Development of Education Quality in Network School by Using Participatory Action Research

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Abstract

This participatory action research aimed to develop procedures for basic educational quality of the network school. The results of the study can be shown that current situation was at moderate level, and the need for developing quality of basic education was at high level in terms of factor. Likewise, the current situation was also at moderate level, and the need for basic educational quality development was at high level in terms of methodology. On the other hand, the current situation was at high level, and the need for developing quality for basic education was at high level in terms of important elements. The procedures for the basic educational quality development of the network school showed eight guidelines, seven methodologies, thirteen activities, and four projects. That characteristics of the basic educational standard of learners, instructors, administrators, stakeholders and schools had an overall mean score at the highest level.

Keywords: quality development, participatory action research, network school.

1. Introduction

Thailand education reform is the mission of every Thai person, as it is an alignment for developing Thai people in order to create an intellectual force for society. The major condition for
success of educational reform is to connect every part of society in network form. Additionally, the educational reform network should be aware of the importance and aim for common educational reform. The movement in developing of management science is at present focused on the construction a body of knowledge for network management, aligned with organizational development for work, and connecting to the network in order to accomplish goals together successfully and efficiently (Kaewdang, 2000). Office of the Education Council (1999:10) stated that the learning network means the learning resource collaboration, informative data, use of resources, and consistent job operations to build, exchange, instruct, distribute knowledge throughout the life continuously as the requirements of people and community. Robin, 1978:5 defied definition of participatory administration that is the method of administration which subordinates participate in a decision-making process with administrators. Lossier, 1996:10 stated that participation is the working process between commanders and subordinates in setting up the aims and planning to work successfully. Anthony, 1978: 35 indicated that the significances of participatory administration consist of 3 important aspects: 1) subordinates participate in a decision-making (Subordinate involvement). 2) What will make a decision is important (Involvement in important decisions or issues). 3) Shared authority is such as subordinates. Dimmock, 1993: 5 stated that participation results from trust that opens the opportunities for teachers to collaborate in order to improve the proper curriculums, and mostly utilize to the learners. The strategy for developing and applying the educational quality during 2008-2012 bore the following aspects: 1) student quality development so that students would develop full potential and appropriateness for each age or grade, 2) development for teachers, instructors, and educational staff at a sufficient level of quality, 3) development of educational technology so that it would function as an instrument for quality development, 5) preparing the school strength for developing the quality necessary for decentralization, and 6) promotion of the participation of every sector in society to alleviate burden and responsibility in educational management (Chiengkool, 2009).

There are many educators who have defined the meaning of the network school group: “the network school group refers to many schools getting together based on the specified criterion by managing the guidelines or regulation regarding to the structure, duty, and technique for implementation so that the group would be able to run business successfully as specified objective…” Sukontasap (1996: 342); “the network school group is an innovation combining the schools from many places for common use of the Educational Resources in both of Management and Educational Objectives…..” Bray & Mark (1987). In creating collaboration of various schools to share common educational resources for utmost efficiency in educational management, the network school group uses research study as an instrument in developing basic educational quality. The PAR is emphasized according to the following important rationales of Tendon (1998, cited in Erawan, 2001:13), Sumayao (…cited in Duangchatom ,1999: 49), Chantarasombat (2007: 170-171) and Erawan (2008: 103)

The integral factors, techniques, and factors of strategy in developing the basic educational quality, were to develop teachers and educational staff so that they would work with quality, efficiency, effectiveness to obtain quality based on basic educational standard including student quality, educational management, learning social development, school identity, and promotion measure (Office of Educational Testing, Office of Basic Educational Commission. 2001: 10) in the instructional process management, educational system improvement, and network development at higher level. (Office of Kalasin Educational Service Area 2. 2010: 3)

According to regulations of the Office of Kalasin Educational Service Area 2, the network school for developing educational quality management 2009, and establishment of network school 2009, the schools were categorized into network school so that each school in network school could
collaborate in developing educational quality efficiently and according to educational guidelines. SWOT found that the current situation and need for developing basic educational quality of network school regarding student quality, teacher quality, administrator quality, stakeholder quality, school quality, and other aspects of implementation, was such that every aspect needed to be improved: the academic aspect, each network lacked cooperation, there was no promotion of quality development, educational management, and decentralization at school level so that schools would be basis for educational management and establishment of the network school, and collaborate in team work from school level, network level, and educational service area level in order to develop strength for schools, and participatory educational management in developing educational quality for network school through PAR in order to obtain quality based on basic educational quality. There was no collaboration and exchange. Students had highly different learning achievement levels in the same class. Furthermore, they had lower scores than the specified criteria of national testing. Concerning staff management, the principles of participatory management as a universal guideline was not focused on. Good governance was not administered. The staff was not encouraged to develop its work performance. It lacked morale in work practice. There was no appropriate structural system for management in combining the educational service area. Concerning work plan and budget, the schools in the network had no cooperation and exchange with each other. The practice guidelines were in different directions. Moreover, general work management indicated that there was no participation or team work in educational management.

The researcher is a person assigned by the director of the Office of Kalasin Educational Service Area 2, responsible to monitor, and care for network group management in developing the educational management quality of Yangtalat District 2, (under jurisdiction of the Office of Kalasin Educational Service Area 2), to be aware of what is taking places and be interested in studying the development in basic educational quality of network school through PAR as guidelines in educational development which would give the network school further educational quality.

2. Research Purposes

The objectives of this research were:

1. To study the current situation and need for developing the basic education quality of the network school.
2. To study guidelines, techniques, activities, projects, objectives, indicators, goals, and characteristics based on basic educational standard for developing the basic education quality of the network school.
3. To study the effect of development in the basic education quality of the network school.

3. Research Target and Instruments

The target group was the 58 personnel working in the network school of educational administration quality development at Yangtalat 2 district through the Participatory Action Research (PAR).

The research instruments were observation form, interviewed form, questionnaire, field recording form. Percent, mean, and standard deviation were used for data analysis.

4 Research Implementation

The 1st step: there was preparedness for personnel in the groups of network schools by
studying documents, theories, concepts of the basic educational quality development of the network school for implementing study the current status, and developing requirement of the network school then making seminars for personnel under the following aspects: 1) theoretical concepts involved in network schools, 2) educational quality assurance, 3) procedures of basic educational quality development of the network school, 4) roles and responsibilities of personnel in developing the network school, and 5) the fundamental conceptual frameworks in developing the basic educational quality in the network school. Then personnel involved were brought to field study in organizations or network schools: Moo Mon Wittaya School, Kwannakorn school network under the Office of Loi Ed Primary Education Area 1, and Chiang Kwan Wittayakom School under Office of Secondary Education Area 27.

The 2nd step: the basic educational quality development of the school network was conducted by the Participatory Action Research. Each cycle has activities as follows:

The 1st Cycle
The planning step: the analyzing implementation of the network school by SWOT analysis was conducted, then determined activities and developed strategies by focus group discussion. Next, the developing plans was done by determining objectives, significant indicator index, aims, and methods of the basic educational quality development of the school network throughout building up the tools used for measurement and assessment the implementation planned. Tools were used for other research conduct through making workshops.

The step of bringing plans to be developed (action): there were the meetings for explanation about the details of activities in the developing plans. Teams were set up. There was determination the structure of network school to be suited for the basic educational quality development.

The step of observation and assessment: the researcher and co-researchers jointly implemented in determination of pattern, method in controlling, and monitoring the results and evaluating the performances occurred.

The step of reflection: the research and co-researchers jointly considered on achievement the results as the projects’ objectives, achievement, implementation as the project indicators, and achievement as the project targets.

According to the 1st cycle, the implementation, followed by projects for the basic educational quality development in the network school has not yet achieved. This was brought to consult with the persons involved in the meetings, and finally concluded that the activities from the projects were taken to consider, improve, and implement in the second times as follows.

The 2nd Cycle
The step of planning: this is an improvement of planning development of following issues. They are techniques used for improving plans, objectives, significant indicators, aims, and developing methods.

The step of action: the researchers, and co-researchers jointly considered on structures of network school, team improvement and leadership of researchers.

The step of observation: the researchers and co-researchers jointly considered on following issues: pattern improvement of controlling, supervising, monitoring, and method improvement of controlling, monitoring, evaluating, and reporting.
The step of reflection: there was considered between the researchers and co-researchers on the following issues: the achievement, followed by the projects’ objectives, indicators, implementing according to the projects’ aims.

Regarding the 2\textsuperscript{nd} cycle, the implementation, followed by the projects for the basic educational quality development of the school network groups was reached the aims of the projects at a better level upwards. The activities done from the projects were taken to develop, improve, and re-study the results of the basic educational quality development so as to be a status of educational quality in the 3\textsuperscript{rd} times as follows.

The 3\textsuperscript{rd} Cycle

The step of re-planning: the researchers and co-researchers jointly considered on analyzing pattern of study the results of the basic educational quality development in the school network groups, then determined them by focus group discussion. Next, the assessment test of educational quality development was done through determining the indicator aspects: learners, instructors, administrators, stakeholders, and educational institutes.

The step of taking plans to be practiced (action): the researchers and co-researchers jointly considered on the meetings about the details of assessment the basic educational quality development in the school network groups, finally set up the teams.

The step of observation and evaluation: the researchers and co-researchers jointly considered on assessment the results of the basic educational quality development in the school network groups.

The step of reflection: the researchers and co-researchers jointly considered on achievement the implementing results according to the basic educational quality development in the school network groups.

The assessment of developing results is the characteristics evaluation in accordance with the basic educational standard for the basic educational quality development of the network school, constructed as the research tools by the researchers and co-researchers.

\textbf{Process summary and operation research finding.}

The phases and steps of study in process of Research and Development of Education Quality in Network School by Using Participatory Action Research as shown in the Figure 2:

\textbf{Figure 1}: The Main Steps in Development of Education Quality in Network School by Using Participatory Action Research
Figure 2: The PAR Administrative Steps

Planning
SWOT Analysis and Focus group workshop to contribute the developing guidelines and elements, the developing methods, the objectives, the important elements, the pre and post measurement indices, the projects and development activities, the target goals and the development plans.

Acting
Arranging meetings contributing to participation, leadership, teamwork and the organization structure.

Observing
Specify the forms and methodology during and after the process which are observing, interviewing, using questionnaires and taking field notes.

Reflecting
Reflect on the results of successful processes in the areas of objectives, measure index, goals and unsuccessful processes.

Re-Planning
Improve the new objectives, measure indices, target goals and activities.

Arranging the Meeting
Arrange the first meeting to inform development results to all concerned (Those responsible for projects and evaluation).

Re-Acting
Improve and support the development of using leadership, participatory and organization management.

Re-Observing
Revise the pattern of controlling results, the method of controlling result and the roles and functions of the controllers.

Re-Planning
Improve the new objectives, measure indices, target goals and activities.

Evaluating the Overall Quality Development of the Basic Education
Administering the evaluation form for the quality development of basic education according to the important indicators of the characteristics related to the Basic Educational Standards.

Re-Acting
Use leadership, participatory and organization management.

Re-Reflecting
Improve the result of successful processes in terms of the objectives, measurement indices and target goals.

Re-Observing
Revise the pattern of controlling results, the method of controlling result and the roles and functions of the controllers.

Summarizing and Reporting the Results of the PAR
This participatory action research methodology was divided into 2 steps as follows:

**Step 1:** Preparation for staff.
1. The study of approaches for developing the basic education quality of the network school.
2. The study of the current situation and need for development.
3. The management for providing training and seminars for staff.
4. Field trip study.

**Step 2:** The development in basic education quality of the network school.
1. Cycle 1 of research.
2. Cycle 2 of research.
3. Cycle 3 of research.

The instruments employed in the study were 1) The questionnaire of current situation and need for developing the basic educational quality of the network school by using PAR, 2) Evaluation form for development of basic educational quality of the network school by using PAR, 3) Interview form, 4) Observation form and 5) Field notes.

### 6. Research Results

1. Concerning the effect of current situation and need of the network school, the administrators had virtue and morality. They were role models for leadership, knowledge, and competency in management for schools in network group. Various activities were implemented for preparing readiness for internal and external assessment in order to attain standardization. Educational technology was used by schools. Information was systematically stored by school group. In addition, all resources were gathered. There was a need for organizing the conference, training, and seminar, and field trip study for stimulating shared learning. The staff development was organized so that staff could access, comprehend, develop, and retrieve data from computer network system in the workplace (since the technology was necessary for developing the education, and affected efficiency as well as effectiveness of work). So, the schools were to be systematically and continuously checked and reviewed for quality. The instruments for evaluating students’ learning achievement or quality in order to analyze specific problems or evaluate overall educational quality or other objectives had to be constructed.

2. In order to implement methodology to develop basic educational quality of network schools by using participatory action research (PAR), 8 development guidelines, 7 development techniques, 13 development activities, 4 development projects, 11 items of development objectives, and 2 issues of development innovation were employed for developing the basic education quality of the network school.

3. Progress in the basic education quality of the network school, using participatory action research (PAR), resulted in basic education quality among students, administrators, stakeholders, and school, overall, at “highest” level. The development of basic educational quality of the network school, with aspect to students, resulted in increased quality, knowledge, skill, and desirable characteristics in analytical thinking and synthetic thinking regarding different kinds of information, body of knowledge according to the learning substance of programs, good hygiene habits, competency based on standard criteria, awareness, and skill in working with others as well as aesthetic sense in art, music, and sports. Interestingly, the students obtained higher learning achievement based on the evaluation findings of learning substance. Moreover, the students
participated in instructional management of students, by students, and for students. With respect to teachers, their work improved in terms of organization of student-centered instruction with quality, efficiency, and effectiveness of study, training, searching, and conducting research study for developing media and student centered knowledge management. The assessment findings were analyzed and applied in remedial teaching and students’ development by teachers. The teachers also used the findings for remedial teaching and student development, and improving instructional management. They were able to design and organize learning in order to serve individual differences and brain development for directing students to accomplish goals in student centered instructional management, so that students would participate in instructional management of students, by students, and for students. With respect to administrators, their role and duty improved in terms of quality, efficiency, and effectiveness by participatory school management based on good governance and educational management, including the management and use of limited resources for optimum public utility. They encouraged their staff to be economical, use material and equipment with cost effectiveness, and maintain well the natural resources and environment to be sustainable and modern. With respect to stakeholders, school boards, parents, and community worked according to their role and duty with quality, efficiency, and effectiveness by providing a function for monitoring, follow up, care, help, support, and participation in educational management. With respect to the schools, there was progress in terms of educational quality based on basic educational quality, curriculum management, learning activity, development, and development of the quality assurance system based on Ministry rules. There were development findings according to the focused point and strong point leading to reflected identity and school identity, and the accomplishment of philosophy, aspiration, mission, and objective in establishing the school with quality.

**Process summary and result research finding.**

This research conduct on the basic educational quality development of school network groups by using the Participatory Action Research was firstly determined the developing procedures by the researchers and co-researchers. The status of school network groups gained information from training, and field study was collected. As studying the current problem status and the need of the basic educational quality development of network schools, they were analyzed by SWOT, emphasized on school where the administrator currently works on to create the shared-developing procedures. When the researchers obtained the developing procedures, they would bring to making plan for development through focus group discussion in order to determine the developing activities to be consistent with those developing procedures mentioned. The researchers were acknowledged on developing methods from the activities determined. Then, they would collect the developing activities to making the developing projects, and finally launched those projects including set up the workshop meeting of projects’ detail providing before collecting them to making plan for the basic educational quality development of school network groups. In the process of the workshop meeting, all would jointly determine the objectives, indicator index, aims, and characteristics according to basic educational standard for development distinctly.
This was summarized to following diagram.

7. Research Discussion

According to the results, there are three main points to discuss: 1) the study of the current situation and the need to develop the quality of basic education of the educational development management quality network school, 2) the development of procedures for the basic educational quality development of educational development management quality network school, and 3) the...
study on the results of the quality development of the basic education of the educational development management quality network school.

1. The study on the current situation and the need to develop the quality of basic education of the network school

The study on the current situation and the need to develop the quality of basic education of the network school determined interesting points about the creation of awareness for the research team and the role of the researcher and research team as follows:

1.1 Raising awareness of educational quality development

In order to raise awareness of educational quality development, the researcher arranged a meeting, provided training and a field trip to a school considered to have best practice regarding quality development of basic education, and studied the current situation and the need for educational quality development, for the purpose of improving the quality of basic education. According to the confederation as a mutual support network, synergy resulted. To summarize this, the current situation is at moderate level, and the need in developing quality of basic education is at high level in terms of factor. Likewise, the current situation is also at moderate level, and the need for basic educational quality development is at high level in terms of methodology. In addition, the current situation is at high level, and the need to develop quality of basic education is at high level in terms of important elements. In short, creating awareness for staff in the network school could motivate them to develop quality of basic education. As Chareornwongsak (2000, p. 34-35) explored the study on the current situation and the need for developing the quality of basic education of the network school, so did, Chantarasombat (2007, p. 170) who found that research procedures should be involved with all educational experiences in order to meet the demand of the community and create a sense of awareness and engagement in solving community problems.

1.2 The role of the researcher and the research team

Participatory action research (PAR) was generally designed as a collaboration between outside researchers and the research team which constituted the outside target. In this study, the researcher and the research team were affiliated within the same jurisdiction. The process of action research was used according to Lewin (1946). To wit, the concept of spiral operation, which included planning, acting, observing and reflecting. Consequently, this participatory action research was processed in accordance with spiral cycle. In addition, the researcher and the research team conducted the research according to the ten principles and ten moralities (Sanrattana, 2006) and behaved according to the twelve characteristics of a researcher (Rammasoot, 1997).

2. The development of the procedures of the basic educational quality development of the educational development management quality network school

Procedure I development for the basic educational quality development of the network school established eight developmental guidelines, seven developmental methodologies, thirteen developmental activities, and four developmental projects, eleven objectives, eleven successful indices, eleven goals and two innovations for developing basic educational quality. Before developing the research procedures, the researcher and the research team set up guidelines by assessing school situations and information from the fieldtrip and studied the current situations and needs in developing the quality of basic education in order to analyze the network school with SWOT technique. After that, developmental guidelines were used in development planning for
focus group discussion, which sought to develop methods, activities and projects. Next, workshop activity was provided in order to describe the aforementioned projects and also determine objectives, important indices and goals. As Prawanpruek (1995) mentioned, action research does not always start from planning, but can be started from reflection in order to design the form of the situation if the information is collected through current work-activity. Moreover, it can be used as a guideline in setting the thematic concern which is the basis follow up planning and action.

3. The study of the results of basic educational quality development of the network school

Evaluation results of characteristics of standards for basic education and the body of knowledge.

3.1 Evaluation results of characteristics of standards for basic education

Evaluation results of characteristics of standards for basic education of the learner established that the overall finding was at the highest level. There were three characteristics of the highest level of their mean scores; the learners had the body of knowledge in the major subject areas based on the National Education Curriculum, students had higher scores for the academic proficiency assessment in each subject, students had good health habits, standard competency, awareness and cooperation skills including aesthetics, art, music, sports.

The evaluation result for characteristics according to standards of the basic education of the teacher revealed that the overall finding was at the highest level. There were three characteristics the highest level of their mean scores. The first important point was that teachers performed their duty and used child-centered teaching methods effectively by studying and doing research to develop instructional media and child-centered teaching. The second thing was that the analysis of the evaluation result was used for remedial teaching and the development of the learners including improving teaching methods and learning design suitable for individual differences and brain development.

The evaluation result for characteristics according to standards of the basic education of administrators revealed that the overall finding was at the highest level. Also, the evaluation result of characteristics according to standards of the basic education of stakeholders revealed that the overall mean was at the highest level.

In addition, the evaluation result for characteristics according to standards of the basic education of schools revealed that the overall finding was at the highest level, and there were arranged the three highest average scores. First, the schools provided the school curriculum, activities, and environment, promoted the development of learner-quality, and had internal quality assurance pursuant to Ministry Rules. Second, the school results showed progress regarding focused points and best practice. Third, the school results revealed progress in achieving philosophy, improvisation, mission and objectives. The rationale behind the results was that participatory action research was used by the schools for problem solving developing organization with inherent synergy. Duangchatom (2007) mentioned that the one who had problems was the one who took the main role in analyzing the problems and searching for the cause of those problems systemically, including the establishment of guidelines, solving problems and learning practical problem-solving methods. Similarly, Chantarasombat (2008) defined participatory action research as educational process and development which could help the disadvantaged and the impoverished person in learning to cope with knowledge management.
3.2 The body of knowledge

The body of knowledge collected by way of educational quality development of basic education for the network school revealed 7 indicators for learners, 1 indicator for teachers, 1 indicator for administrators, 1 indicator for stakeholders, 5 indicators for schools. The body of knowledge was related to internal quality assurance according to the educational standards of the schools and the Ministry rules regarding systems, principles, and techniques of educational quality assurance 2010.

8. Research Recommendations

Basic Educational Quality Development of Network School by Using Participatory Action Research, the recommendations from research findings and for research study, were as follows:

1. Recommendations from research findings:

1.1 The effect of development in basic education quality of the network school by using participatory action research caused the obvious changes in the target network school. The schools were audited, followed up on, evaluated, and supervised education including information used for improving and developing educational quality efficiently. Teachers were able to use the computer laboratory in order to improve students’ quality in every learning experience. The schools in the network group had an internal quality assurance system based on Ministry Rule 2010. Committees were appointed for follow up, auditing, evaluating, and supervising education. The schools had innovation affecting the instructional quality improvement and presentation-competency for being the model in knowledge management. They could discover their strong points and develop innovation affecting instructional-quality improvement. Therefore, the research findings of this study were very useful for network school group to consider in application of development for basic educational quality of the network school in terms of future opportunities.

1.2 The researcher and research assistants had knowledge and comprehension of the problems and needs. So, the integration of approaches for development was not too difficult. But, to put the approaches into productive practice, the researcher had to obtain knowledge and comprehension of participatory action research (PAR). More precisely, the researcher had to explain each step of the research process in detail, and give credit to the process rather than the product of development, because the researcher used the developmental plan determining the objective, important indicators, and goals research development, research process focusing on every step of staff participation in the network school starting with the selection of research assistants and key informants. The research assistants were given the opportunity to monitor, follow up, and evaluate. The researcher taught how to avoid development as top-down form.

1.3 For participatory action research in educational organization and educational administration, the researcher, and his assistant considered the administrative factors, for instance, the administration and management of organizational structure in the network school, determining objectives, indicators and goals for development. Consequently, it was the research process as “learning,” “approaching,” and “development,” which took place in context of specific area research. So, participatory action research in other contexts or other educational work units might include the process or consider the administrative and management factors in different contexts, for example, conceptual framework of force-field analysis etc.
2. Recommendations for future research

Research and development of techniques for educational administration of the network school or local administrative organization, should be conducted in order to see clear guidelines in implementation of Action steps of PAR researchers.

Research and development in basic education quality of the Office of Educational Service Area, should be conducted by using PAR for development in broader areas.

Research and development of measurement and evaluation in basic education of schools under jurisdiction of the Office of Educational Service Area, should be conducted by using PAR in order to make plans for improving and enhancing the basic educational quality continuously and sustainably.

9. Research Conclusion

According to research findings of this study. Development of Education Quality in Network School by Using Participatory Action Research. Which was appropriate and available to be used in real practice process and ready to be applied in developing quality educational practical steps cycle of participatory action research. The innovations that could solve the problem in a systematic manner consistent with the principles of participatory management theory. And participatory action research process. The stakeholders involved all sectors. School in the school network had collaborated in planning practice, evaluation and reporting of quality of education, thus improving the quality of basic education in the schools of the school network. Using participatory action research. It was a process that would help improve the quality of basic education. The quality effective and more productive.

The successful elements of basic educational quality development for the network school were 1) motivation of the staff 2) leadership of the researcher, the research support staff, research team and key informants 3) the functional competency of the research team 4) the participation of the research team 5) the participatory environment 6) the practical procedures for the quality development of the basic education 7) the network schools serving as a mobilizer.

10. References


