculum affecting innovative school in significant .05 and found that policy factor negative affecting innovative school.

3) A model toward innovative school under the office of the basic education mission include; 1) Principles 2) Objective 3) Method and 4) Indicators success. and the process developing toward innovative school under the office of the basic education mission include; 1) Leader 2) Strategic planning 3) using innovative strategy, and interne vision.

4) A model toward innovative school under the office of the basic education mission showed that propriety, feasibility, accuracy and utility was overall at the highest level.

Article History

Article Received: 5 March 2019

Revised: 18 May 2019

Accepted: 24 September 2019

Publication: 12 December 2019

Keywords: *the development model, innovative school*

I. INTRODUCTION

Schools are important units for instructing and developing national personnel, especially since childhood is a time of learning that requires a supportive environment, including both good personnel and place.

Therefore, schools in the 21st century must adapt to learning trends and changes, requiring continuous development in a variety of skills, especially information technology, which plays a great role at present and will continue to in the future. Such skills can guide and encourage students to learn independently at any time.

A new era of educational institutions does not aim to produce consumers but create producers.

Education in the era of Thailand 4.0 aims to teach children to create innovative products or aims to reach so-called organizational productivity in order to accomplish innovation for the country. The Ministry of Education must be the leader that works along with schools, which are direct-operating units in charge of not only managing education for students' gaining of knowledge and analytical thinking, synthesizing, and interpreting skills, but also encouraging students to create lifelong innovations.

The above aims are consistent with the belief that the value of people is derived from their work performance and meeting these aims will also solve the problem of consumerism, which has been a persistent issue in Thai society. Meeting such ideals begins with supporting educational institutions to produce innovations. This leads students to have analytical thinking and become learners for innovation. Success or failure lies in the basic education of primary and secondary educational institutions. Pitune Silarat (2016) included the following elements for succeeding in becoming innovative schools under the concept of "Changing Education Paradigms for the 21st Century Skills:" 1) Access: All Thai people must be able to access

quality education according to the same standards; 2) Equity: All educational institutions must provide education to all learners effectively and equally based on the set standards; 3) Quality: A quality education system must be able to develop learners to achieve their full potential; 4) Efficiency: An effective education management system must be cost-effective and facilitate successful educational investment; 5) Relevancy: The education system must be responsive to the dynamics of a changing world. (Ministry of Digital Economy and Society and The Association of Thai ICT Industry, 2017)

In Thailand, both public and private organizations have a variety of ideas for building innovative schools. Regarding a successful and well-known model for innovative schools, Darunsikkhlalai School of King Mongkut's University of Technology Thonburi integrates situations associated with globalization into their learning management by implementing "constructionist learning," which is based on a learning theory by Prof. Seymour Papert from the Media Lab of MIT, and a vision of a "learning organization" as developed by Peter Senge from the Sloan School of Management, MIT, while acting in accordance with the National Education Act B.E. 2542. Both great teachers mentioned above have spent more than 20 years inventing teaching methods and organizational management paradigms for the modern world. Darunsikkhlalai School, meanwhile, aims to develop learners, facilitators, administrators, personnel, and parents in order to aid in developing learners to meet their full potential by cultivating ideas of "Learning How to Learn" and "Thinking about Thinking." Ideas can be cultivated in learners at a young age (tacit knowledge). When they grow up, academic knowledge and English requirements are fulfilled. Then at upper secondary level, learners are developed with career-based learning. After that, they can be evaluated according to methods set by the Ministry of Education, and their

passion for learning can be measured. This process is meant to guarantee that students are interested in lifelong learning, demonstrate leadership for change qualities, and develop good relationships with their colleagues while going to work with a positive mindset. If general schools are developed into innovative schools, the students will be able to apply their knowledge in practice by inventing new products using analytical thinking skills and by synthesizing new ideas for society. In addition, students will be able to develop a sense of being producers rather than consumers. This will help Thai society reject consumerism. Thailand needs people with new ideas to create new products in order to balance its dependency with independence and to prepare itself for globalization. Such people can lead Thailand to overcome its weaknesses and move forward toward sustainable economic and social development.

The purpose of this study was to investigate primary schools in Thailand in order to identify components of innovative schools. The components will be analyzed in order to create a model for developing innovative schools in Thailand.

II. RESEARCH OBJECTIVE

- 1) to study components of innovative school under the office of the basic education mission
- 2) school level factors and teacher level factors affecting the innovative school under the office of the basic education mission
- 3) construct a model toward innovative school under the office of the basic education mission
- 4) evaluating a model toward innovative school under the office of the basic education mission.

III. LITTERATURES REVIEW

- 1) The researcher reviewed 185 documents regarding innovative schools to gather data on components of innovative schools and then categorized the data into groups based on similarity of meaning and concept.
- 2) The researcher studied data derived from schools that had been accepted as innovative schools. The schools included six overseas schools and Three Thai school which had become successful after participating in a program and which had also been awarded. Purposive sampling was used to ensure that all selected schools were proper representatives of innovative schools in general.

The data collection process included field data collection, decoding of successful school practices, interviews with school stakeholders, and a summary of each school which covered a comprehensive overview of all aspects of education management for grouping components of innovative schools. The percentages and summaries of the 7 innovative school representatives revealed the components and behavioral indicators of innovative schools for primary schools as shown in Table 1.

Table 1: Synthesis of innovative school indicators as aligned with components

Components	Operational Definitions	Indicators
1. Mutually challenging visions	Personnel sets a clear image for success for the organization which members of the organization can work together to achieve in the future, and personnel show bonds of love toward the organization. Personnel commit to working together, prepare to support the work to take it in the same direction, and utilize their knowledge, experience, and skills, as well as databases from both past and present. Most importantly, they use innovations in their work in order to achieve the organization's future-oriented goals.	<ol style="list-style-type: none"> 1. A clear image of success for the organization 2. Bonds of love 3. Work is supported to take it in the same direction 4. Integration of innovations into work in order to achieve goals
2. A flexible organizational structure	Structure of working divisions or departments is set in a flexible way to facilitate adaptation to all changes in the organization free of controls. Working divisions are also granted freedom in self-administration, work autonomy, and opportunity for generating innovative creations. The personnel are excellent in a variety of disciplines. The organization decentralizes decision-making power to the personnel.	<ol style="list-style-type: none"> 1. Able to adapt to changes 2. Control-free 3. Freedom granted to working divisions 4. Self-administration 5. Excellency in a variety of disciplines
3. An innovator team	The personnel of the organization are able to gather and transfer information appropriately, create new mechanisms for developing the organization continuously, and support the application of new ideas. In addition, they are proficient in creating innovations; possess and apply skills, ideas, questions, observations, interactions, and experimentation; and demonstrate courage in initiating new ideas and taking risks for the sake of implementing sensible changes. Moreover, they express perseverance, imagination, interpersonal skills, and reflection, and they enjoy challenges, continuous learning, and self-improvement. They are achievement-driven, have a variety of interests and motives, are skilled in analytical thinking and teamwork, and are open-minded and accepting of different ideas. Finally, they are enthusiastic and enjoy learning, are self-motivated, are troubleshooters when faced with obstacles in the organization, and do not fear mistakes or failure.	<ol style="list-style-type: none"> 1. Creativity 2. Application of new ideas 3. Proficiency in innovation generation 4. Analytical-thinking 5. Courage to initiate new ideas or apply new mechanisms 6. Interpersonal skills 7. Outcomes and achievements 8. Self-motivation 9. Troubleshooting 10. Acceptance of mistakes or failures
4. Innovation strategies	Directions, processes, steps, or guidelines are put into practice for the sake of generating excellent innovation. Flexibility and adaptability are also applied toward constant change, both within the educational institution and in the context of the outside world.	<ol style="list-style-type: none"> 1. New methods 2. Excellence in innovation 3. Flexibility 4. Environmental analysis and setting of strategies

<p>5. Innovative behaviors</p>	<p>The personnel show clear signs of creativity; have freedom in thinking and expression in order to exploit novel processes through active practice; and seek opportunities that contribute to the growth and success of the organization. In addition, personnel are expected to be pioneers, initiating changes or experimentation. Moreover, they analyze opportunities, improve situations, swiftly respond to threats, and integrate all experiences into new productivity, contributing to research, solutions, and inventions. They also transfer knowledge to other colleagues in the organization for further development.</p>	<ol style="list-style-type: none"> 1. Creativity 2. Freedom of ideas 3. Seeking of opportunities 4. Pioneering 5. Risk-taking for change 6. Analysis of opportunities 7. Swift response to threats 8. Contributing success to the organization
<p>6. culture and open climate</p>	<p>Personnel are aware of the organization's support for creative ideas, freedom of thought, making queries, and participation in work-related goal setting. They also feel satisfied with job details and feel free to generate innovation. In addition, they are given opportunities to try out new methods for working, and they feel secure when participating.</p>	<ol style="list-style-type: none"> 1. Support for work 2. Freedom to present ideas 3. Freedom to express ideas 4. Freedom to ask questions 5. Participation in goal setting 6. Satisfaction with job details 7. Freedom to generate innovation 8. Security in participation
<p>7. Open communication</p>	<p>The organization has a process and freedom for exchanging ideas, feelings, and desires among executives and personnel or stakeholders, who all aim to achieve the set goals and have a mutual sense of ownership toward the organization. Consequently, personnel are inspired to generate innovation and appreciate any vision that contributes to innovative creations. In addition, personnel feel relaxed working under their supervisors and among colleagues, leading to close and strong relationships for developing innovations together.</p>	<ol style="list-style-type: none"> 1. A process for exchanging ideas, feelings, and desires 2. A mutual sense of ownership toward the organization 3. Freedom to exchange ideas 4. Inspiration 5. Flexible attitudes 6. Strong and close relationships 7. Awareness and understanding of changes in environment 8. Influence over personnel's attitudes and behaviors 9. Feelings of relaxation at work

IV. RESEARCH METHODOLOGY

1. The researcher reviewed 195 documents regarding innovative schools to gather data on components of innovative schools and then categorized the data into groups based on similarity of meaning and concept and studied data derived from schools that had been accepted as innovative schools. The schools included ten overseas schools and three Thai school which had become successful after participating in a program and which had also been awarded. Purposive sampling was used to ensure that all selected schools were proper representatives of innovative schools in general and reviewed 120 documents factors affecting to innovative school and then categorized the data into groups based on similarity of meaning and concept; school level factors and teacher level factors.
2. study components of innovative school under the office of the basic education mission using synthesis document and in-depth interview from five selected expert (purposive sampling) and Confirmatory Factor Analysis (CFA) analysis
3. study school level factors and teacher level factors affecting the innovative school under the office of the basic education mission using HLM (Hierarchical Linear Model) the sample include 1350 Teachers and administrators from 450 schools under the office of the basic education mission in Thailand using multi - stage sampling. Data

was analyzed using basic statistics such as frequency and percentage which were then summarized.

4. construct a model toward innovative school under the office of the basic education mission were draft using synthesis documents and in –depth interview from five selected expert, and were developed using Multi-Attribute consensus reaching with a sample consisting of 11 selected experts. The instrument used in the study were semi-structured interviews and evaluated a model. Data was analyzed using basic statistics such as frequency and percentage which were then summarized.

RESEARCH RESULT

- 1) The Innovative school under the office of the basic education mission was composed of seven components; 1) Mutually challenging visions 2) A flexible organizational structure 3) An innovator team 4) Innovation strategies 5) Innovative behaviors 6) culture and open climate and 7) Open communication. The proposed structural equation model of innovative school fit quite well with the empirical data set. $\chi^2 = 112.489$, $df = 92$, $RMSEA = 0.011$, $SRMR = 0.017$, $CFI = 0.999$, $TLI = 0.997$

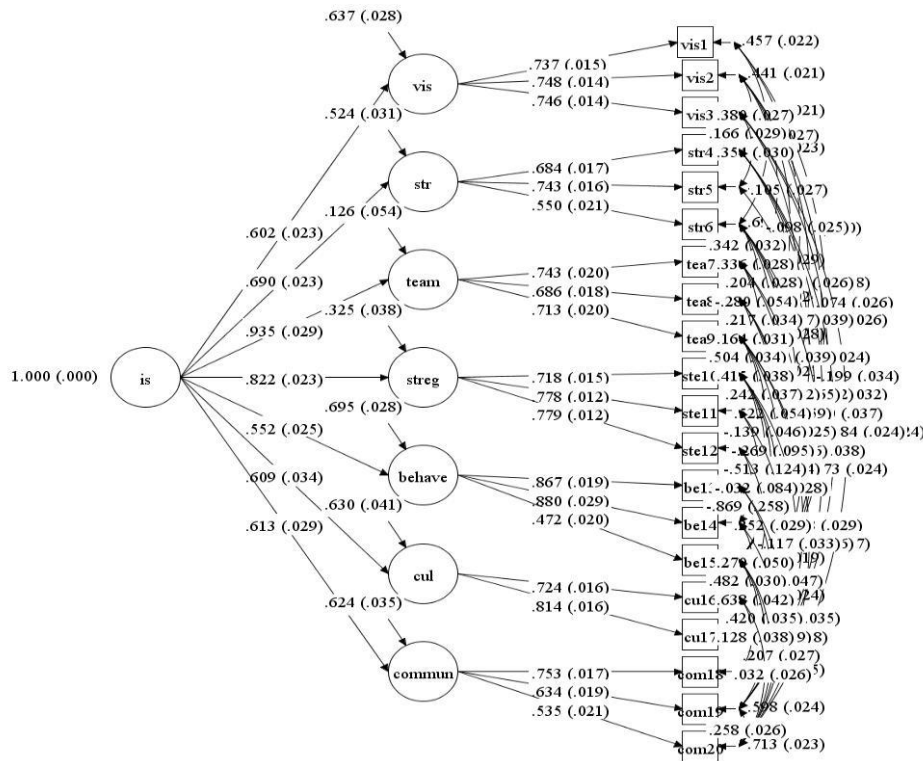
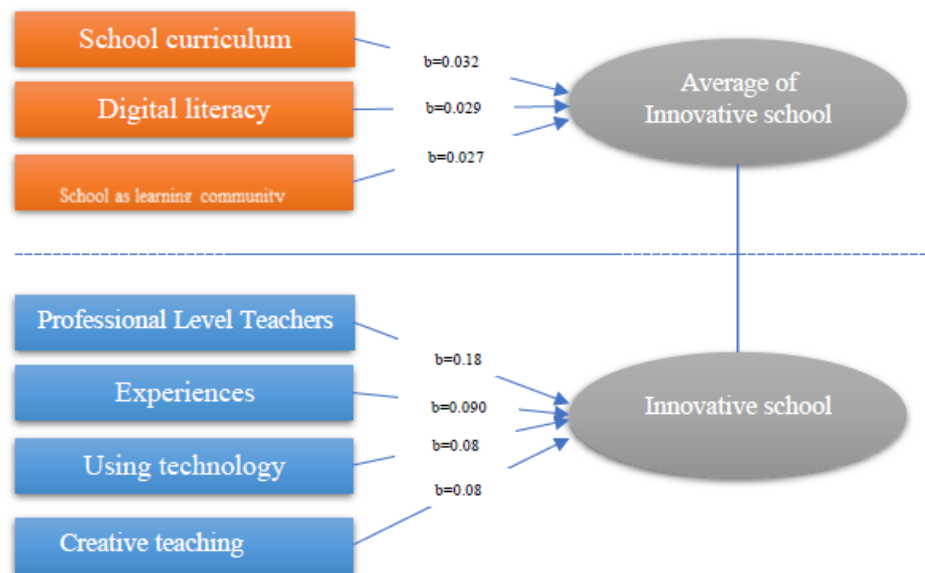


Figure 2: Confirmatory Factor Analysis (CFA) analysis Components of innovative schools

2) The teacher level; academic level of teacher, level; school as learning community and school experience teaching, using media and curriculum affecting innovative school in technology, and creative teaching affecting significant .05 and found that policy factor innovative school in significant .01and school negative affecting innovative school.

School level



Teacher level

Figure 3: school level factors and teacher level factors affecting the innovative school using HLM (Hierarchical Linear Model)

- 3) A model toward innovative school under the office of the basic education mission include; 1) Principles 2) Objective 3) Method and 4) Indicators success. and the process developing toward innovative school under the office of the basic education mission include; 1) Leader 2) Strategic planning 3) using innovative strategy, and interne vision.
- 4) A model toward innovative school under the office of the basic education mission showed that propriety, feasibility, accuracy and utility was overall at the highest level.

V. DISCUSSION

1. The purposed structural equation model of innovative school fit quite well with the empirical data set. The results of this study are as follows. Research on the concept and theory of innovation school the purpose of this study is to study various and concise methods of literature review and to propose experts. Suggestions and opinions Finally, the elements of innovative schools are consistent.

2. The teacher level; academic level of teacher, experience teaching, using media and technology, and creative teaching affecting innovative school in significant .01 and school level; school as learning community and school curriculum affecting innovative school in significant .05 and found that policy factor negative affecting innovative school. This is because Teachers use their knowledge and innovation from the academic to the practical implementation and the design of the curriculum. The work contributes to the academic development of the education system. And a social perspective. The academic work contributes to the recognition in the same profession and other professions that. The teacher is a noble profession so proud to live happily in society.

Teaching Experience Affect school innovation statistically significant at the .01 level. This was due. Teaching experience of

teachers in activities to learn it. Can be used to design learning programs include an analysis such as determining the unit. Planning, teaching and development of teaching skills to measure and evaluate various learning and promotion of research skills in the classroom as a teaching experience in problem solving, learning and reflection, achievement of quality. in the learning activities of teachers.

Media and Technology The results of this study show that: Teachers teach students They can use the creativity and practicality of technology. Therefore, learners' attitudes and acceptance of the benefits of technology will help students acquire more technical skills. Learning from other sciences.

Creativity in learning. Affect school innovation statistically significant at the .01 level. This was due. Creativity is the intellectual level of the teachers. The process of thinking things together. To innovate or existing solutions for the better. I can think of how to teach a variety of exotic and original. The theory can be applied or principles carefully and accurate to innovate and create new inventions or new ideas to develop a model student.

The Learning school has a positive influence on the statistical significance of innovation at the .05 level, because learning schools are a reflection of a teacher's collaborative learning community. Executives and educators There is a culture, a fellowship relationship with value vision, goals and missions together, by working together, learning team as a leader, a co-leadership, and executive administrators support to learn and develop professional-quality changes to the quality of management. Learn how people see your goal. The path and what is actually going to see yourself as a learning power learning is focused on the community of happiness, respect for each other. The ethics of generosity is a moral force. The good that members share is dedicated to the

profession with a positive attitude. Reflective learning is a supported structure. The formation and remains. It has been a culture that promotes a culture that is based on the culture of the fellowship and is culturally promoting the vision, continuous operation and sustainability. Learning school leaders can be classified into three levels, each of which is a community of sub-learning Community, and the community level is the Level 1 student level, which students will be promoted and engaged in. Learning more From other teachers and fellow students to do their activities to seek reasonable answers to them , students will be able to develop key skills, namely, learning skills, learning methods, and the cognitive skills of the subjects being studied, students are able to continually learn Authentic learning to achieve proactive learning goals and being a solution and the most effective solution, in conclusion. The importance of having the students ' learning community in schools is to help students know their self-knowledge by using proactive learning through an "Active learning" process and establishing a definition from what they learned. Level 2 is a Professional level, which consists of teachers and management of schools by the second-level learning community to have a distinctive character that is called "a professional community or Professional Community", which is a crucial mechanism for success in learning schools. Having a career community will encourage operators of both teachers and executives to use their own profession principles to improve their teaching and skill skills by using the study method. Reflection Analysis the use of dialogue and feedback that each person has to come back, etc. To achieve the school. Of learning. Everyone must come together to review the policy, Practices, and the school's management processes to be new, based on the improvement of these changes to provide students with a more productive and effective learning service. Contribute to the support of professional performance of teachers and

executives for greater quality and effectiveness. It has the atmosphere and environment of working well for all parties of the teachers. Students and parents, by learning schools, have a positive influence on statistical significance of innovation at the .05 level, because learning schools are a reflection of a teacher's collaborative learning community. Executives and educators There is a culture, a fellowship relationship with value vision, goals and missions together, by working together, learning team as a leader, a co-leadership, and executive administrators support to learn and develop professional-quality changes to the quality of management. Learn how people see your goal. The path and what is actually going to see yourself as a learning power learning is focused on the community of happiness, respect for each other. The ethics of generosity is a moral force. The good that members share is dedicated to the profession with a positive attitude. Reflective learning is a supported structure. The formation and remains. It has been a culture that promotes a culture that is based on the culture of the fellowship and is culturally promoting the vision, continuous operation and sustainability.

Curriculum has a positive influence on school innovation. Statistically significant at the .05 level. This is because the curriculum. The system has been developed to set clear goals. Focus on the processes involved the school set up Based on the standard core curriculum. The teacher can design the curriculum, standards-based. Learn to deal with ICT and ICT in the classroom in the school.

Innovation and technology management has a positive influence on innovative schools, this could be because the schools have focused on the level of education management to focus on innovation along the 4.0 educational approach by educational media and technology services. The service is organized in a way that provides guidance to users. This is to be able to meet the full educational technology needs and

executives, pay attention and support seriously, so as to ensure innovation and technology management. People, including the appropriate learners, are based on their intended and intended purposes.

The management policy has a negative influence on innovative schools, this may be because the current school has been assigned a policy to manage education both as a government policy of the Ministry of Education from social entities and educational institutions, in which the policy defines the term. A different and accelerated time to succeed, which makes the school operator unable to complete the operation according to the specified timeframe and to affect the policy on the other side, where the role of the majority of the operators is a teacher's mission. If there is a new or urgent policy, it can affect the existing missions, or may cause certain policies to be unsuccessful, and this may be because the school executives cannot integrate a variety of policies that are focused on the melting point. If the executive uses the integrated concept, such as Group Policy, focus is consistent. Have the same target group. The same tool timeframe can be carried out in the same direction.

3. A model toward innovative school under the office of the basic education mission include; 1) Principles 2) Objective 3) Method and 4) Indicators success. and the process developing toward innovative school under the office of the basic education mission include; 1) Leader 2) Strategic planning 3) using innovative strategy, and interne vision. Teachers use knowledge and innovation to perform their academic work into practical and practical design, learning management, which provides academic performance, contributes to the development of educational systems and angles. The social look that doing academic work contributes to the same profession and other professions that the teacher is a high-class profession, so it is proud to be able to live

happily in society. The Education section has a different perspective on whether the academic performance does not promote or enhance the real education personnel and are unsure whether it is a destructive study and that there is a social view that is not done. It may be because the form development process has passed the stage of the findings of the findings in the first phase and the second phase influencing the school's innovations and applied to the concept. The idea and method of Romiszowski (1970) and Bowditch (1973) is known as the system Approach, which is an overview of the structure or processes that are organizing the relationship between the elements combined in the process. 4 elements include 1) import data

2), Process 3) output (Output) and 4) feedback (feedback) in conjunction with the school management system by the quality system according to the National Quality Award (Thailand quality Award: TQA), a criterion based on the National Quality Award of the United States, called The Malcolm Baldrige National Quality Award (MBNQA) and the OBECQA Quality Award which has been developed throughout. To help organizations assess their self-assessment under a constantly changing environment. Focus on performance based on corporate strategy the criteria have evolved into a comprehensive system view and integrated management with the overall performance of the Organization and are evaluated correctly in accordance with experts and systematic auditing by qualified and assessed. Updated according to qualified offerings This makes the pattern through the assessment.

4. The Accuracy and Suitability of Comprehensive Evaluation and the Feasibility and Practicability of the Development Model of Western Schools The views of the members of the Committee Committee of the Committee of the Committee of the Expert's Committee on Basic Education are at the highest level. Through

expert processes Academic evaluation and through expert system inspection. According to the expert's advice. evaluation model

Results of the development process for innovative education The Office of the Basic Education Commission by the Congress of discussing the consensus from Multifaceted (Multi-Attribute Consensus Reaching: MACR), which has a summary of the meeting, that method of development to be an innovation school. With a high score and narrow range, it is important to pay the most.

The leadership consists of 1) the establishment of a working group. Analysis of the current state of international organizations, administrators and teachers. People involved Using methods such as SWOT, PESTEL etc. 2) workshops. Administrators, teachers People involved Together determine the success of the organization to challenge the ability of the organization and the team, and 3) determine the identity behavior. / Characteristics of Personnel Innovation of the common organization this may be due. School administrators are It is important to give priority to school and have to build a picture of reality that occur. The staff has a doctorate agreeably. And can be seen as a substantial unison. Management must create a change of mind (Growth mind set).

Strategic planning Stages Comprising 1) set up a working group to revise the curriculum innovation focus. 2) The school has a course of educational focus. Learners have the desirable features to innovate, focus on advanced thinking skills. 3) Executives at the Executive Committee, the management of the organization structure for the organization 4) determines roles are based on the annual action plan and determine who is responsible for the work, according to their knowledge, abilities, and development needs in the work, and to clearly define the success of the group or the parties. This could be due to the development of an innovation school for both

academic and operator importance. The tool is that the school course needs to be updated and focused on innovation. In fact, the innovation School has a strategic focus on innovation. The school has to adapt the strategy to the course and course to be driven into the learning management plan that can lead to practice. In addition, the school must have a group of individuals called at the first stage, but when driving changes in the development of innovative schools, innovation will expand the results of the entire school, and it may be because the innovation school has a flexible structure. It can be adapted to all contexts, even the world society will change or have an urgent policy. The focus is on a sudden สัจการ. Personnel in the Department can only be able to use the Integrated Knowledge to act in response to the policy or focus point.

The focus is on implementation using innovative strategies. Consisting of 1) training/Engaging workshops invites those who have been inspired by innovation, inspire the people to see the importance and value of innovation. 2) Arrange the area stage to encourage innovation in education, such as the school's innovation Master class. Open the House of innovative School, the ultimate contest of learning innovation at both personnel and Level 3), encourage and give teachers the opportunity to decide. Take action on the project responsible for strengthening the power and decentralized and inspiring 4), encouraging the people to think boldly, do something new, challenging, without the doctrine and 5) encourage. The display of different opinions without prejudice, this may be because the innovative school will require knowledge from all the departments to develop, improve the use of innovation. The school has to create learning as a learning community in schools, with a successful knowledge exchange. Happily, it is fast and can actually be used. Use communication that can accept comments, even

different feedback. It has been analyzed to review the original knowledge, including the area of innovation, such as various labs with tools to build innovative designs for a wide range of learning, and can be used by an innovative knowledge-based consultant.

The supervision process for development consists of Education executives use a variety of in-service styles to analyze and use the information they have developed. This may be because in the development of an innovative school, it is necessary to get information from Inservice. Follow up to analyze and participate in discussions, improve and define new frameworks, may have a goal that adds more difficult challenges, but it must be based on information from in-service information analysis.

Acknowledgements

This research was well supported by National Research Council of Thailand. The researcher would like to thank all parties who have geared us toward the success of this research

REFERENCES

- [1] Adair, J. E. (1996) .Effective Innovation: How to Stay Ahead of The Competition. London :Pan Books.
- [2] Brown, W. and Moberg, D. (1980). Organizational theory and management : A macro approach. New York : Wiley.
- [3] Caldwell, D. F. and C. A. O'Reilly. (2003). The Determinants of Team-Based Innovation in Organizations: The Role of Social Influence. Small Group Research. 34(4) : 497-517
- [4] Christiansen, James A. (2000). Building The Innovative Organization: Management.
- [5] Systems that Encourage Innovation. Hampshire: Macmillan Press.
- [6] D.K. Denton. (1999). The toolbox for the mind : Finding and implementing creative solution in the workplace (Milwaukee : Quality Press, 1999), no page.
- [7] Dvir T., Kass N., Shamir B. (2004). The emotional bond: vision and organizational commitment among high-tech employees. J. Organ. Change Manag. 17, 126–143 10.1108/09534810410530575
- [8] E. Dundon. (2 0 0 2) . The Seed of Innovation : cultivating the synergy that fosters new ideas (New York : AMACOM, 2002), 173-187Kuczmarski (2003)
- [9] Fayol, Henri. (1949). General and Industrial Management. London: Sir Isaac Pitman & Sons.
- [10] Harvard Business School. (2003). Managing Creativity and Innovation. Boston: Harvard Business School Press Hay Group. (2006). The Innovation Organization : Lessons Learned from Most Admired Companies.” 5 (July 2006) : 1-6. Holder, Bob J. and Matter, Gary. (2008). The Innovative Organization. Retrieved December 11, 2009 from
- [11] <http://www.geocities.com/CollegePark/Library/1048/innova.html>
- [12] Higgins, J.M. (1995). Innovate or evaporate :Test&improve your organizatio IQ-its innovation quotient. New York : New Management, 1995.
- [13] Kantabutra, S. (2010). Vision Effects: A Critical Gap in EducationalLeadership Research. International Journal of Educational Management,24(5), 376-390.
- [14] Linden, R. M. (1990). From vision to reality: Strategies of successful innovators in government: Lel Enterprises Charlottesville, Virginia
- [15] Læg Reid P, Roness P and Verhoest K. (2011). Explaining innovative culture and behaviour of state agencies. Organizational Studies 32(8): 1-27.
- [16] Nicholson, N., & M.A. West (1988), Managerial Job Change: Men and Women in Transition, Cambridge University Press, Cambridge.
- [17] Pitune, S. (2016). Philosophy of Creative Education and Production. Bangkok : Chulalongkorn University Printing House.

- [18] Quinn, R.E. and Spreitzer, G.M. (1991).The psychometrics of the competing values culture instrument and an analysis of the impact of organizational culture on quality of life.” *Research in Organizational Change and Development*, Volume 5, pages 115 142. Greenwich, CT: JAI Press.
- [19] Rushton, R., & M.A. West (1988), Mismatches in work role transitions, MRC/ESRC Social and Applied Psychology Unit, University of Sheffield, Memo No. 983.
- [20] Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*. New York, NY: Currency Doubleday.
- [21] Sherwood, Dennis. (2001). *Smart Things To Know About Innovation & Creativity*. Oxford: Capstone Publishing Limited.
- [22] Sununta S. and Bechter, C. (2001). *Strategic Human Resource Management and Firm Innovation*.
- [24] *Research and Practice in HumanResource Management*. 9(1), 35-57.
- [25] Tidd,J., Bessant, J., & Pavitt, K. (2005). *Managing innovation: Integrating technological, market and organization change* (3rded.) Sussex, UK: John Wiley & Sons.
- [27] Tidd, Joe., Bessant John, and Pavitt Keith. (2001). *Managing Innovation Integrating Technological And Organization Change*. Chichester : John Willey and Sons.
- [29] Von Stamm, Bettina. (2008). *Managing Innovation, Design and Creativity*. Chichester: John Wiley & Sons .
- [31] Upasana Kanchan and Abhishek Gupta. 2009. *How To Be An Innovative Organization Developing a culture of innovation in organizations*. International Conference on Computer Technology and Development. Retrieved June 21, 2015 from <http://ieeexplore.ieee.org/document/5360197/>
- [32] West-Burnham J. (2010). ‘Why vision?’ (online), Microsoft Partners in Learning. Available
- [33] from:http://www.istoolkit.com/knowledge_library/kl_files/WhyVision_JohnWestBurnham.pdf (accessed 17 December 2014).
- [34] Weber, Max. (1946). *Essays in Sociology*. Translated by H. H. Gerth and C. W. Mills. New York: Oxford University Press.