

Research Report: Management Model for the Development of Quality Schools in the Institute for the Promotion of Teaching Science and Technology (IPST) by Creating a Mentoring System and Professional Learning Community

Achara Niyamabha¹, Wisut Wichitpatcharaporn², Chaiyawat Khamkhrueng³

^{1,2} Faculty of Education, K.U, Thailand.

³ Doctoral Candidate, K.U, Thailand.

Email: ¹ a.niyamabha@gmail.com, ² feduws@ku.ac.th, ³ chaiyawat.kh@ku.th

Abstract

The purpose of this qualitative research was to develop a management model for the development of IPST quality schools by creating a mentoring system and a professional learning community. Researchers collect data by analyzing documents. and interview. The informants in the research were 16 school administrators and personnel from 4 participating schools. The research tools were document analysis, interview forms. The data were analyzed by content analysis. The results of the research showed that the school administration model of quality, science, mathematics and technology according to the standards IPST by creating a mentoring system and a professional learning community. There are four forms: 1) a case model for Piyapong Wittaya School 2) a case model for municipal 10 Saraburi school 3) a school case model Wat Don Wai School and 4) a case-by-case model of Wat Rat Singkhon School. The aforementioned format is appropriate to the context of each school.

Keywords: School Management, Mentoring System, Professional Learning Community.

Introduction

Influenced by rapid changes around the world through globalization technology development trend and the hegemony of capital as a result, the wide adaptation of all organizations by the mainstream of the world. Create a phenomenon in the modern world (VUCA: Volatility, Uncertainty, Complexity and Ambiguity) as a source of disruptive change. All sectors must develop themselves to keep up with such changes. which must be prepared to cope with changes that will occur in the future.

Such changes it is affected for a number of reasons. both in technology that changes rapidly Both natural disasters, weather conditions, and the tide changes direction. or an epidemic Circumstances have resulted in

changes throughout the world. People in the global society have to adjust their lifestyles for proper existence in line with the changing context. New society arose a society that goes in the same direction more. Due to the advancement in technology that makes people in this world able to get news information quickly because awareness learns from each other quickly, knowledge and innovations that happen in one country. Many countries around the world can be applied thoroughly. The desirable new society therefore has the following characteristics: Learning Society, Cooperative Society, Creative Society, Society of Equality, and Society of Peace. (Niyamabha, 2021)

In this digital age the quality of science, mathematics and technology is still important

and necessary for learners who need to continually develop and increase their knowledge and abilities. so that it can be adapted to contexts that change dramatically Learners need to have the knowledge and ability to apply knowledge in science, mathematics and technology to further develop their ideas to create new and innovative things suitable for living in a changing society.

School Administrators are important people in driving to make teaching and learning in Science, Mathematics and Technology succeed effectively through management. Policy development Implementation of quality development policies, science, mathematics and technology according to IPST standards into production evaluation practices Outcomes and impacts on quality schools, PLC implementation and coaching in a continuous system.

School quality development is an urgent need for educational institutions. in developing the quality of students to keep up with the times the quality of teaching and learning management must be developed to be effective. Give students the knowledge and ability to apply knowledge to their way of life appropriately. The professional mentoring and learning community is recognized as It is a guideline for personnel development to have a great increase in performance.

From the IPST has implemented a quality school project in science, mathematics and technology according to the IPST standards to develop the competencies and learning skills necessary to develop the country into the 4.0 era, which is truly a digital age. This is to raise the level of achievement and reduce inequality in education. Therefore, a project has been established to develop a management model to develop according to the quality of quality schools of IPST by creating a mentoring system and professional learning community This is part of the SMT quality development that focuses on enhancing the efficiency of school management. To achieve the objectives of the project that aims to raise the quality standards.

However, schools with different contexts both under the jurisdiction and school size Thus, the management to improve the quality of each project would be different. This is the reason for researching that the management to improve school quality is There should be a model for managing quality through similar or different methods. This is to serve as information for agencies involved in further school quality development.

Objectives of the Research

To develop a management model to develop quality schools from IPST by creating a system. Mentors and professional learning communities.

The Research Scope

- **The Research Content Scope**

Research Management model for quality schools in science, mathematics and technology according to IPST standards has the following content scope:

1. Determination of policies, strategic plans and annual operational plans that aims to improve the quality of science Mathematics and Technology.
2. Implementing policies for quality development, science, mathematics and technology according to standards IPST into practice, consisting of policy communication school organizational structure supporting factors or resources Promotion of learning management Development of teachers and related personnel networking Motivation.
3. Being a coach and mentor to develop quality schools, science, mathematics and technology according to IPST standards.
4. Promotion of PLCs in schools to ensure the quality of science, mathematics and technology according to IPST standards.

• The Research Population Scope

The research population is as follows:

1. School administrators and management team of Wat Don Wai School, Wat Rat sing khon School, Piyapong School, and Municipal School 10, Saraburi Province.

2. Teachers of Wat Don Wai School, Wat Rat sing khon School, Piyapong School, and Municipal School 10, Saraburi Province.

Research Conceptual Framework

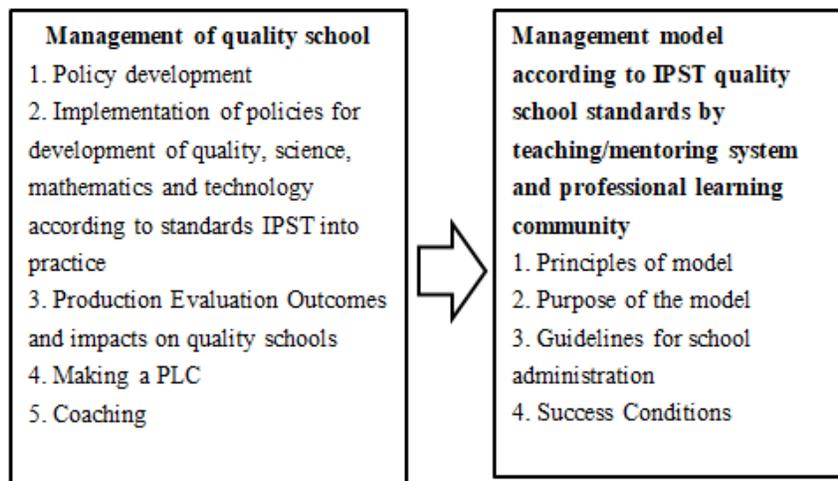


Figure 1. Research Conceptual Framework

Document Review

1. Quality school projects in science, mathematics and technology according to IPST standards

Achieving Thailand 4.0 goals and provincial development goals according to the needs of the area it is necessary to increase manpower with creative potential, critical thinking. can apply scientific knowledge Mathematics and technology in problem solving for use in daily life and Occupation by enhancing the quality of education in science, mathematics and technology from primary to upper secondary levels in every district across the country.

IPST has implemented a quality school project in science. Mathematics and technology according to IPST standards that promote teaching and learning in science. Mathematics and Technology by providing opportunities for youth in every district to have access to quality education has been developed until capable and

have the necessary learning skills to develop the country towards the 4.0 era in order to raise the level of achievement and reduce educational inequality. By cooperating with provinces, districts and local. Science, Mathematics and Technology Quality School Project Guide according to IPST Standards, SMT Quality Systems Institute, Ministry of Education Thailand (2022).

2. Mentoring concept and professional learning community

The mentoring system is a system of supervising, teaching and consulting to personnel who are less experienced by those who act as mentors should have seniority in the work as well as work experience that is higher than those assigned to take care of In addition, sometimes a mentor may be a mentor as well as a consultant on other issues at the same time, such as adjusting to working at the organization, living in the organization, and

living in society. Mentor's Guide Strategy and Human Resource Development Committee Faculty of Nursing Chiang Mai University (2021).

Professional Learning Community PLC stands for Professional Learning Community, which means Community of Practice in performing teacher duties. This is a concept that has been widely accepted in today's educational circles. PLC affects teachers can encourage teachers to feel more committed to the mission and goals of the school. by increasing their enthusiasm to fulfill the mission Have a clear common goal want to learn together and responsible for the overall development of students because learning power will have a positive effect on school performance Able to transfer knowledge through a variety of teaching methods It has a positive effect on improving professional development at all times. As a result, the inspiration to develop and professional devotion for students, which is both valuable and morale for better performance (Sanokarn, 2019; Salaksilp, Areerat & Areerat, 2019).

Benefits for students was able to reduce the repeat drop rate and the number of classes that had to be postponed or slowed down in learning management. Compared to the last old school, there is a difference in academic achievement. between groups of students with different backgrounds and a clear decrease (Waichumpo and Janjit, 2017).

Hord (1997: 14-24) mentioned the components of the PLC professional learning community in 5 ways: 1. Supportive and Share Leadership is support and leadership together. The administrators and teachers jointly support the various operations in the school to achieve success. 2. Collective Creativity is a collaborative learning and application of knowledge. The administrators and teachers have a variety of teaching methods. There is a modern curriculum. 3. Shared Value and Vision is the creation of shared values and visions. Administrators and teachers jointly created popular words and set a vision for teaching and learning management. for good academic achievement of students and to provide good quality schools. 4. Supportive

Conditions is a condition that facilitates Administrators should encourage, encourage and praise teachers' work in their work. 5. Shared Personal Practice is an exchange of learning between individuals. With a commitment to self-improvement, job development and building a school to be a learning community.

Hipp and Huffman (2003: 8-9) discussed the components of the PLC professional learning community in 5 ways: 1. Support and leadership together (Share and Supportive Leadership) means that executives use democratic principles. participation decentralization decision making. 2. Defining a vision and shared values (Shared Value and Vision) means that personnel share their opinions. And it is part of setting guidelines for teaching and learning in order to develop an educational institution that takes students as a priority. 3. Collective Learning and Application means that executives and personnel at all levels jointly share information, planning. 4. Exchange of learning between people (Shared Personal Practice) means the exchange of learning from each other by observing, supervising, following up, and expressing opinions on teaching practices. 5. Providing supportive conditions (Supportive Conditions) means academic interaction. They should have a good relationship with colleagues Respect, sincerity, based on the pursuit of knowledge with consideration. Teacher have a positive psychology.

Professional learning community There are 3 important elements that make PLC activities successful (Wongyai & Pattaphol, 2019) as follows: 1. Learning together (learning together) between members of the professional learning community sharing ideas. knowledge and experience. 2. Work collaboratively (work collaborative) based on the idea that members. Everyone is responsible for the learning outcomes of the learners. 3) Responsibility (accountable) is the responsibility to learn as a member of the professional learning community to develop themselves according to the agreed action plan of the PLC.

PLC is characterized by reducing the organization that is based on bureaucratic culture, turned to use a culture of academic alliances instead and a culture that promotes a vision of continuous action and sustainability. Organize supportive conditions according to the community context. Has a non-centralized organizational structure (Sergiovanni, 1994) or the autonomous community structure.

3. Concept of model and pattern development

Meaning of model 1) The model is the real model, exemplary form and casual style that is like the real thing but smaller or larger than usual. Scholars who defined the meaning of this style. 2) A model is a structure that shows the relationship between a set of factors or variables or elements that are important in relation or rationally to each other, to help understand the facts or the phenomenon in any particular subject, scholars who give the meaning of this style. 3) Styles are desirable characteristics that are ideological or rare in the real world, especially what we want and the ability to find what we want is very different, such as a city in Ideal. Scholars who give the meaning of this. 4) A model is a set of theories that have been tested for validity and reliability. In addition, relationships between variables can be identified and predicted by mathematical or statistical methods. Scholars who have defined the meaning of this style. 5) The model is an ideal simulation that leads to the description of the main characteristics of the expected phenomenon to make it easier to understand (Wichitphatcharaporn, 2018).

Research Methodology

A research on a management model to develop an IPST quality school by creating a mentoring system and a professional learning community. The researcher uses a descriptive research method, by collecting quantitative and qualitative data. There are four research procedures as follows:

Step 1: A study of the conceptual framework of management for the development of quality schools of IPST.

By studying relevant documents and research. Concepts related to management and quality development according to IPST standards.

Research tools: it is a document analysis form created by the researcher.

Data analysis: the data was analyzed using the content analysis method.

Step 2: A study of management conditions for the development of quality schools of IPST.

Research at this stage the researcher used the method of interviewing the administrators and personnel of the four schools for 1 academic year, the first semester 1 time, the upper semester 1 time, total 2 times.

Step 3 Draft a management model to develop according to the quality of IPST quality schools.

By bringing the study results from steps 1-2 to draft a management model for developing quality schools, IPST.

Step 4 Assessment of the management model to develop according to the quality of the IPST quality schools.

The information providers for affirmative assessment of the management model for the development of quality schools of IPST were school administrators and administrative teams. There are 3 of school team managements per school, totaling 12 of school team managements.

Creating an Assessment Tool: the researcher created a management model assessment tool for the development of quality schools of IPST. And check the quality by the research team.

Data analysis: the data was analyzed using the content analysis method.

After taking the model to be evaluated according to the specified process the researcher uses information and suggestions from experts to improve the model and present a complete model.

Research Results

• Part 1 Results of the study of the management conceptual framework for quality school development IPST.

The results of the study of the management conceptual framework for quality school development IPST have synthesized concepts. Quality School Management It has 5 components as follows:

1. Policy formulation: the school's implementation of the strategic plan. and annual action plan that aims to improve the quality of science Mathematics and Technology.
2. Implementation of the quality development policy in science, mathematics and technology according to IPST standards into practice. The action of the school consists of policy communication school organizational structure supporting factors or resources Promotion of learning management Development of teachers and related personnel networking Motivation.
3. Production Evaluation Results and impacts of IPST quality schools. Assessment of standard quality levels Management for development according to the quality of IPST quality schools by creating a mentoring system and a professional learning community.
4. Making a PLC is Actions of schools that encourage teachers to organize the PLC process to develop teaching and learning in science subjects. Mathematics and technology to meet the standards of IPST.
5. Coaching is School operations that coach and mentor teachers to provide quality science, mathematics and technology according to IPST standards.

• Part 2 The results of the study of the quality school management status of IPST by interviewing.

Results of a study of the management of PIT quality schools in the case of Piyapong Witthaya School. interview results Administrators of Piyapong Witthaya School and the school management team able to

summarize the interview results the important points are as follows:

School administrators have implemented management innovation principles using administrative strategies during the COVID-19 situation. for the management of educational institutions in the digital age There are related elements that are connected to use in planning the development of science quality. And technology to learners is important by having an important principle in management that focuses on quality practice that is Leader's friendliness and utilizing the potential of personnel for maximum benefits.

The results of the study of quality school management the case of municipal school 10 Saraburi. The school organizes an annual action plan. Aiming to develop science teaching and learning management Mathematics and Technology Implemented projects include teaching remedial projects. Educational curriculum development project Project-based teaching project 8 subject groups project-based analytical thinking Learning management development project 8 groups of learning subjects ICT training project. Project to study learning resources outside the school upper elementary level Projects supporting factors used in learning management academic exhibition project and activities carried out include reading week activities, SMT Mini Camp activities and science camp activities.

Results of a study of the quality school management status of IPST in the case of Wat Don Wai School. Wat Don Wai School There are important projects related to river development. develop the environment by using various technologies to help with school science. Wat Don Wai School Formulate policies and strategies to be used as guidelines for improving the quality of education. The school recognizes the importance of developing science, mathematics and technology according to the Ministry's focus, such as the STEM Education Integration Program for Learning Development. Sai Nam Classroom Project and a project to promote academic excellence and enhance academic achievement.

From a study of the quality school management status of IPST in the case of Wat Rat Singkhon School. Vision of Wat Rat Singkhon School SMT quality school, IPST standard. Teachers, personnel and students keep up with technology. combine power to create opportunities using the school as a base for success in elevating the quality of education. Wat Rat Singkhon School has a 4-year main plan for developing the quality of school education and has guidelines for developing SMT quality schools with IPST standards included in the master plan. Wat Rat Singkhon School, in addition to having a focus on developing quality SMT schools with IPST standards, also emphasizes learning happily. especially the introduction of music subjects for students to learn.

• **Part 3 The results of the draft management model for the development of quality schools, IPST.**

The researcher used the study results of steps 1-2 to draft a management model to develop

according to the quality of IPST quality schools.

• **Part 4 Evaluation results of management model for quality school development IPST.**

The researcher brought a draft management model for the development of quality schools from IPST for school administrators to make a confirmatory assessment and further found that school administrators and administrative teams of all 4 schools have confirmed and agreed with the draft model presented by the researcher. and a few additional comments. Therefore, a model for school management of quality, science, mathematics and technology standards has been presented. The complete IPST.

• **Part 5 Presentation of quality school management model.**

Model 1 Model for school management of quality, science, mathematics and technology according to IPST standards: the case of **Piyapong Witthaya School.**

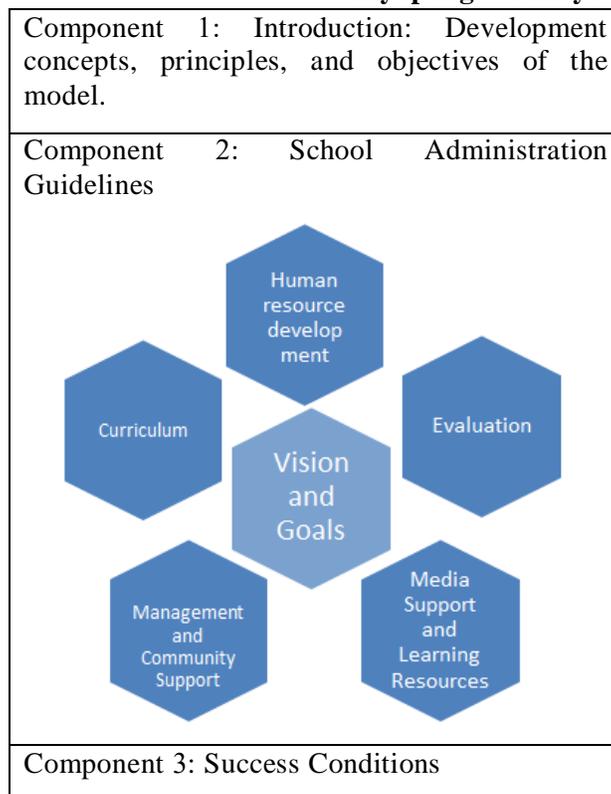


Figure 2 Model 1 Model for school management of quality, science, mathematics and technology according to IPST standards: the case of Piyapong Witthaya School.

Component 1: Introduction: Development concepts, principles, and objectives of the model.

Piyapong Wittaya School has the administration of the school. The executives have applied the principles of management innovation by using management strategies during the COVID-19 situation. for management in the digital age, with elements that are related and linked, and thinking or planning in each element is consistent.

Component 2: School Administration Guidelines

- Vision and Goals

The management of Piyapong Wittaya School that has been operated is the school has a vision, mission, goal, policy and quality development plan for science and technology institutes, with a school quality development plan that promotes learning skills. SMT has an evaluation process by preparing clear evidence and having assessment documents from the development plan quality.

- Human resource development

Development of teachers and school personnel the school conducts an analysis of the potential of the personnel responsible for the SMT subject group, teaching according to the majors that have been graduated, but personnel who do not meet the qualifications are also sent to the IPST training. There is a development of training and study visits in every semester in each academic year.

- Curriculum

The school has a curriculum that is consistent with the Basic Education Core Curriculum (revised edition 2017), with management Learning-based communication facilitates assessment and reflects on student understanding. by continuing to develop a conceptual framework for teachers and students create new knowledge media conducive to wisdom.

- Evaluation

There is an evaluation of SMT from the student's desirable characteristics by what students can apply their knowledge to in real life. Parents can evaluate SMT by evaluating the satisfaction of parents with teachers. very satisfied. Project to extend the results of the team of teachers to cross other subject groups in the implementation of PLC integrated teaching and learning, which the school is in the process of working with a network of private primary education associations, has jointly developed with 13 school groups. IPST. The innovative approach that the school has used is PIYAPONG MODEL.

- Management and Community Support

SMT teachers have a network of student quality development by academic team groups. clubs held every year and private elementary education associations and community support with a network of parents to learn and exchange experiences. The school creates participation of Kasetsart University. NIDA University and IPST. The academic training in the SMT group is the experience of students from meeting and talking with researchers. by cooperation between educational institutions.

- Media Support and Learning Resources

Equipment support from the beginning of the planning phase to prepare to grow in the support center as needed. In addition, support for materials, media, and learning resources may be supported by communities, entrepreneurs, volunteers, and assistance during the COVID-19 situation. Tech-savvy teachers have the opportunity to fully support between older teachers.

Component 3: Success Conditions

1. Continuously promoting the development of executives and colleagues
2. Team Building Focus on teamwork that works together deeply and continuously.

3. Entrepreneurial Leadership Executives should show behavior Ownership is determined to make school development with quality, sustainability, art in work, visionary, capable of guiding development with unity.

4. Friendship with colleagues It can be seen from the school administrators who support

both their work and care about the living conditions of their subordinates.

Model 2 School management model for quality, science, mathematics and technology according to IPST standards Case: **municipal school 10 Saraburi**

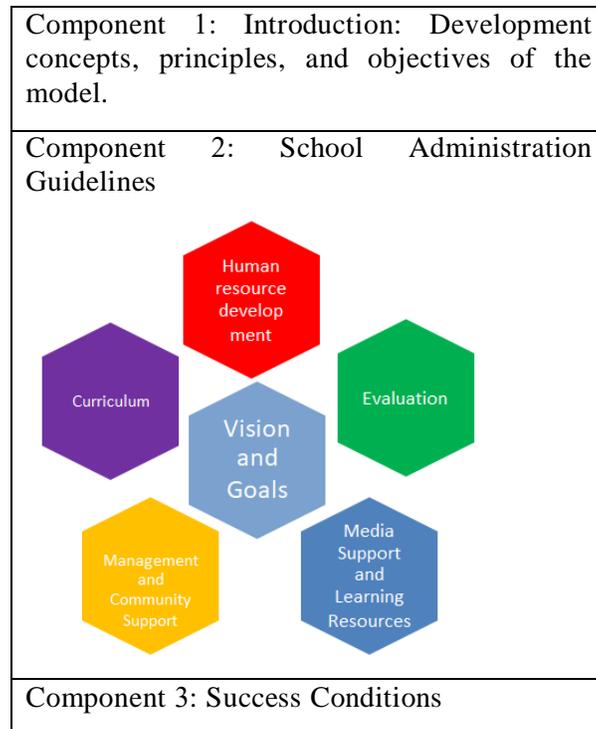


Figure 3 Model 2 School management model for quality, science, mathematics and technology according to IPST standards Case: municipal school 10 Saraburi.

Component 1: Introduction: Development concepts, principles, and objectives of the model.

Municipal School 10 Saraburi has school administration. The executives have applied management innovation principles using management strategies during the COVID-19 situation. for management in the digital age.

Component 2: School Administration Guidelines

- Vision and Goals

Action plan meeting of teachers and basic education committees to analyze the weaknesses and strengths of educational institutions, it was found that in the academic year 2018, the results of the national level test (O-NET) in science subjects have a higher average score than the national level in the mathematics subjects, the target value set by the school has not been achieved.

- Human resource development

Encourage teachers to develop themselves according to various departments organized.

Develop teachers to solve problems in the classroom by organizing Professional Learning Community (PLC) activities.

- Curriculum

The school has created the SMT curriculum and classroom structure by increasing the weight of basic subjects, more science and mathematics subjects' Additional subjects have added science projects, complementary science and supplementary mathematics.

- Evaluation

Follow up on self-improvement from participating in the online training of the Institute for the Promotion of Science Mathematics and Technology.

- Management and Community Support

Make a budget request plan to the agency and the municipality. School received funding from

the municipality to build classroom buildings, including scholarships

- Media Support and Learning Resources

School supports high-speed internet signal, as a base for searching for information for learning. The use of media is promoted. Innovation and digital technology.

Component 3: Success Conditions

1. Parental support in improving SMT quality
2. Student inspiration for learning SMT
3. Motivation for the achievements of schools participating in the quality school science project Mathematics and Technology

Model 3 School management model for quality, science, mathematics and technology according to IPST standards Case: **Wat Don Wai School**

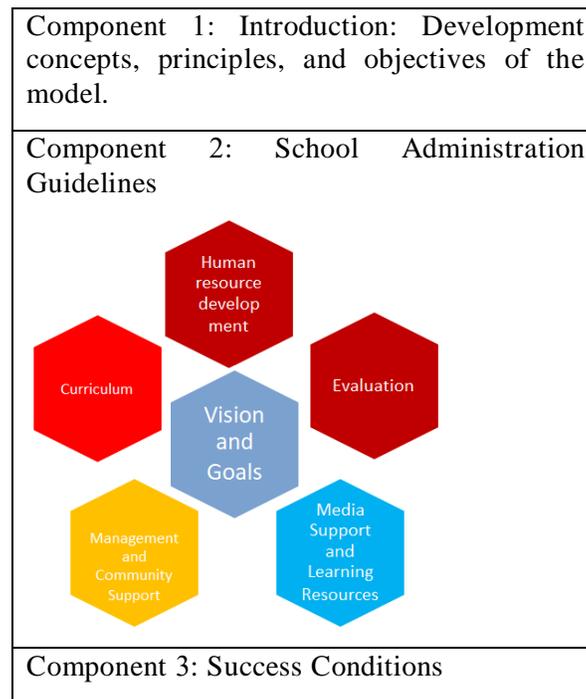


Figure 4 Model 3 School management model for quality, science, mathematics and technology according to IPST standards Case: Wat Don Wai School

Component 1: Introduction: Development concepts, principles, and objectives of the model.

Wat Don Wai School ever received an award Outstanding School of Science found that there is a project related to river development. develop the environment by using various technologies to help with science of this school, technology will always be in the satisfactory criteria of the Doi Wai community.

Component 2: School Administration Guidelines

- Vision and Goals

The school recognizes the importance of developing science, mathematics and technology as the focus of the ministry. Because it was found that the results of the national assessment Below average quality Therefore, relevant personnel in all departments were mobilized to prepare an annual action plan.

- Human resource development

The management team has encouraged teachers and personnel involved in self-development on a regular basis by providing advice and advice on various actions through the supervision process within the class in a friendly manner. by conducting internal supervision activities on a monthly basis.

- Curriculum

Teachers prepare lesson plans that focus on developing learners to their full potential. Encourage learners to learn appropriately. The curriculum focuses on creative learners trying to stimulate. come out in the form of a project create knowledge by yourself, seeking knowledge Encourage teachers to use a variety of learning management methods.

- Evaluation

The management team has taken steps to create an opportunity to talk to each other. By participating in the exchange of learning as the opportunity arises. By acting as a person who draws on problems encountered in teaching and learning management. From work to talk and exchange with each other.

- Management and Community Support

There is a community and foundation of Wat Doi Wai. Sponsored as scholarships for students and part of the allocation for academic development of the school.

- Media Support and Learning Resources

The school has a budget to fully support the production of teaching materials. and requesting budgets to external agencies in the past academic year, the school received a budget from the Nakhon Pathum Primary Educational Service Area Office 2 to purchase equipment and teaching aids for science.

Component 3: Success Conditions

1. Teachers are enthusiastic in teaching and learning with the intention of transferring knowledge to students. There is an action to find improvements in teaching and learning through the PLC process. Students enjoy a variety of teaching and learning activities.

2. Adaptation to the situation from the Covid-19 epidemic Solving problems in the quality development of science, mathematics and technology that occur in the academic year 2020 that occur.

Model 4 School management model for quality, science, mathematics and technology according to IPST standards Case: **Wat Rat Sing Khon School**

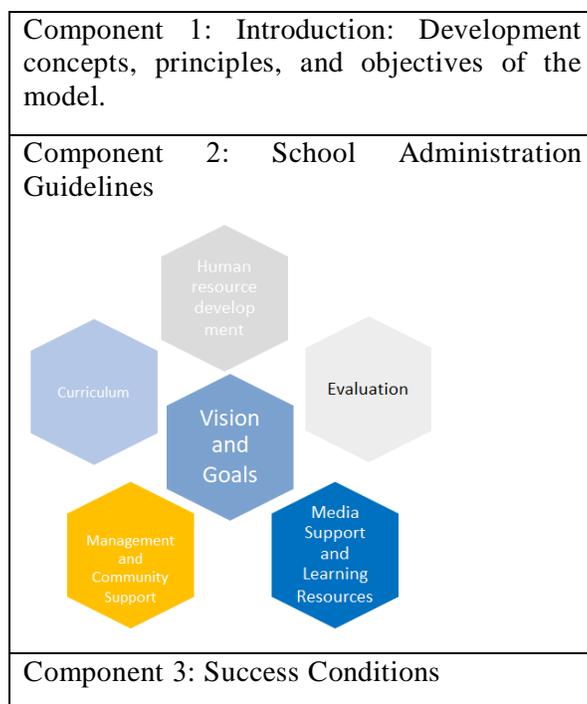


Figure 5 Model 4 School management model for quality, science, mathematics and technology according to IPST standards Case: Wat Rat Sing Khon School

Component 1: Introduction: Development concepts, principles, and objectives of the model.

Wat Rat Sing Khon School develop school administration that promotes the development of quality, science, mathematics and technology according to IPST standards.

Component 2: School Administration Guidelines

- Vision and Goals

Vision of Wat Rat Sing Khon School SMT quality school, IPST standards, teachers, personnel and students keep pace with technology. combine power to create opportunities using the school as a foundation for success in improving the quality of education the school has developed teachers, personnel and students to keep pace with technology. raise the quality of education It is a quality SMT school.

- Human resource development

Develop teachers to attend training in both their affiliation agencies. and external agencies all subject groups for professional development.

- Curriculum

Course development and administration the school has its own design of the book document. It's the school's line. But now, fortunately, teachers, new generation personnel meet the needs of curriculum development and management, use it as a model School as a base (school base) to suit the school by relying on new personnel.

- Evaluation

Wat Rat Sing Khon School Achieving higher O-Net scores by tutoring students. For teachers, this 8-time assessment is organized, that is, you have to be a teacher's assistant for 2 years, receive 8 assessments, and then look at their progress. Here, I take the opportunity that You have to create a job You have to produce work.

- Management and Community Support

There is cooperation from both internal and external educational institutions such as Dhonburi Rajabhat University, Srinakharinwirot University, publishing house, Network, with private schools coming in, such as Wat Suthi, about music to work together, Rajamangala University Open house, we also go to create cooperation with network communities for students.

- Media Support and Learning Resources

School to promote the use of media Innovation and digital technology are used, booklets are shared online. Store data on hard disk.

Component 3: Success Conditions

1. Teaching techniques of teachers that need to be developed in line with changes
2. Technology communication system that must be developed to be able to use effectively
3. Teachers' cooperation in improving the quality of education

Conclusion and Discussion

From the research presented discussions for academic benefits as follows:

- **Discussion of research results on the issue of model knowledge obtained from research.**

From the research the researcher has presented the concepts of management model for the development of quality IPST schools in 4 styles. It has 5 components as follows:

1. Policy formulation refers to the operation of the school in forming a strategic plan.
2. Implementation of policies for development of quality, science, mathematics and technology according to standards IPST into practice means the operation of the school consisting of policy communication school organizational structure supporting factors or resources.

3. Production Evaluation Outcomes and impacts of IPST quality schools means assessment of standard quality levels. Management for development according to the quality of IPST quality schools by creating a mentoring system and a professional learning community.

4. Making PLC refers to the operation of schools that encourage teachers to organize the PLC process to develop teaching and learning in science subjects. Mathematics and technology to meet the standards of IPST.

5. Coaching refers to the operations of schools that act as coaches and mentors for teachers to ensure quality, science, mathematics and technology according to IPST standards.

Principles, objectives and clear guidelines for school administration the resulting format will be useful to those who are interested. in administrators and teachers and those involved that will be used to further create management innovations that will result in driving quality as specified by IPST, which is in line with (Aphaijai, 2017) that the educational management model will be successful. This can be achieved by the continuous support of the parent agency and the presence of external organizations to provide regular support.

- **Discussions on highlights and important aspects of school administration.**

Targeted school different affiliations, concepts, beliefs, cultures and input factors affect different processes and methods of administration the results will be different. different levels of success in management with different organizational cultures consistent with the research of (Budket, 2019). Organizational culture correlates with teacher happiness at work. Building a quality corporate culture Create clear organizational goals understand the diversity of people will enable teachers to work fully.

Management during the Covic-19 crisis, but not discouraged, as well as encouraging teachers to take care of teachers to work efficiently. by using technology to develop

teaching and learning Therefore, the success of Piyapong School Distinguished as a leader who focuses on improving schools in times of crisis. Consistent with the research of Siriman (2021). School management skills of school administrators during the crisis of COVID-19 of schools under the Office of Secondary Educational Service Area 31 that school management in crisis, administrators must adapt to the changes that occur. Management should develop communication skills. Technology and digital skills.

Municipal School 10, Saraburi Municipality Schools under the Local Administrative Organization which the administration. There is a culture based on local administration governed by politics. Administration of local administrative organizations It is a form of decentralization in the administration of Thailand. There is a structure of administrative agencies by the municipality, so it has a special feature. Administration by a body led by local politicians Aims for the people to be held accountable by the people. This is consistent with the research of Puripinitnan (2022) on Decentralization and Local Development of Thai Local Administrative Organizations. It was found that the decentralization of power to local government organizations for local government organizations Has a wide role and authority and is an opportunity for people to participate. It will be very important to strengthen democracy in the country.

Wat Don Wai School gives importance to the deputy director. by assigning them to work independently helping to drive schools in times of crisis This is in line with the research of Thathong (2020) on factors affecting resource mobilization for school administration. Under the Chachoengsao Primary Educational Service Area Office 2. It was found that the factors affecting resource mobilization for school administration were the leadership of administrators. Support resources network building and public relations affecting the mobilization of resources for the administration of educational institutions.

Wat Rat Sing Khon School The researcher found that driving school administration to

develop quality of Wat Rat Sing Khon School the key role is played by the deputy director. with a sense of responsibility which is an important aspect of a context. In the condition that the school administrator has moved or retired this may be because the school has a person who acts as a deputy director who has a passion for improving the school. regarded as a form. This is consistent with the research of (Flaherty, 2018) from the University of Limerick, Ireland, who studied Delegation and empowerment in schools found Empowerment of teachers affects teacher performance development Empowerment is central to professional development when teachers have full power to manage their teaching and accomplish their work. will receive praise, which is a positive energy for teachers to be able to perform their duties fully and efficiently.

Recommendations

The research results, it was found that the management model for quality development according to IPST standards had different characteristics and strengths. on the affiliation of each agency Input factors in management with different organizational cultures. The researcher has suggestions for the development of management of participating schools as follows:

1. The agency level that drives the IPST project should proceed as follows:

- 1.1 Selection of schools participating in the research project There should be criteria and consideration processes that emphasize participation from the school. will result in school development according to the project Achieve more.

- 1.2 There should be systematic and continuous coordination with participating schools. Some schools have changed administrators during the project. as it is a project that continues for many years There is therefore a need to access schools that have changed administrators and teachers. with continuous monitoring of development results.

1.3 Should coordinate and create understanding with the parent agencies of participating schools. so that project-based development is not fragmented and can be linked to command level missions will make the performance of participating schools.

1.4 It should create motivation for school administrators and inspire teachers. on the issue of participation Developing the quality of learners according to the goals in the issue of sufficient progress.

2. School level Suggestions are as follows:

2.1 School administrators should create teacher involvement in project work. Able to successfully implement project concepts by setting a policy communication creates understanding supervising and monitoring the performance of teachers in normal working conditions.

2.2 Management must show good leadership. It is a model for educational institute development that focuses on quality development according to IPST standards by organizing work systems that are appropriate to the context of each school.

2.3 Administrators and administrative teams aim to encourage teachers to develop innovations to improve the quality of teaching and learning in mathematics, science and technology subjects in a concrete manner.

Reference

- [1] Aphaijai, N. (2017). *Education Management Model for Career Encouragement of Disadvantaged Students in School under Royal Initiative*. Doctor of Philosophy Thesis in Leadership. Education and Human Resource Development, Chiang Mai Rajabhat University.
- [2] Budket, W. (2019). *Organizational Culture and Teachers' Happiness at Work in Schools under the Secondary Educational Service Area Office, Region 9*. Master of Education Thesis. Department of Educational Administration, Silpakorn University.
- [3] Busaba Thathong, B. (2020). *Factors affecting resource mobilization for educational institute administration, Under the Chachoengsao Primary Educational Service Area Office 2* (Online). <http://academic.rru.ac.th/wp-content/uploads/.pdf>, 12 February 2022.
- [4] Flaherty, A. (2018). "Power and Empowerment in Schools." In Y. Weinberger and Z. Libman (Eds.). *Contemporary Pedagogies in Teacher Education and Development*. London: Intech Open.
- [5] Hipp K.K. & Huffman J.B. (2003). *Professional learning communities: assessment development effects*. Paper presented at the international Congress for School Effectiveness and Improvement, Sydney, Australia, January 5-8.
- [6] Hord, S. M.(1997). *Professional Learning Communities: Communities of Continuous Inquiry and Improvement*. Retrieved March 20, 2017, from <http://www.sedl.org/siss/pIccredit.html>.
- [7] Niyamabha, A. (2021). A Model of New Normal School Administration to Desirable Educational Quality in Changing Context. *STOU Education Journal*, 14(2), 178-195.
- [8] Office of the Basic Education Commission. (2022). *PLC process drive training manual. Professional learning community to educational institutions*. Bangkok: Ministry of Education. Strategy and Human Resource Development Committee Mentor's Guide Faculty of Nursing Chiang Mai University.
- [9] Phuripinitnan, T. (2022). Decentralization and Local Development of Thai Local Administrative Organizations. *Journal of MCU Pali Sueksa Phuttakhosa Review*, 8 (1), 85-100.
- [10] Salaksilp, S., Areerat, W. and Areerat, T. (2019). Assess good practice for online teacher professional learning communities using the EDFR technique. *Academic Journal of Technology Management Rajabhat Maha Sarakham University*, 6(1), 127 – 136

- [11] Senokarn, J. (2019). Professional Learning Community to Organize Activelearning to improve academic achievement in Thailand 4.0. *Journal of Education Prince of Songkhla University Pattani Campus*, 30(1), 12-23.
- [12] Sergiovanni, T.J. (1994). *Building Communities in Schools*. San Francisco: Josse-Bass.
- [13] Siriman, C. (2021). School Management Skills of School Administrators in the Crisis of COVID-19 of Schools under the Office of Secondary Educational Service Area 31. *The 8th National Conference of Nakhonratchasima College*, 14(1/39), 407-416.
- [14] Waichompoo, N. and Jonchit, S. (2017). The transformation to a professional learning community in the 21st century of nursing teachers. *Journal of the Southern College of Nursing and Public Health Network*, 4(1), 265 –279.
- [15] Wichitphatcharaporn, W. (2018). *Policy Implementation: Concepts, Processes in Business Organization Education*. Bangkok: Vista Interprint Company Limited.
- [16] Wongyai, W. and Pattanapol, M. (2014). *Cognitive Coaching*. Bangkok: Charansanitwong Printing.