

MANAGEMENT STRATEGY FOR MAINTAINING EDUCATION QUALITY OF SMALL-SIZED SCHOOLS WITH EVALUATIVE RESULTS BELOW STANDARD OF BASIC EDUCATION IN CHIANG MAI PRIMARY SERVICE AREA 4

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Abstract

This research was to study the current state, guidelines for solving problems, and factors facilitating the success at an organizational level of the administrative strategy for education to determine quality development of small-sized schools in Chiang Mai. The data obtained was used to develop and validate the strategies and handbook to study the effect of using the strategies and handbook on developing quality of small-sized schools whose evaluative results were lower than the standard of basic education in Chiang Mai Primary Education Service Area 4. The findings reveal that the management strategy, in general, was at a moderate level. The issue obtaining the highest mean was the analysis of the organization's environment. The crucial problem found that the teachers and concerned individuals lacked participation and the personnel had minimal knowledge and understanding of the management strategy. The approach to solve the problems was to provide opportunities for relevant personnel to participate and enhance knowledge and understanding of the management strategy. The success factors with the highest mean included the schools who realized the significance of, and carried out the management strategy by having every concerned side participate and, the administrators who understand the concept and principle of management strategy. The management strategy was developed using the process of analysing

environmental factors, and creating, applying monitoring, and evaluating the strategy. Included strategies for building cooperative networks, personnel capacity development, reforming the learner's learning, and, public relations. It was found that the strategy and handbook had utility, propriety, and feasibility at most levels. The administrators and teachers had higher understanding about management strategy and could create the strategy for maintaining education quality satisfying the basic education standards. The operation of the projects/activities had achieved the goals set and the concerned individuals were satisfied with the strategy and handbook at most levels.

Keywords: Management strategy, small-sized schools, education quality

Background and Significance of the Problem

The Ministry of Education had continuously carried out education reform but still found the problem of education quality, particularly of the effectiveness of instruction, administration and management, and educational budget spending of small-sized schools (Office of the Education Council, 2017). This could be because most small-sized schools still had budget constraints regarding administration and management resources, particularly the budget for personnel, affecting the effort to maintain the educational quality.

The Office of Primary Education Service Area 4 had 50 small-sized schools. From the O-NET test in 2017, it was found that most small-sized schools had a mean score lower than the criterion. From the evaluation on education quality regarding the basic education standards, it was found that most small-sized schools had evaluative results at a low level, particularly learner quality standards (Office of Primary Education Service Area 4, 2017) leading parents to lack confidence in small-sized schools educational provisions. As Area 4 of the primary education service was not too far from Muang District, there was convenient transportation to large and medium schools, private schools and schools affiliated to local administrative organizations therefore, parents had choices when choosing schools. Most middle socio-economic class parents liked to send their children to schools with administrative readiness for maintaining educational quality. Consequently, every year, the number of students in small-sized schools had been falling. Since 2011, the Chiang Mai Office of Primary Education Service Area 4 had a policy to merge and close small-sized schools that had failed to provide quality education and schools with less than 60 students. Nonetheless, such policies could not solve all of the problems concerning educational quality. The Chiang Mai Office of Primary Education Service Area 4, had encouraged small-sized schools in its area to quickly maintain educational quality by identifying the management strategies to satisfy the basic education standards. Most small-sized schools had been in a similar situation – the administrative resources were scarce as the budget had been allocated based on student numbers. However, some small-sized schools had tried to maintain their educational quality and had been rewarded as small-sized royal reward schools that followed good practice, for example. It is

apparent that the administrative resource constraint had not always been the problem for quality maintenance. The small-sized schools that had not yet reached the standard education had to start their education quality maintenance by setting the appropriate goals and strategies relevant to the context and needs of the community to upgrade their educational quality.

Strategic management was an instrument to an organization starting by analyzing the organizational environments leading to setting up the direction goals and strategy to lead the organization to clear success. Besides, it had to provide opportunities for personnel at every level to take part to assure collaboration in the organization. This is relevant to the small-sized schools which could not carry out the educational quality alone to identify sharp goals and strategies relevant to the context to lead the maintenance of educational quality along the basic education standards. Consequently, the researcher had aimed at studying the current state, problems, guidelines for solving the problem, and the success factors at an organizational level - the small-sized schools in Chiang Mai Province to use the acquired data to design strategies and a handbook for carrying out management strategy for educational quality development of small-sized schools that had evaluative result lower than the basic education standards of Chiang Mai primary education service area 4. The research would be conducted in the form of participatory action research (PAR) originally proposed by Kemmis and McTaggart (1998). This research model was composed of 1) Plan, 2) Action, 3) Observation, and, 4) Reflection to solve the problem concerning educational quality of small-sized schools that had failed to pass the basic education standards. It is hoped that if small-sized schools can organize quality education, they would be able to better educate students making parents satisfied, and small-sized schools could continue to run without worrying that they would be merged or closed.

Objectives

1. To study the current state, problems and guidelines for solving problems, and the success factors at an organizational level of management strategy for maintaining education quality of small-sized schools in Chiang Mai Province.

2. To develop the strategies and handbook for carrying out the management strategy for maintaining education quality of small-sized schools whose evaluative result were lower than basic education standards in Chiang Mai primary education service area 4.
3. To study the effect of using the strategy and handbook for carrying out the management strategy for maintaining education quality of small-sized schools whose evaluative result was lower than basic education standards in Chiang Mai primary education service area 4.

Research Population/Sample

Step 1 - In studying the current state, problems, and guidelines for solving the problems and the success factors at organizational level of management strategy for education quality maintenance of small-sized schools in Chiang Mai Province, the sample included the administrators or person in charge of his/her small-sized school affiliated with the Office of Basic Education Commission in Chiang Mai Province obtained via cluster sampling resulting in 196 subjects from 356 schools.

Step 2 - To develop a strategy and handbook for carrying out a management strategy for education quality development of small-sized schools whose evaluative result was lower than basic education standards in Chiang Mai primary education service area 4 including informants as follows:

2.1 Administrator of small-sized schools receiving royal award or small-sized schools with a total of 7 subjects, director and vice directors of the Office of Primary Education Service Area, director of Policy and Plan Group affiliating to Chiang Mai Office of Education Service area 4 totaling 3 subjects or 10 altogether.

2.2 Two experts on management strategy for small-sized schools and education quality assurance, and school administrator and teachers, and personnel from the budget division of small-sized schools in Chiang Mai Office of Primary Education Service Area 4 who had applied the strategy and handbook for maintaining educational quality of 8 small-sized schools 2 from each school, totaling 16 experts.

2.3 Seven experts to validate and confirm the drafted strategy and handbook.

Step 3 - Studying the effect of using strategy and the handbook for carrying out the strategy by administrators, teachers, and personnel in the budget planning division of small-sized schools - the same group as those of Step 2.2 totaling 16 altogether.

Research Methodology

The researcher had conducted research by using participatory action research (PAR) using the procedural steps as follows:

Step 1 - Studying the current state, problems and guidelines, and the success factors at an organizational level for educational quality maintenance of small-sized schools, Chiang Mai Province. The process was proceeded by analyzing the data obtained from the questionnaire provided by the sample group.

Step 2 - Developing the strategy and handbook for carrying out management strategy for education quality maintenance of small-sized schools with evaluative results lower than the basic education standards of Chiang Mai primary education service area 4.

The planning step was carried out as follows:

2.1 Interviewing administrators of the small-sized schools obtaining royal reward for small-sized schools or small-sized schools that were using good practice, director and vice director of the office of primary education service area, and director of the Policy and Plan Group, Chiang Mai Office of Education Service area 4 to find a way to develop management strategies for educational quality development of small-sized schools.

2.2 Organizing a workshop for presenting the data obtained from Step 1 and Step 2.1 using guidelines for designing the strategy for small-sized schools and educational quality assurance, administrators and teachers, personnel of the budget planning division of the 8 small-sized schools that participated in the research and draft the strategy and content scope of the handbook for carrying out the strategy.

2.3 The researcher used the results of the drafted strategy and content scope for the handbook to carry out the strategy to create the handbook and asked the experts to help check the validity and efficiency of the handbook.

Step 3 - Studying the effect of using the strategy and handbook for carrying out the management strategy for maintaining education quality small-sized schools whose evaluative result was below the standard held by the Office of Primary Education Service Area 4 (A: Action). The process was as follows:

3.1 Eight small-sized schools taking part in the workshop at Step 2.2 had tried the strategy and handbook at school for a semester during May - October, 2017, before evaluating the operation by a committee appointed by each small-sized school.

3.2 Observation and follow up (O: Observation) – In this step, there was a process to check and evaluate the success as expected regarding the projects/activities in 2 aspects – results of project operation and satisfaction of the concerned individuals.

3.3 Step of reflection (R: Reflection) – In this step, Administrators and teachers having applied the budget plan of small-sized schools for using the strategy and handbook would reflect on the outcome and the process of using it.

Research Results

Results of the research are as follows:

1. Concerning the current state of management strategy for education quality development of small-sized schools in Chiang Mai Province, it was found that the highest mean of practice was that of the analysis on environmental factors, followed by setting up a strategy and applying it. The aspect with the lowest mean was regarding monitoring and evaluating the strategy. Every item was practiced at a moderate level. Problems found were - 1) teachers and the concerned individuals had lacked participation using the management strategy, 2) the personnel had minimal level of knowledge and understanding of management strategy for maintaining educational quality, 3) the project was not carried out using the schedule set, and, 4) the monitoring and evaluation of the strategy were not systematically and continuously carried out. The solution

should be as follows: 1) create awareness of participate for using the management strategy for teachers and concerned individuals, 2) administrators to pass a knowledge and understanding of management strategy to the teachers and concerned individuals, 3) create an integrated project to lessen the overlapped operational tasks, and, 4) implement a system to monitor and evaluate the operation on a continuous basis using the relevant technology. It was found that the factors with the highest mean were achieved when the school had realized the significance of, and carried out management strategy by involving all personnel, followed by the administrator's understanding of the concept and principle of management strategy. The factor with the lowest mean was regarding a fair system of rewarding and promoting personnel.

Step 2 - Developing a strategy and handbook for carrying out management strategy for maintaining education quality of small-sized schools that had evaluative result below basic education standards, affiliated to the Chiang Mai Office of Primary Education Service Area 4, the results are as follows:

2.1 Approach for using the management strategy to maintain the quality of small-sized schools that had obtained the royal award for small-sized schools and were using good practice reveals that the process for designing the main strategy was composed of the following steps:

In analysing the environmental factors, the process included - 1) planning for collecting information, 2) appointing a committee for evaluating educational quality along the educational standard in the passing year, 3) analyzing the prime missions and products, 4) analysing the environment utilizing SWOT framework, using C-PEST to analyze the external environment and 7 S McKinsey's to analyze the internal environment. The result of evaluating the schools status were presented in TOW Matrix from. Small-sized schools could invite outside individuals with expertise or personnel from the office of education service area to participate in analyzing the data and carrying out the benchmarking analysis with the schools nearby.

The process to obtain the strategy included - 1) preparing the information, 2) setting the goals, 3) setting the schools operational direction, 4) outlining the school's strategy, 5) identifying the success indicators, and, 6) creating a strategy for small-sized schools. The strategy should be flexible and

dynamic, relevant to the context, and satisfy the needs of parents and the community.

The process to apply the strategy included -1) reviewing and adjusting the strategy, 2) creating projects and activities, 3) adjusting the operational process, 4) creating an operational schedule, 5) implementing the strategy along the schedule set, and, 6) checking the results of the operation of the projects/activities. For small-sized schools that had constraints on administrative and managerial resources particularly regarding personnel, they had to create an organizational culture of teamworking, allowing for alumni, community, parents, and temple to take part in providing education. The project should be organized in an integrated way to lessen the personnel's workload and manage the budget.

Monitoring and evaluating the strategy should be done using the following process - 1) monitoring and following up the implementation of the projects/activities, 2) following up the results of operating the projects/activities, 3) evaluating the strategy, 4) reviewing and adjusting the strategy or identifying a new strategy. The administrator had to build up the personnel's awareness and attitude when monitoring the assessment and use technology to evaluate the operation to lessen the teacher's workload.

The strategy for maintaining educational quality of small-sized schools to reach the basic education standards included a strategy for creating a participatory network, strategy for personnel capacity development, strategy for reforming the learner's learning, and strategy for public relations.

The success factors at an organizational level were - 1) the school had realized the significance of and carried out the management strategy by involving all personnel, 2) administrators understood the concepts and principles of management strategy, 3) environmental analysis had to be relevant to the context of the school, 4) strategy implementation had to be relevant to the context and needs of the school, 5) there were systematic monitoring and evaluation of the strategy, and, 6) there was the fair system for rewarding and promoting.

2.2 The results of drafting the strategy and scope of the contents for creating the handbook are as follows:

From analyzing the environmental factors of small-sized schools applying the strategy, it was found that there were 2 schools which were at Question Mark status; namely, Wat Phrachao Leum School and Ban Dong Pa Wai School. There were 6 school at Cash Cow status; namely, Ban Mae Khan School, The 5th Watershed Development Khun Wang School, Bantonglaung School, Wat Makap Tong Luang School, Muangpeenong School and, Wat Srisawang School. Every school had to quickly carry out the program to improve the learner's quality along the basic education standards.

The success factors at operational level found that - 1) they had to be valid, sufficient, comprehensive, and up-to-date, 2) there was an environmental analysis covering all the significant factors affecting the schools operation, 3) results of the environmental analysis are congruent to the real situation, and, 4) the concerned individuals had taken part in analyzing the environment.

Results of the strategy design covered 4 strategies. First is the strategy for building up a participatory network: The measure was the promotion and creation of a network with internal and external agencies to work together in providing education of small-sized schools. The projects under such measure are the Project to Build Up Technology-based School Network, Community-Owned School Project, Project for Mobilizing Efforts for Education Development, Small-Sized School Network Maintaining Project, and the Older School Help Younger School Project. Second is the strategy for personnel capacity development. The measure was to promote and develop capacity of the teachers and educational personnel to enable them to organize learning activities to develop the learners to actualize the educational standard. The projects under the measure were, for example, Friends Help Friends Project, Community Career Learning Project, Project for Instructional Development via Active Learning Project, Distance Learning Television (DLTV) Project, and Technology-based Teacher Capacity Development Project. Third is the strategy for reforming the learner's learning. The measure is to intended develop the learners to develop quality as set by the educational standard both in academic and desirable characteristic aspects. The projects carried out by the measure are, for example, One Classroom One Project, Communication via English, Fun via Math Thinking, Fun to Read & Fun to Think, Taking Responsibility Together,

Career Finding, Joining Hands to Do the Good Deed Making It Our Way of Life, and Learning Process Development. Forth is the strategy for carrying out public relations. The measure is aimed at publicizing the school to build up confidence in educational provision for parents, community, agencies inside and outside the school, and mobilizing resources for educational provision. The projects under the measure are, for example, Technology-based Public Relations, Resource Mobilization for Education Development, Home and School Relationship, and Informing Things Through Loud Speaker, etc.

The success factors at a practical level include 1) The system use valid, complete, sufficient, and up-to-date information, 2) Every concerned side had participated in implementing the strategy, 3) The strategy was implementation-oriented and focused on maintaining educational quality along basic education standards, 4) the strategy was flexible, dynamic, and relevant to the contexts and needs of parents and the community.

Concerning the construction of the handbook for carrying out the strategy, the handbook was composed of - 1) Instructions for use, 2) Introduction, 3) Basic knowledge on management strategy, 4) Management strategy for maintaining educational quality of small-sized schools, 5) Guideline/methods, 6) Evaluation applying it, and, 7) Appendix.

The results of validating the strategy reveal its propriety and feasibility were rated at Much level and utility at Most level. For the handbook for carrying out the strategy, its propriety, feasibility, and utility were at Much level.

Step 3 - Results of using the strategy and handbook for carrying out the management strategy for maintaining education quality of small-sized schools that had evaluative result lower than the basic education standards are as follows:

Planning Stage:

1) Each school had organized meetings for the concerned individuals to understand the strategy and handbook.

2) Applying the results of the analysis on environment, problems, and other factors related to the school's education quality maintenance to serve as the criteria for selecting the strategy and projects to

be used. The strategy and project were selected relevant to the context and urgent needs of the school.

3) Creating details of the projects/activities to be applied in the school. The details included list of persons responsible for the project, principle and rationale, objectives, activities in detail, budget, and evaluation. All 8 schools had selected the strategy and project as follows. There were 4 schools having selected the strategy for reforming the learner's learning. They were divided along the project as follows: 1) Wat Phra Chao Lueam School on One School One Project, 2) Ban Mae Khan School on Fun via Math Thinking, 3) The 5th Watershed Development Khun Wang School on Career Finding, 4) Ban Dong Pa Wai School on Joining Hands to Do the Good Deed Making It Our Way of Life. There were 2 schools having selected the strategy for personnel capacity development. They are 1) Muangpeenong School on the Project for Instructional Development Utilizing Active Learning Approach, and, 2) Wat Makap Tong Luang School on Community Career Learning Project. The schools having chosen the strategy for creating a participation network included Wat Srisawang School on Joining Hands for Education Development and the school having selected the public relation strategy was Bantoonglaung School Project on Mobilizing Efforts for Education Development.

Implementing the strategy (A: Action) - All the 8 schools had to implement the projects/activities along the handbook for carrying out the strategy by setting up the operational schedule and carrying out the projects/activities accordingly and appoint a committee to follow up the operation of the projects/activities.

The success factors at operational level included 1) the administrators assigning projects/activities, the staff had to be concerned with the ability and propriety and be ready for personnel operational capacity development, and, 2) the administrator supervising and following up the projects/activities in a friendly way and providing advice for the implementation of the operation.

Monitoring and evaluating the strategy (O: Observation) - Each school had to appoint a committee to monitor, follow up, and evaluate the success in 2 aspects, namely, the operational outcomes and satisfaction of

the concerned individuals. The evaluative results are as follows: For Wat Phra Chao Lueam School, the Project on One Classroom One Project achieved the operational result at Good level, and satisfaction at Very Good level. Ban Mae Khan School on Fun via Math Thinking had the operational results and satisfaction rated at Much level. The 5th Watershed Development Khun Wang School on Career Finding was found to have the operational result at Good level and satisfaction at Much level. Ban Dong Pa Wai School in carrying out the Joining Hands to Do the Good Deed Making It Our Way of Life Project was found to have operational results and satisfaction at Good level. Muangpeenong School on the Project for Instructional Development Utilizing Active Learning Approach had the operational result at Good level and satisfaction at Much level. Wat Makap Tong Luang School on Community Career Learning Project had the operational result and satisfaction at Good level. Wat Srisawang School on Joining Hands for Education Development had the operational result and satisfaction at Much level. Bantoonglaung School Project for Mobilizing Efforts for Education Development had the operating result and satisfaction at Much level.

The success factors at operational level included 1) having a system for monitoring, following up, and evaluating systems which were flexible and valid, 2) having methods to monitor, follow up, and evaluate relevant to the strategy, and, 3) having relevant personnel take part in the monitoring, following up, and evaluating.

Step on reflection (R: Reflection) - Each school sets up a meeting to reflect on the operation of the projects/activities and satisfaction. The results are as follows:

1) In operating projects/activities, every school had achieved the goals set and the concerned individuals were satisfied with the selected projects/activities at Most level.

2) Administrators and teachers of small-sized schools had gained more understanding of management strategy and could design the strategy for upgrading educational quality of small-sized schools to achieve the basic education standards and were satisfied with the strategy and handbook for carrying out the strategy at Most level.

Discussion

In conducting the research on management strategy for education quality development of small-sized schools that had evaluative result lower than the basic education standards in Chiang Mai primary education service area 4, the researcher had gained the findings as follows:

1. Current state, problem, ways to solve the problem, and the success factors at organizational level were found to have issues to be discussed. First of all, the current state of management strategy of small-sized schools had shown the real practice at Moderate level. This might be because the school had to use the management strategy to identify the strategy to put into practice and had followed up and evaluated the operation since 2002 budgetary year (Maneelek, 2001). The problems found were as follows. Firstly, the teachers and the concerned individuals had lacked participation which might be because the small-sized school had few personnel while having a lot of teaching responsibility and other tasks. They then failed to realize the significance of participation.

For the concerned individuals such as parents or the community of small-sized schools, most of them were poor and had minimal education. Moreover, for some small-sized schools, parents were ethnic people who could not communicate well in Thai. They did not realize the significance of participation either. The way to solve the problem was to build up awareness listening to the opinions of others and to facilitate the participation of the concerned individuals. This is congruent to the research results found by the policy research and development group, Bureau of Policy and Planning, Office of the Basic Education Commission (2014). The findings reveal that one of the factors enabling small-sized schools to be maintained with quality was the participation of the community and basic education school board. The school administrator as the leader had to provide the opportunity for the community and basic education school board to take part in seriously carrying out the educational development. Secondly, the personnel had minimal knowledge and understanding of management strategy for maintaining educational quality due to the fact that most personnel had thought that management strategy was solely the duty of administrator. The guideline to solve the problem, then, was to build

up knowledge and understanding on management strategy for assuring the quality of the personnel serving as a success factor. Similarly, Boon Bongkarn (2007) had pointed out that the success factors of management strategy were due to the administrator's understanding the principle of the management strategy and could set up the direction and lead the organization to the goals. Thirdly, the operation on the project had failed to follow the schedule. The solution was to create an integrated project to lessen the operational tasks. Similar remark was also made by the Office of the Basic Education Commission and Faculty of Education, Chulalongkorn University (2015) who contended that the success factors of implementing the strategy were due to the organization having a good managerial system, personnel having knowledge and ability, and the administrator having skills in carrying out the operation. Fourthly, the monitoring and evaluation on the strategy had not been systematically nor continuously done. This might be because monitoring and evaluating the strategy were the last step of management strategy as the school failed to realize its significance and had not systematically carried out the process. The observation was similar to that of Petdannua (2013) who found that the current practice of monitoring, following up, and supervising the operation on a continuous basis and publicizing the evaluative results or notifying the individuals carrying out the operation had the lowest mean as the Administrators and teachers had not realized the significance of this step. The guideline for solving the problem was to set up a system for monitoring and evaluating on a continuous basis and utilizing technology. This is congruent to Chaiwan (2012) who contended that the administrator should set up the evaluating systems by monitoring, following up, checking, and evaluating in a friendly way and providing opportunities for relevant personnel to take part according to their role. The success factor at organizational level that had the highest mean was the schools realizing the significance of participation and providing opportunities for relevant personnel to take part. Similarly, Saritwanich (2010) had stated that the factors contributing to the success were putting the management strategy into practice, encouraging the organization to realize the significance of, and adopting the process of management strategy.

2. In designing the strategy and handbook for carrying out the strategy at this time, participatory action research (PAR) was used. The information was

obtained from analyzing current states, problems, ways to solve them, the success factors at organizational level of small-sized schools in Chiang Mai Province affiliating to OBEC and guidelines for developing the strategy from the small-sized schools with royal award and small-sized schools with good practice. The information was used in a workshop to facilitate the administrators, teachers, and planning personnel of the 8 small-sized schools to work together to draft the strategy and handbook for managing and maintaining educational of quality small-sized schools using basic education standards. Because of administrative resource constraints, there should not be too many strategies but selected strategies should be relevant to the context and needs for development of the urgent issues. Consequently, 4 strategies having been obtained. The first one was the strategy for building up a participation network. The measure was the promotion and creation of a network with internal and external agencies to mutually carry out the education of small-sized schools. The projects under the measure were, for example; creating relationships with outside organizations, creating technology-based school networks, community school projects, joining hands for educational development, small-sized school network building project, and Older Help Younger School Project. The second strategy was for personnel capacity development. The measure used was the promotion of teachers and education personnel to enable them to organize learning activities to develop the learners relevant to educational standards. The projects under the measure were, for example; Friend Help Friend Project, Community Career Learning Project, Project for Instructional Development via Active Learning Project, Distant Learning Television (DLTV), and Technology-based Teacher Capacity Development Project. The third strategy was to reform the learner's learning. The measure was created to promote and develop the learner's quality to reach educational standard both on academic achievement and desirable characteristics. The project under this measure were, for example, One School One Project, Communication via English Project, Fun via Math Thinking Project, Fun in Reading Fun in Thinking Project, Responsibility Sharing Project, Career Finding Project, Joining Hands to Do the Good Deed Making It Our Way of Life Project, and Learning Process Development Project. The fourth strategy concerned public relations. The measure was to carry out public relations for the school to enhance confidence in educational provision

of parents, students, community, and internal and external agencies in mobilizing resources for providing education. The projects under the measure were, for example, Technology-based Public Relations Project, Project for Mobilizing Efforts for Education Development, Home and School Intercommunication Project, and Informing Things Through Loud Speaker Project. Afterwards, the experts checked validity, propriety, feasibility, and utility of the drafted strategy and handbook to obtain the final version of the strategy and handbook which was unique to serve as the management strategy for educational quality development of small-sized schools, in primary education service area, whose evaluative results were lower than the basic education standards.

The management strategy for developing education quality has been used by many educators such as Wheelen and Hunger (2001) who had determined the management strategy needed to be composed of 4 factors regarding the administration and management process. These 4 factors are - 1) checking the environment, 2) planning and creating the strategy, 3) implementing the strategy, and, 4) evaluating and monitoring the strategy. Similarly, Ekachat (2014), also contended that there were 4 main factors of management strategy in small-sized schools, namely, 1) reviewing strategy, 2) setting up the strategy, 3) putting the strategy into practice, and, 4) monitoring and evaluating the success factors at an organizational level. Similarly, Saritwanich (2010) had contended that the crucial factor for strategic management was the knowledge and ability of high-level administrators who had to understand the concepts and principles of strategic management and could predict the situations that might occur and attempts to involve everyone. A similar finding was also found by the research conducted by Kliangchoom (2014) who found that the factors facilitating success in managing the strategy appropriate to small-sized schools included - 1) leadership of school administrators, 2) personnels competency, 3) unity of personnel, 4) effective communication, and, 5) local support.

3. Results of using the management strategy and handbook for carrying out the strategy for maintaining education quality of small-sized schools ๑ in Chiang Mai Primary Education Service Area 4 (A: Action, O: Observation, R: Reflection)

Results of carrying out the projects/activities of the 8 small-sized schools showed that the schools had satisfied the goals they had set. The success could be because the school had singled out the strategy and projects/activities that were relevant to the context and needs of the school using the handbook enabling the projects/activities to achieve the goals set. This is congruent to the contention made by Certo and Peter (1991) who pointed out that the strategy was an operational method expected to lead the operation to goals or success using the organizational goals in the long run. Suksriwong (2008) concluded the use of management strategy that the organization who had appropriately applied the management strategy could identify the strategic mission and goals to serve as the guidelines and main goals of the organization, as well as the framework to prevent the organization from slipping out from the right direction.

Administrators and teachers of small-sized schools should have more understanding of the management strategy for developing educational quality. This is because, in the workshop, normally there would be experts on management strategy for small-sized schools and educational quality assurance to provide knowledge and mutually draft the strategy and handbook. During the implementation, the researcher, school administrators, teachers, and budget-responsible personnel of the 8 schools would exchange and share their learning. Their satisfaction in the strategy and handbook for carrying out the strategy was rated at the Most level. This might be because the small-sized school administrators, teachers, and budget responsible personnel of all the 8 schools had taken part in setting up the strategy and choosing strategy appropriate to them to ensure the results of operating the projects/activities that would satisfy the goals and could maintain the quality of education.

Recommendations

1. Those who are responsible at the policy and school levels should apply the results of the research on strategy and handbook for carrying out management strategy for education quality development of small-sized schools that were with the evaluative results lower than the basic education standards in Chiang Mai primary education service area 4 to maintain educational quality of small-sized schools as follows:

1.1 At the policy level, the office of education service area should apply the strategy and handbook for carrying out management strategy with small-sized schools in the education service areas that had encountered problems on educational quality and were the target of school merging and closing.

1.2 At the operational level, administrators of other small-sized schools should apply the strategy and handbook for carrying out the strategy relevant to the context to assure the continuous education quality maintenance.

1.3 Office of other education service areas and administrators of other small-sized schools should apply the success factors at organizational and practical levels to use as a guideline for seriously supporting the operation for maintaining education quality.

2. Recommendations for Further Researches

2.1 There should be research and development on strategic development processes for facilitating the small-sized schools to become small-sized royal reward schools and small-sized schools with good practice.

2.2 There should be research and development on the strategic conceptual model for the administrators of small-sized schools to equip them with strategic leadership assuring effectiveness of the educational action along the changing contexts.

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