



Quality Assurance Management Model For World-Class Standard Excellence

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Article History

Received: March 9, 2020

Revised: September 25, 2020

Accepted: October 14, 2020

บทคัดย่อ

การวิจัยนี้มีวัตถุประสงค์เพื่อ 1) ศึกษากระบวนการ และเอกสารที่เกี่ยวข้องกับองค์ประกอบของการจัดการคุณภาพของโรงเรียน ในระดับมาตรฐานสากล 2) พัฒนารูปแบบการจัดการคุณภาพโรงเรียนมัธยมศึกษาสู่ความเป็นเลิศในระดับมาตรฐานสากล กลุ่มเป้าหมาย การวิจัย คือ โรงเรียนในโครงการโรงเรียนมาตรฐานสากล ระดับมัธยมศึกษา ในจังหวัดรุ่งเทพมหานคร จำนวน 52 โรงเรียน ซึ่งผู้วิจัย เลือกกลุ่มเป้าหมายแบบเจาะจง (Purposive Sampling) โดยเป็นไปตามจุดประสงค์ของการวิจัย เครื่องมือการวิจัย ได้แก่ แบบบันทึก การวิเคราะห์ข้อมูล แบบสังเคราะห์องค์ประกอบของรูปแบบ แบบร่างรูปแบบการจัดการคุณภาพ และแบบบันทึกการตรวจสอบ ความถูกต้องของรูปแบบ ทำการวิเคราะห์ข้อมูลการวิจัยเชิงคุณภาพโดยใช้การวิเคราะห์เนื้อหา (Content Analysis) เปรียบเทียบข้อมูล ประดิ่นความเหมือนและแตกต่าง (Constant Comparison Technique) จำแนกความถี่ สังเคราะห์องค์ประกอบของรูปแบบ และ ตรวจสอบความถูกต้องกับเกณฑ์รางวัลคุณภาพระดับมาตรฐานสากล ผลการวิจัย พบว่า (1) องค์ประกอบของรูปแบบการจัดการคุณภาพ ของโรงเรียนในระดับมาตรฐานสากล ประกอบด้วย 2 องค์ประกอบ ได้แก่ 1) ระบบการพัฒนาและยกระดับคุณภาพโรงเรียนของ หน่วยงานต้นสังกัด และ 2) ระบบการจัดการคุณภาพของโรงเรียน และ (2) ผลการพัฒนาได้รูปแบบการจัดการคุณภาพโรงเรียนมัธยมศึกษา สู่ความเป็นเลิศในระดับมาตรฐานสากล โดยใช้กระบวนการเชิงระบบของวงจรคุณภาพ PDCA เป็นขั้นตอนในการจัดการคุณภาพของ รูปแบบครอบคลุมการดำเนินการของโรงเรียน 7 หมวด คือ (1) การนำองค์กร (2) กลยุทธ์ (3) นักเรียน และผู้มีส่วนได้ส่วนเสีย (4) การวัด การวิเคราะห์ และการจัดการความรู้ (5) บุคลากร (6) การปฏิบัติการ (7) ผลลัพธ์ ดำเนินการแบบขั้นตอนของระบบงาน Stakeholders → Input → Process → Output → Costumer เพื่อให้หน่วยงานต้นสังกัดดำเนินการ และโรงเรียนนำไปใช้ปฏิบัติในด้าน บริหารจัดการ และด้านการจัดหลักสูตรการเรียนการสอน โดยยึดตามค่านิยมแนวคิดหลักของเกณฑ์รางวัลคุณภาพระดับมาตรฐานสากล 11 ประการ เป็นหลักในการปฏิบัติงาน เพื่อให้หน่วยงานต้นสังกัดที่รับผิดชอบการจัดการศึกษา และโรงเรียนในโครงการโรงเรียนมาตรฐานสากล มีรูปแบบการจัดการคุณภาพ ที่สามารถประยุกต์ให้เหมาะสมตามบริบทระบบการจัดการคุณภาพของโรงเรียนตนเอง ลดความคล่อง ตามเกณฑ์รางวัลคุณภาพระดับมาตรฐานสากล ต่อไป

คำสำคัญ : ระบบคุณภาพ ; การจัดการคุณภาพ ; โรงเรียนมาตรฐานสากล ; โรงเรียนมัธยมศึกษา ; ความเป็นเลิศของโรงเรียน

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ABSTRACT

The purposes of this research were 1) review literature and study the related documents about components of quality system management of schools in the “World-Class Standard.” 2) to develop a quality assurance management model for the world-class standard excellence. The target group were 52 secondary schools in the project under the office of basic education commission, Bangkok metropolitan. In which the researcher selected the target group through Purposive Sampling according to the research objectives. The research instruments were data analysis form, synthesis form for components of model, quality management model outlining form, and the validation record form. The data was analyzed as the qualitative research inquiry which was the content analysis to compare the similarities and differences, classify the frequency, synthesize the model components and verify the accuracy with the World-Class Standard Quality Award criterions. The results showed that (1) the components of the model for quality management are namely: 1) development and enhancement system for the quality of schools and 2) the system to manage the school quality and (2) the result of developing the model for the world-class standard school project which was PDCA cycle, a process for school quality management comprising of (1) organization leadership (2) strategy (3) students and stakeholders (4) measurement, analysis and knowledge management (5) workforce (6) operations and (7) the results. The process of system was conducted respectively as follows; stakeholders, the input, process, output, and customer to practice in schools both administration management and curriculum instruction based on the values and the main concept of eleven principles for World-Class Standard Quality Award criterions. These steps will become the models and concept for schools in-charged educational management organization and schools in the project to apply to the appropriate contextual system of quality management .

Keywords : Quality System ; Quality Management ; World-class Standard School ; Secondary School ; Excellence of School

Introduction

The Office of the Basic Education Commission, Ministry of Education have driven world-class standard school project and there are 1,540 schools both in elementary and secondary level to participate the project. The objective was to have a teaching and learning management and quality system aimed at desirable characteristics (learner profile) of students with the potential to be a world citizen. Educational management and students should be comparable to world-class standard especially in the international testing and National Education(O-Net). Office of Basic Education Commission has prepared a Quality Award (OBECQA) with the basic features. according to TQA: Thailand Quality Award. The concept has been promoted to be the policy for schools to suit their contexts to develop sustainable

excellence by a vision of “excellent quality management and the best results” (Office of the Secondary school, 2016) However, from the analysis of the problems of the operation of the world-class standard school, it is found that most of the problems caused from the personnel lacking knowledge and understanding about the operation, the curriculum method model, management structure and quality management system. The operation then was not complied with the principles of international standard schools and school administrators were not able to set quality management systems in accordance with the school’s context. Office of Basic Education Commission Quality Award,2016 (as cite in Sangthong, 2016) When assessing OBECQA quality criteria, so it is not possible to answer the questions of the criteria.



Ministry of Education Thailand research by Siridhrungsri, 2015) The results of the research showed that Basic educational institution management conditions, that schools under The supervising support of the agency is managed in the form of community participation. Network format Coaching format and the form of the host and client Including educational institutions, In this regard, it was found that the model of educational institution management with participatory Community is an important base of school management that leads to success. Both in the city and in the countryside Both small, medium, large and Extra large.

From the current issues, the researcher is interested in studying and developing the quality management model for schools in the World-class Standards School that can be applied to suit the context of school so it can pass the criteria for Quality Award. Base on school base managements with participatory. And the system oriented concept; school as curriculum as input with teaching and learning. There is management system (process) that can enhance student quality (output) with higher goals including academic excellence, being bilingual, initial idea, creative production and job creation as a tool that helps to monitor and manage the school operation. The overall results of the schools can develop competitiveness with comparable schools with higher quality which accounts for Thailand World Competitiveness ability.

Definition of terms

MBNQA : The Malcolm Baldrige National Quality Award (National Institute of Standards and Technology(NIST)Department of Commerce USA,2019) is an award established by the U.S. Congress in 1987 to raise awareness of quality management and recognize U.S. companies that have implemented successful quality management systems. The award is the nation's highest presidential honor for performance excellence.

TQA : Thailand Quality Award is the criteria for the National Quality Award of Thailand (Office of Thailand

Quality Award of Thailand Productivity Institute, 2018). established in 1996, according to the country's strategic plan to increase productivity. The concept of the National Quality Award of the United States (MBNQA) has been adopted and managed for the organization to achieve its objectives, improve results, and increase the ability to compete with organizations at an international level. The National Quality Award is a prestigious award that is widely recognized as a mark of excellence in international standard management of organizations. It is also the model and approach of quality awards such as the Public Management Quality Award (PMQA), Education Criteria for Performance Excellence (EdPEx), and Quality of Basic Education Commission Quality Award (OBECQA)

OBECQA : Office of the Basic Education Commission Quality Award (Office of the Secondary school Ministry of Education,2016) is the criterion used in quality management for the excellent performance of the world-class standard school .The conceptual framework of excellent values based on the basic criteria and techniques of the National Quality Award (TQA) and the United States of America's The Malcolm Baldrige National Quality Award (MBNQA). OBECQA quality criteria is to help schools of any size for Excellent Performance, schools have to examine themselves whether the measurement of achievement has been successful and be able to answer the questions of the criteria, The awarded schools have been recognized as a national model school for its best practice and inspiration for the other schools.

PDCA Quality Cycle (Thoachalee, 2015 as cite in Deming,1950) is the concept of process quality management with P (Plan), D (Do), C (Check), and A (Action) to carry out the solution to the problems. In the cycle, when the A (action) has been completed, P (plan) will be started again for the next operations. The quality cycle PDCA can move on seamlessly without end to prevent problems that might come up, and to deliver continuous quality improvement. The PDCA is obligatory to apply to the process of the quality



management system in accordance with the Quality Award OBECQA of schools. The basic concepts and dimensions of the scoring criteria correspond to the questions of the OBECQA criteria.

World - Class Standard School (Office of the Secondary school Ministry of Education,2016) means the schools that participate in the World-class Standard School Project. Office of the Basic Education Commission has developed curriculum as well as teaching and learning management aiming to develop students 'potential as global citizen with quality management system grounded on OBECQA and adopt guidelines the management of international standards to learning management such as Independent study and management of teaching of additional foreign language apart from English. Students are equipped with the skills, knowledge, abilities, and characteristics as world citizen of which key features include: 1)academic excellence 2)being bilingual 3)initial ideas 4)creative production and 5)social responsibility. The school curriculum has to be contextualized and high order of thinking should be promoted for multiple intelligences of students and comply with students 'need according to Basic Education Core Curriculum. In addition, knowledge of internationalization and world citizenship potential with the knowledge to public exchange for the movement of the global situation. The quality will be evaluated according to the OBECQA Quality Award criteria divided into 3 levels as follows.

Level 1

Administration of Quality Management in school level
 ScQA (School Quality Award)

Level 2

Administration of Quality Management in Office of Basic Education Commission Level OBECQA to develop and improve the quality of the school.

Level

Administration of Quality Management in National level
 TQA (Thailand Quality Award:) by the National Productivity Institute. Participating this national quality level is

the optional. However, the school has to pass ScQA and OBECQA assessments before they can be assessed.

By reviewing documents and related literature, Researcher definition MBNQA, TQA, and OBECQA is the World-Class Standard Quality Award criterions. Criterions shares important subjects reflecting the adoption of principles, concepts, values of MBNQA 11, namely Systems- Perspective, Visionary leadership, Valuing the people, Organizational learning and agility, Focus on success, Managing for innovation, Management by fact, Societal responsibility, Ethics and transparency, and Delivering value and results. The concepts has been the guideline for developing consistent criteria and can be used to develop various organizations by using two dimensional assessment process evaluation system ADLI and evaluate the results by using LeTCI (Office of the Secondary school Ministry of Education, 2016) mix method of PDCA Quality Cycle and The process of system and the details of the rating in each category and context are varied in each award. That is primary information to development Of Quality Assurance Management Model For World-Class Standard Excellence.

Research Purpose

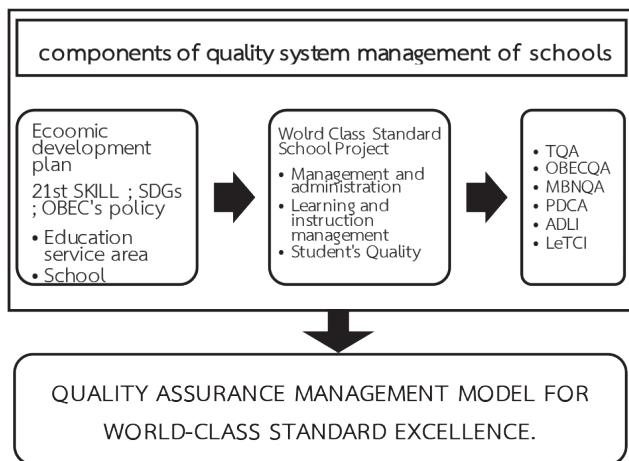
The purpose of the research were to;

- 1) review literature and study the related documents about components of quality system. management of schools in World-class standard.
- 2) development Of Quality Assurance Management Model For World-Class Standard Excellence.

Conceptual Framework

The study found that the Office of the Basic Education Commission has the policy in 2020 fiscal year divided into 2 parts (Office of the Basic Education Commission, 2020) 1) Office of the Basic Education Commission and the Educational Service Area Office, and 2) Schools and the implementation of world-class standard school project with the objective of providing schools with excellent educational management and

students are of world-class Standard. There is the criteria for OBECQA quality award that conforms to the TQA National Quality Award criteria as a guideline for educational management (Office of the Basic Education Commission, 2016) this can be displayed as follows.



The picture 1 Conceptual Framework of research

Methodology

This research was conducted by the qualitative inquiry method which is the content analysis of the documents and related literatures of world-class standard school project to synthesize the components of management and generate the quality model.

The Targets were 52 secondary schools in the project under the office of basic education commission, Bangkok metropolitan. In which the researcher selects the target group (Purposive sampling) according to the research objectives.

The research instruments were formed based on the related literature review;

1. Data analysis form
2. Synthesis form for components of model,
3. Quality management model outlining form
4. The validation record form

The content was analyzed in the regards of curriculum and instruction management, quality system management, influential factors to school operation, development and improvement of performance, checking the results, and value of quality management in school. Index of Item-Objective Congruence was rated by 5 experts and the value was between 0.80 to 1.00 meaning that it was validated.

Type of research document the researcher studied the documents and related literature about the quality system management components in 52 targets World-class standard schools such as 1) quality plan, 2) operational plan 3) school curriculum 4) quality reports 5) various information reports from the school. The documents and information have been disclosed to the public as instructed by data analysis form, synthesis form for components of model, and the validation record form.

Data Analysis qualitative data analysis such as content analysis and constant comparison technique were employed to find the similarities and differences, strengths and weaknesses of each method (Buason, 2008 cited in Lincharoen, 2015) which are 1) data organization 2) Indexing or coding of data 3) eliminating data or creating temporary conclusions in accordance with the quality management model outline 4) creating a conclusion which is the main content of the analysis results, interpretation and definition of the components and details of each element and 5) proof of the reliability of the analysis results. After that, synthesis contributed to the quality assurance management model for world-class standard excellence. which is accordance with the World-Class Standard Quality Award criterions.



Table 1 Content Analysis and Constant Comparison of Operation Practiced by the Target School According to the Table 1, the number of schools has been displayed from documents. PDCA has been practiced with SIPOC and IPO among the targets group.

Content	Number of School					
	Completely	Some	Not appear	Conform with OBECQA		
Part 1 Required planning in School						
Vision and Goal	52	0	0		50	
Mission and Strategy	52	0	0		39	
Value	32	15	5		16	
Core Competencies	20	16	16		16	
Part 2 Required operation in the school	PDCA	Other	Not appear	SIPOC	IPO	Other
Curriculum and teaching management	32	13	17	16	17	17
School quality system management	32	13	17	16	17	17
Developing and improving operational results	47	3	2	16	17	17
Performance review	47	3	2	16	17	17
Factors affecting school operation	13	16	13	16	17	17

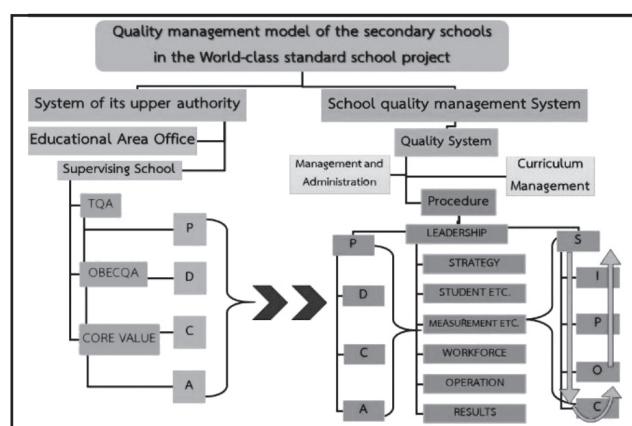
Results

From the study, the researcher found the conclusion of the components of quality management of secondary schools in world class standard school. And develop the quality assurance management model for world-class standard excellence. The research results are as follows

1. The components of the quality management model of the secondary schools in the World-class standard school consist of 2 components are; 1) quality development and enhancement system of its upper authority is a system that the educational area office collaborates with a mentor school that has been awarded the World-Class Standard Quality Award criterions and Excellent Corporate Values. The process of implementing the PDCA quality cycle is consistent with the procedures of the school's quality management system to improve the quality of the school in the world-class standard school project.

2) school's quality management system is system that the school uses for educational management. It can be divided into 2 areas which are management

and course arrangement. The process of implementing the PDCA quality cycle is consistent with the steps of the development and quality improvement of the upper authority. Level 7 the World-Class Standard Quality Award criterions. was implemented using the process of S (steak holder) I (input) P (process) O (output) and C (costumer) which of each component presented in figure 2 below.

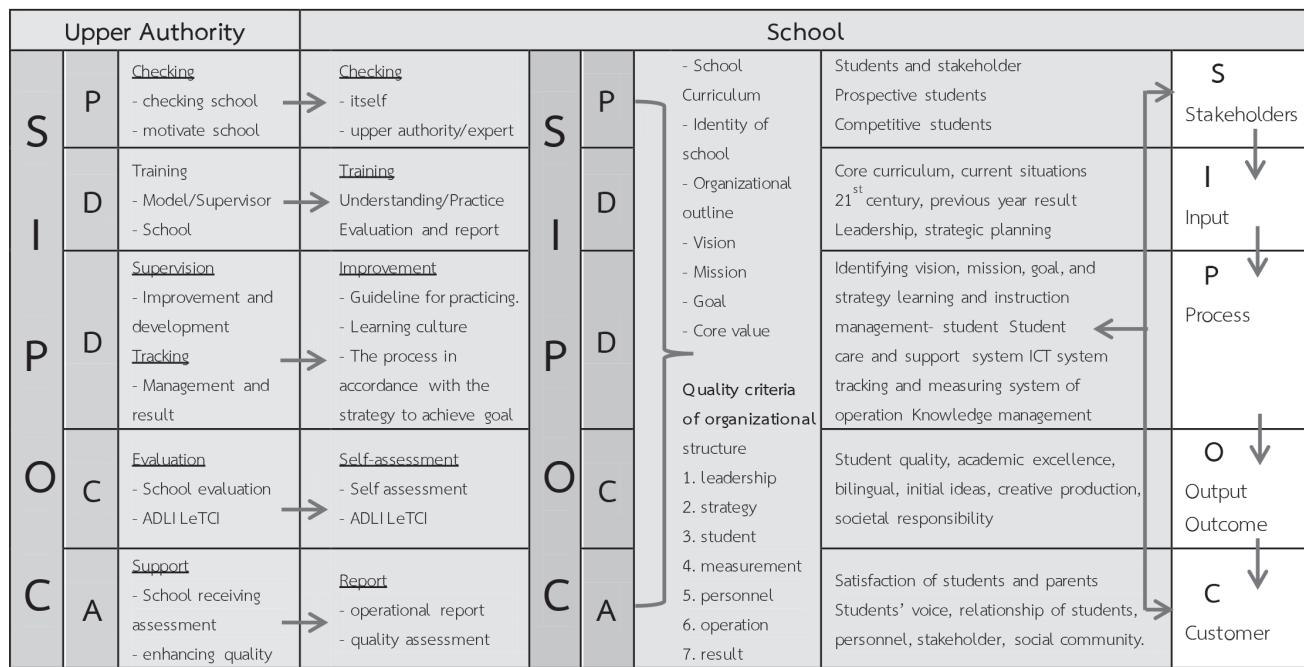


The picture 2 shows the detail of components of the quality management model of the secondary schools in the World-class standard school which based on the

concepts of MBNQA and TQA quality awards and the guideline for operating World-class standard school

with the criteria of OBECQA. (Office of Upper Secondary Education, 2018)

2. The quality assurance management model for world-class standard excellence. There are steps and processes of the quality management model to implement and use in the school as shown in Picture 3



The picture 3 shows the steps, process, connection and referral of the quality management model of the secondary schools in the world-class standard school project.

In conclusion, the management model of the world-class school consists of two components: 1) development of quality assurance for school provided by its upper authority 2) quality system management by using PDCA with; 1) leadership, 2) strategy 3), students and stakeholders, 4) measurement, analysis, and Knowledge Management, 5) personnel, 6) operation, and 7) results. This is conducted by the steps of SIPOC where Stakeholder, Input, Process, Output, and Costumer are respectively and integrate the popular concept of the World-Class Standard Quality Award criterions. as the primary procedures by implementing the system in the operation of the school in 2 areas which are in line with management and curriculum and instruction as the guidelines for implementing the World-class

standard school (Office of Upper Secondary Education Ministry of Education, 2018) and in accordance with Bodhichan,(2015).

3. Implementation of the model by schools. There are two components of quality management for secondary schools in World-class standard school project system by its upper authority and school itself quality management which has been practiced in 2 areas in accordance with OBECQA quality criteria as in Table 2.



Table 2 The implementation of the school quality management system Secondary schools in the World class standard school project Practice in school

Administration and Management	Learning and Instruction Management
<p>School has to adopt OBECOA concept to quality management as follows:</p> <ol style="list-style-type: none"> Integration of the 11 core value concept to the organizational culture and promote competencies for the school personnel. Development of goal, vision, mission, and strategy from learning in organization and personnel for the better outcomes. Competitive benchmark for standard and quality of the operation which aims at the development as a goals for school. Operate according to the strategic plan of school, focusing on the outcome and generate the practice from knowledge management. Use the criteria as a tool to understand and review the implementation as mechanism to learn for the best practice by incorporating the components for the appropriate context. <p>Organization outline Is the self-awareness of the school with emphasis on the organization's characteristics and organizational circumstances and define the identity of the school which showing the highlight.</p> <p>Section-1 Leadership is important, the leader must have vision and always inspect and develop the organization. Mission has to be clear with moral and ethical practice as well as the social responsibility.</p> <p>Section-2 Strategy, quality development and enhancement has to be carried out in operation and bring into the annual action plan, technique, and method.</p> <p>Section-3 Accepting students and stakeholders' opinion regarding the curriculum, learning and instruction, services to develop and improve the conditions for their satisfaction</p> <p>Section-4 To know whether the operation has been successful, measurement, analysis, and knowledge management play important role in this process by incorporating technology for database system and analysis.</p> <p>Section-5 Personnel is the factor for reaching the goals and vision. Relationship in organization is important and personnel data system</p> <p>Section-6 Operation has to be designed and planned systematically with the objective that students get maximum benefit.</p> <p>Section-7 outcome is the success and excellent practice of school in the following aspects 1)Curriculum and pedagogy 2)students and stakeholders 3) organizational leadership and management 4)personnel 5)finance and marketing</p>	<p>Guideline for school curriculum development and world-class standard learning and instructional management are as follows.</p> <ol style="list-style-type: none"> Study and analyse basic core curriculum and the amendment which learning characteristics has been modified for the world-class competencies and analyse the current circumstances and the context of the school with the goal of being Thai and International. Amendment of the structure of school curriculum for world-class standard by connecting the foundational subjects and supplementary subjects according to the needs and focus of the school as follows. <ul style="list-style-type: none"> Improve the curriculum structure in learning program especially the special focus such as science, mathematics, language, music, sport, vocational according to the local context, being Thai and International in both foundational and supplementary subjects. Organize continuous learning processes with appropriate sequence in line with the development of the students on grade level by learning a 5-step ladder by adjusting the content of learning, Integrated student-centered teaching and learning management focusing on the real practice and independent study which is divided into three learning feature. IS 1 ; IS 2 ; IS 3 ** to teaching and learning in additional subjects or student development activities Provide foreign language instruction with the focus of communication both English language and other foreign language. Connect the school curriculum to the national policy and the world trend with the goal to develop students' readiness changes in 21st century Active Learning has been emphasized for thinking process development, learning from real experience, coding and the local thinking for digital platform and incorporating digital into courses. Strengthen the learning management and create understanding among stakeholders and lead them into the real practice. There is an internal supervision system that helps build confidence for both teachers and students which enable making the product and creating innovation that are beneficial for society and the general public.

Table 2 The detail of components of the quality development and enhancement model of secondary schools in world-class standard project which are process, management and administration, and curriculum management.

Discussion

1. The elements of school quality management in the world-class standard school project must consist of 2 components, namely the development and quality enhancement system of the schools under its upper authority and the school quality management system

because the provision of quality education, participation of upper authority is a significant mechanism for driving policy, management services, and budgeting which supervision, monitoring and evaluation of educational management are important processes especially in public schools which is responsible for providing compulsory education And basic education aiming at the OBEC's



Quality Award criteria. This is congruent with the research of Paungsajai (2017) that success of the school quality system development must rely on all parties involvement; school administrators, school board, parents, community, students, agencies and organizations.

2. The model of school quality management in the world-class standard school project requires a systematic process that can be checked, collaborated and improved. The school must specify the vision, mission, objectives, strategies, values and key competencies including student classification, stakeholders, personnel, sponsors, strengths, weaknesses, opportunities for development as well as set the target of operation in the period of 3-5 years and specify the school benchmarking according to one's own context and in line with the educational guidelines of the world-class standard school project.

3. The model of school quality management in the world-class standard school project operates with the procedures of the PDCA quality cycle with exchanges of learning and continuously improve the operation of the circuit to drive the quality system in all 7 categories according to the OBECQA Quality Award criteria which is also in accordance with the evaluation using the ADLI assessment model as in the study of Bodhichan (2015) for comparison of tools and techniques for improving work, including quality tools such as QCC, advanced Six Sigma statistical analysis and KM (knowledge management). It is found that they all have the fundamentals of the PDCA cycle concept. Implementation of the PDCA will be performed systematically and completely, which will contribute to the productivity activities for the organization. Applicable planning from a comprehensive study of relevant information is a good starting point and the implementation in accordance with the plan will be the path to success and achieve the goal set because of its continuous improvement.

4. School quality management system must focus on results and emphasize students in the areas of physical, emotional, social, and intelligent, which reflect

the quality of the educational management. Therefore, the implementation of the OBECQA quality award criteria in all 7 categories requires the Input Process Output system by taking the student and customer into account to import the information for improvement and export the results which will be able to reflect the effectiveness of any process. This is in line with the MBNQA (2020) study that there are 11 of values and key concepts of an excellent organization in integrated operations, including 1) systematic perspective 2) systematic vision 3. student-oriented excellence 4. The focus on personnel 5) organization-level learning and agility 6) aiming at success 7) management for innovation 8) management using real data, 9) social responsibility, 10) ethics and transparency and 11) delivering value and results.

5. Using the OBECQA Quality Criteria is to help schools of any size or affiliation in answering 3 questions as follows: 1) Is the school performing well as it should be? 2) How does the school know its performance and how? 3) what should the school improve or change? To answer the OBECQA Quality Award Criteria for Excellent Performance, schools have to examine themselves whether the measurement is important and able to answer the questions of the criteria covering 7 important categories in the operation and the results of the school. The process is divided into 6 categories of operation and 1 category of result, which are 1) organization leadership, 2) strategy, 3) students and stakeholders, 4) measurement, analysis and knowledge management, 5) personnel, 6) operations, and 7) results. The award-winning school of quality (OBECQA) will be recognized as a national model school. There will be exchanges of learning, best practices, inspiring other schools in its operations and improving the results.

Expected Benefits of the Model

1. Project-participating schools and other schools understand the criteria of OBECQA and are able to implement the quality system model into their context.



Therefore, the school can evaluate themselves for improvement and development of process for their students and stakeholders.

2. Project-participating schools and other schools are able to integrate the models of quality enhancement and development with the school quality assurance which can be verified its quality by recognized OBECQA criteria.

Suggestions

1. Budget support both in the management and the teaching and learning comparable to international standards is important.

2. To create a work culture systems using the OBECQA in order to construct knowledge and to understand the development trend of international standards for school administrators, teachers, educational personnel, student, and stakeholders. Quality systems management must be recognized and given priority as a tool to bring the school to excellence and quality.

3. The development of the curriculum and the learning process integrates fully with the guidelines of the World-class Standard School (QSCCS) Integrated the King principles, Moral school, Localized curriculum, Management for Employment, Sustainable development,

Coding Active Learning and STEM to further develop into Big Data Digital Platform and Artificial Intelligence (AI).

4. Strengthening of the internal quality assurance system in accordance with OBECQA is established as an important strategy of the school quality development. There are indicators that are completed in accordance with the quality standards of the Office of the Basic Education Commission and the national educational standard.

5. Strengthening of partners, including the Ministry of Education. Office of the Basic Education Commission, Educational Service Area Office, Educational Supervisors, OBECQA Model Supervising School, and National Productivity Institute in promoting, supporting, helping in quality management operations and the curriculum management of world-class standard schools systematically.

Suggestions for further research

1. The empirical data of implementing the model in schools under the world-class standard school project should be collected.

2. The comparative study of using the model between the elementary and secondary schools should be conducted.

References

Bodhichan, S. (2015). *PDCA key to continuous improvement*. Retrieved September, 2019 from <https://www.ftpi.or.th/2015/2125>.

Lincharoen, A. (2015). *Qualitative Data Analysis Techniques*. Retrieved March, 2020 from https://edu.msu.ac.th/jem/home/journal_list.php.

National Institute of Standards and Technology (NIST) Department of Commerce USA. (2019). Baldrige Excellence Framework Education “MBNQA”. Retrieved March, 2020. from <https://www.nist.gov/baldrige/publications>

Office of Thailand Quality Award of Thailand Productivity Institute. (2018). *Thailand Quality Award2018-2019 TQA*. Bangkok : Eastern Printing Co., Ltd. (Thailand).

Office of Public Sector Development Commission. (2018). *Improving the quality of public administration (PMQA)*. Retrieved March, 2018 from http://www.opdcddc.org/document/meeting-invitation/18_2.pdf.

Office of the Secondary school Ministry of Education. (2016). *Office of Basic Education Commission Quality Award : OBECQA of World-class Standard School*. Bangkok: Center for Agricultural Cooperatives of Thailand limited.

Office of the Secondary school Ministry of Education. (2018). *Guidelines for the implementation of World-Class Standard School Improvement Year 2018*. Bangkok : Center for Agricultural Cooperatives of Thailand.



Office of the Secondary school Ministry of Education. (2018). International Standard School information. Retrieved March, 2020 from <http://203.159.154.154/mathayom/obec>.

Paungsajai, S. (2017). The Comprehensive Administration Model of Basic Education Institution in Upgrading Education Quality for World Class Standard School .(Unpublished doctoral's thesis) Chiangrai Rajabhat University, Thailand.

Sangthong, P. (2016). Introduction for *Office of Basic Education Commission Quality Award OBECQA of World-class Standard School* p.5. Bangkok : Office of the Secondary school Ministry of Education.

Siridhrungsri, P. and Ministry of Education Thailand. (2015) Basic school management model. Bangkok : Ministry of Education.

Yaisilp, C. (2019). *The academic papers "extracted the pokes to the sustainable development of World-class standard schools"*. North World-class Standard School Competency Forum. Phitsanulok Phityakhom School, Phitsanulok

ThoaChalee, T. (2015). *Managing an organization with a deming cycle.Industrial Technology Review*. Retrieved March, 2020 from <http://www.thailandindustry.com/onlinemag>.