# Development of Educational Management System in Small Primary School

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## Abstract

The purposes of the research were: 1) to study the factors of Educational Management System in Small Primary School; 2) to investigate current situations problems and guidelines of developing educational management in small primary school, 3) to develop Educational Management System in Small Primary School and 4) to examine the results of usage Educational Management System in Small Primary School. The research was comprised of four phases: Phase1 studying the factors of educational system in small primary school; Phase 2 Investigating current situations problems and guidelines of developing Educational Management System in Small Primary School; Phase 3 Developing educational system in small primary school and Phase 4 Examining the results of usage educational system in small primary school. The instruments used for data collection in this study were a note- taking form, a questionnaire, an interview and an observation form. The statistics used for data analysis were mean, percentage, standard deviation and content analysis.

The results of the research found that:

1) The factors of educational system in small primary school comprised of 4 main aspects: (1) Input including with eight sub-factors; (2) Process including with two sub-factors; (3) Output including with two sub-factors; (4) Feedback including with one sub-factor.

2) The results of studying current situations and problems revealed that:

There are 10,877 small primaries.

The problems revealed that administrators lacked of supervision and did not followed up development of student's quality, teachers did not clear about student-centered learning, parents and community lacked of cooperation in development of student's quality and students' quality were lower than benchmark.

The guidelines to develop found that both administrators and teachers needed to develop teachers in student-centered learning, curriculum in learning of teachers, media and technology, learning sources for learner's learning and to ask for parents' cooperation in development of student's quality.

3) Educational Management System consisted of 4 main aspects, 13 sub-factors including with 42 indicators

4) Evaluating system factors by experts, the results revealed that there were the highest in every factor in 80%. The findings of evaluation system and manual of Educational Management System found that it was higher than 80%.

5) The examining of usage Educational Management System revealed that pre- treatment of usage educational management system was in the 'least' level. However, post- treatment of usage educational management system was in the 'most' level.

**Keywords:** educational management, development, small primary school

## 1. Introduction

The change current in world society has become an important factor in livelihood on knowledge-based society and economy. If the country had the quality of population, it would be a winner in competition. The characteristics of human for modern society must be learning person in learning society and learning organization (Panich, 2004; Office of The Basic Education Commission, 2010). Education is the most important

instrument in human development because if the population had quality education, they also would have the quality of good life. Thus, all over the country in the world including with Thailand had tried to adjust the direction of modern future that has focused on human development and human learning and has encouraged learners to develop themselves at their own pace and to continuous lifelong learning (The Institute of Research and Learning Development, 2010, p. 12).

National Education Act of B.E. 2542 (1999), Section 22 states that "Education shall be based on the principle that all learners are capable of learning and self-development, and are regarded as being most important. The teaching –learning process shall aim at enabling the learners to develop themselves at their own pace and to the best of their potentially. And Section 23 states that "Educational management shall give emphases to knowledge, morality, learning process and integration of the following, depending on the appropriateness of each level of education: Knowledge about oneself and the relationship between oneself and society, namely: family, community, nation and world community; as well as knowledge about the historical development of the Thai society and matters relating to politics and democratic system of government under a constitutional monarchy; Scientific and technology knowledge and skills as well as knowledge. Understanding and experience in management, conservation, and utilization of natural resources and the environment in a balanced and sustainable manner; Knowledge about religion, art, culture, sports, Thai wisdom, and the application of wisdom; Knowledge and skills in mathematics and languages, with emphasis on proper use of the Thai language; Knowledge and skills in pursuing one's career and capability of leading a happy life. Furthermore, Section 24 states that " In organizing the learning process, educational institutions and agencies concerned shall: Provide substance and arrange activities in line with the learners' interests and aptitudes, being in mind individual differences; Provide training in thinking process, management, how to face various situations and application of knowledge for obviating and solving problems; Organize activities for learners to draw from authentic experience, drill in practical work for complete mastery; enable learners to think critically and acquire the reading habit and continuous thirst for knowledge; Achieve, in all subjects, a balanced integration of subject matter, integrity, values, and desirable attributes; Enable instructors to create the ambiance, environment, instructional media, and facilities for learners to learn and be all-round persons, able to benefit from research as part of the learning process. In so doing, both learners and teachers may learn together from different types of teaching-learning media and other sources of knowledge; Enable individuals to learn at all times and in all places, co-operation with parents, guardians, and all parties concerned in the community shall be sought to develop jointly the learners in accord with their potentially (National Education Act of B.E. 2542 (1999).

National Education Act of B.E. 1999 intends to develop human potentiality to be learning's learner and to be able to continuous lifelong learning quality. However, learners' evaluation in basic education level of most small primary school in rural area found that learner quality faced a problem because of low students' achievement test, especially factor of knowledge and necessity skills for learning i.e. reading, writing, calculating (Office of Education Standards and Quality Assessment, 2005, p. 23). The current situation of small primary schools tend to increase these problems. Nowadays, there are 14,669 small primary school. The rate teacher to student was in 1: 8-11 (Operation Center of Office of the Basic Education Commission, March, 2011) The problems of educational management in small primary school were as follows: there were not enough teacher for the class, the teacher did not teach his major subject, the teachers had both extra works and their teaching, so they could not look after their children in the class closely, teacher lacked of encouragement in their working, most of teachers misunderstood about child-center in learning management, teachers lacked of media and technology and learning sources to support student's learning. Moreover, learning management in subjects were separated each other. They did integrate in both content and value of human development. And students were ignored and were not developed individually, thus, some of them did not catch up their lesson learned and they were left out of student care system. Besides, teachers lacked of skills and techniques of suitable learning management, lacked of planning and psychology in learning and teaching activities. Teachers did not teach on time and in full time because they had a lot of document's burdens. And the administrators lacked of aggressive administration plans and they did not have any long plan. Besides, they did not use information technology to work. They did not check and follow up students. And the school buildings seemed too old and ruined. And the problems of school boards and communities found that they did not clear their roles. Thus, these problems affected to low achievement test of the students (Office of the Education Council, 2005). However, the Ministry of Education tried to solve continuously the problems of the quality of educational management in small primary school i.e. controlling small primary school, providing school-bus, DLTV learning management, providing budgets for learning's equipment (Tunsuk, 2011, pp. 12-13). The evaluation students' quality found that learners in this project were not quite different from learners in specific obligation school (A Primary School Net Work, 2011, pp. 9-10).

## 2. Literature

The study of conceptual framework of Development of Educational Management System in Small Primary School, the researcher had studied from many academic researches: Doug Thomas (2005), Grolnick and Slowiazek (2010), Knezevick (1994), Wiles (2010), Panich (2015), Santiwaranon et al. (2011), Phusrisom (2011), Wathanasirithum (2011), Office of the Basic Education Commission (2010), Jantharasombut (2010), Office of the Education Council (2009), Sutjaritrak (2008), Eua-jai (2006) Wasee (2005), Chaeuy-ki-wong (2005), Khammanee (2005), The Ministry of Education (2004), Runjachroen (2004), Jantharasathit (2003), Wongwanich (2002). The researcher found that the factors of Development of Educational Management System in Small Primary School composed of four aspects, each aspect had sub-factor as follows: Input consisted of eight sub-factors: administrator, teachers, parents and community, curriculum, budgeting, media and technology, learning sources and students; Process consisted of four sub-factors: academic administration, budgeting administration, personnel administration and general administration that each sub-factor had been driven by PDCA process; Output comprised one sub-factor: the quality of school educational management; Feedback consisted of one sub-factor; proceeding report as the follows: 1) Input aspect including with eight sub-factors as follows: Administrators, Teachers, Parents and Communities, Budgeting, Curriculum, Media and Technology, Learning Sources, Learners; 2) Process aspect including with four sub-factors as follows: Academic Administration, Budgeting Administration, General Administration and General Administration; 3) Output aspect including with one sub-factors: The Quality of School Educational Management; 4) Feedback aspect including with one sub-aspect : Proceeding Report as shown in Conceptual Framework in Figure 1 below:
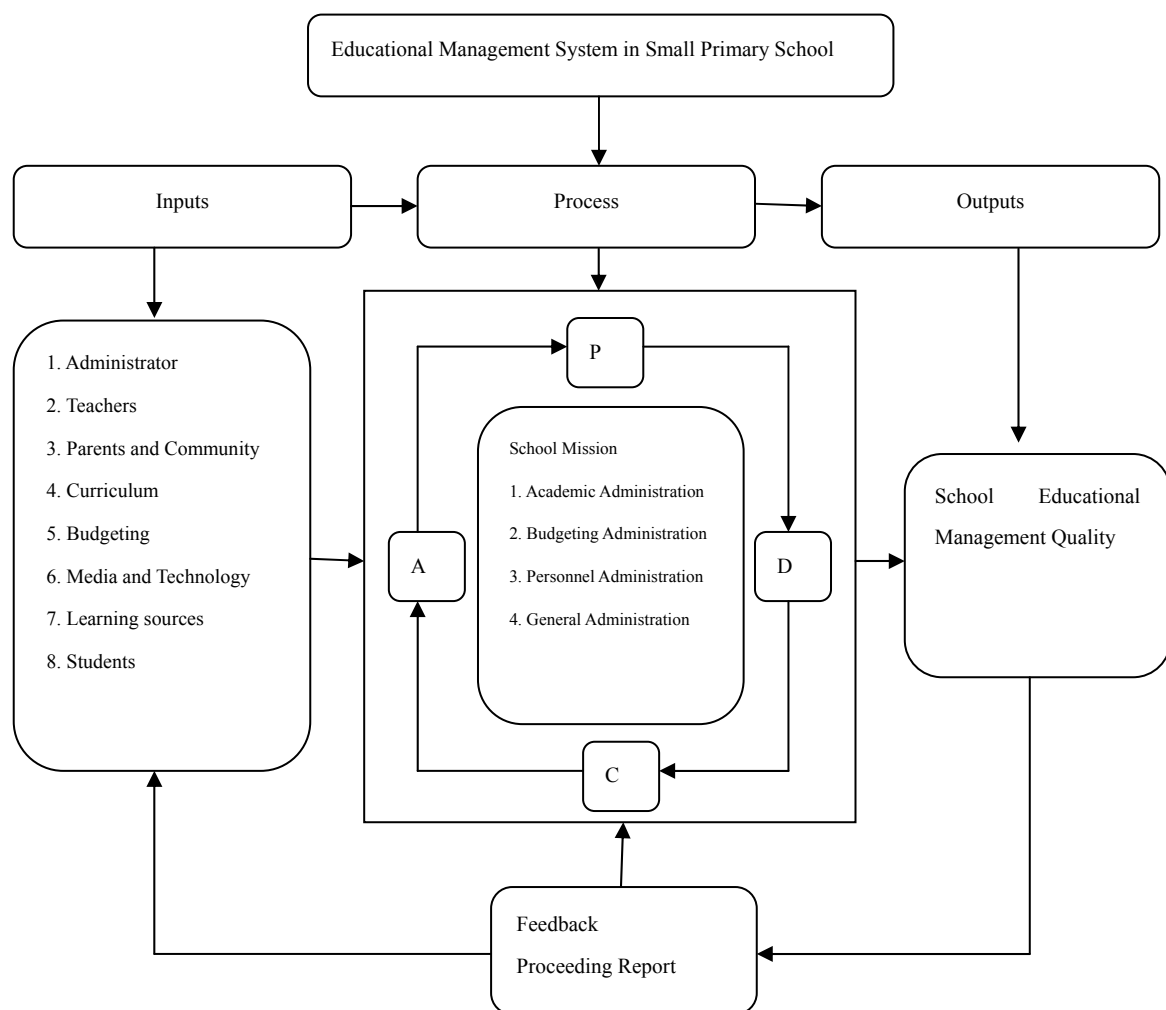


Figure 1. Educational management system in small size school by theory synthesis

Thus, the researcher realizes that it is the most essential to develop small primary school in order to be sustainability with community by developing teachers in learning management about learner center learning, to develop curriculum to suit learning and teaching, develop media and technology to support learning, to develop learning sources inside and outside schools, to administer budget effectively, to supervise and follow up quality of students continuously and to coordinate parents and communities to be a part of develop educational management. This is a choice way to develop educational management in small primary school.

According to the reasons mentioned, the researcher is interested in Development of Educational Management System in Small Primary School in order to investigate the techniques to develop learners in a small primary school.

**3. Research Questions**

1) What is the factor of Educational Management System in Small Primary School?

2) What is the current situations, problems and guidelines to develop Educational Management System in Small Primary School?

3) What should the suitable Educational Management System in Small Primary School be?

4) What effects does Educational Management System in Small Primary School have?

**4. Purposes of the Research**

1) To study the factors of Educational Management System in Small Primary School.

2) To investigate current situations problems and guidelines of developing Educational Management System in Small Primary School.

3) To develop Educational Management System in Small Primary School.

4) To examine the results of usage Educational Management System in Small Primary Schoo.

**5. Procedure of the Research**

Phase 1 Studying the factors of Educational Management System in Small Primary School.

Step 1 Studying the documents and research involved in Educational Management System in Small Primary School aims to define the factors of educational management system in small primary school.

Step 2 Confirmation the factors of Educational Management System in Small Primary School aims to confirm the factors by experts of Educational Management System in Small Primary School.

Phase 2 Investigating current situations, problems and guidelines of developing Educational Management System in Small Primary School.

Step 1 Studying current situations, problems and guidelines of Educational Management System in Small Primary School aim to investigate in depth of information of current situations, problems and guidelines of educational management by the meeting administrators and teachers of small primary schools.

Phase 3 Developing Educational Management System in Small Primary School.

Step 1 Studying the "Best Practices" of small primary schools.

This step was to study the two "Best Practices" of small primary schools in order to collect data according to the factors of Educational Management System in Small Primary School from phase 1 and other factors that affects to developing educational management.

Step 2 Drafting systems and manual of usage Educational Management System in Small Primary School in small primary school.

Drafting systems and manual of usage Educational Management System in Small Primary School was to use the results of phase 1 and studying the two "Best Practices" of small primary schools.

Step 3 Confirmation of Educational Management System in Small Primary School.

The researcher drafted systems and manual of usage Educational Management System in Small Primary School, then they were proved by experts in accuracy, suitability, feasibility and usefulness. And the researcher improved and corrected them on the experts' comments and suggestions.

Phase 4 Examining the results of usage Educational Management System in Small Primary School.

Step 1 Examining the results of usage educational management system was to use the draft of systems and manual of usage Educational Management System in Small Primary School in the real situation. They have been

implemented for 1 year, then it was examined the results of usage educational management system.

## 6. Instruments Used

The instruments used for data collection were a questionnaire and a note- taking form, a questionnaire, an interview and an observation form.

## 7. Data Collection

Researcher collected data oneself.

## 8. Data Analysis

The data analysis from questionnaire was mean, percentage, standard deviation and the data from the meeting was content analysis.

## 9. The Findings of the research

The results of the study found as follows:

1. The factors of Educational Management System in Small Primary School consisted of four main aspects:

1) Input aspect including with 8 sub-factors as follows: Administrators, Teachers, Parents and Communities, Budgets, Curriculum, Media and Technology, Learning Sources, Learners

2) Process aspect including with 2 sub-factors as follows: Academic administration process, General administration process

3) Output aspect including with two sub-factors as follows: Management Administration Quality, Learners Quality

4) Feedback aspect including with one sub-aspect

4.1) Evaluating System Factors

2. The current situations problems and needs of development Educational Management System in Small Primary School found that: 2.1) the current situations of basic education management showed that there were 10,877 small primary schools. It was 35.98 %. And it tended to increase steadily. 2.2) the problems of Educational Management System in Small Primary School revealed that administrators missed supervision and following up development of learner's quality, teachers misunderstood about child-center in learning management, the learners were in low standard. 2.3) the needs analysis of development of Educational Management System in Small Primary School found that both administrators and teachers needed to develop teachers about child-center in learning management, to develop curriculum for teacher's learning management, to develop medias and technology and learning sources for learner's learning, to coordinate the parents' cooperation in learners quality.

3. The factors of educational management in primary school consisted of four main aspects. Each had sub-factors as shown in the Figure 2 below.
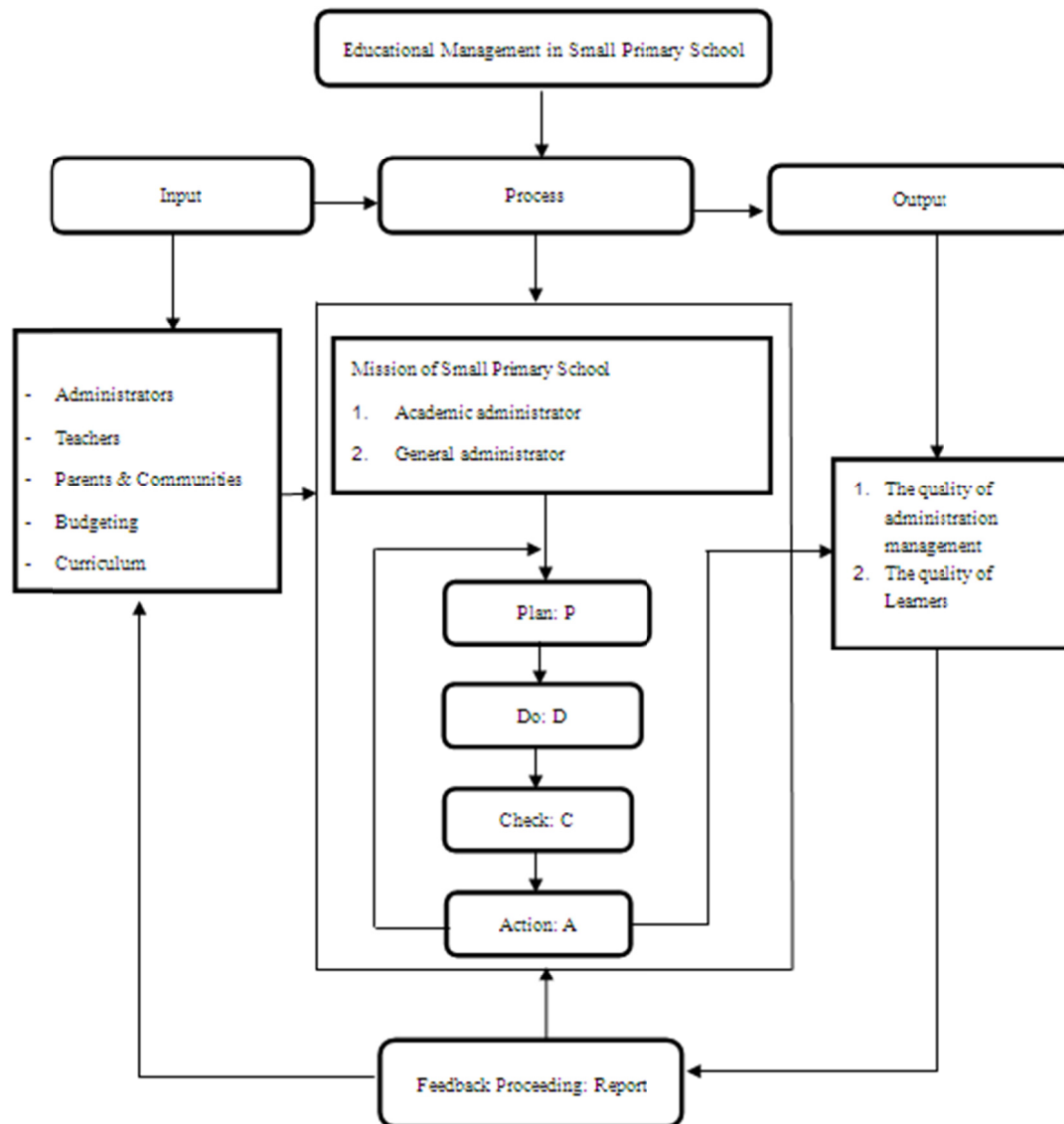
Figure 2. The factors of educational management in primary school

According to the Figure 1 above demonstrated the details of Educational Management System in Small Primary School. It comprised four main aspects: Input, Process, Output and Feedback. Each aspect had sub-factors as follows:

1) Input aspect including with 8 sub-factors as follows: Administrators, Teachers, Parents and Communities, Budgeting, Curriculum, Media and Technology, Learning Sources, Learners

2) Process aspect including with 2 sub-factors as follows: Academic administration process, General administration process

3) Output aspect including with two sub-factors as follows: Management Administration Quality, The quality of learners

4) Feedback aspect including with one sub-aspect

4.1) Evaluating System Factors

The procedures of Educational Management System in Small Primary School, there were two sub systems i.e. academic administration system and general administration system that were controlled by Deming Cycle (PDCA).

The results of evaluation the factors of Educational Management System in Small Primary School by experts found that it was higher than 80% in every factor. It showed that every factor was usefulness, feasibility, suitability and accuracy. The findings of system and manual of usage Educational Management System in Small Primary School demonstrated that it was higher than 80%. It showed that the system and the manual of usage system were suitable.

4. Examining the results of usage Educational Management System in Small Primary School was concluded as follows:

The findings of implementation, the academic administration aspect revealed that pre-treatment of usage educational management system was in the 'poor' level. After treatment for a year, it increased more development. It was in the 'most' level.

The results of implementation, the learners' quality found that the quality of learners in pre- treatment found that some students cannot read and write in basic words of class curriculum. And some of them cannot calculate the basic mathematics of class curriculum. After treatment for a year, students could read and write basic words of class curriculum. Besides they also could calculate the basic mathematics, except learner disability (LD) in the class. Furthermore, the student's national test (NT) in 2013 increased more than student's in 2012, it increased 3.31%. And the student's O-NET in 1013 increased more than student's in 2012, it increased 2.90%.

## 10. Discussion

The findings of development of Educational Management System in Small Primary School had the interesting issues that could discuss as follows:

I) The results of studying the factors of Educational Management System in Small Primary School consisted of four main aspects 1) Input, 2) Process, 3) Output, 4) Feedback. They were basic infrastructure of system as Bardo (1998), Bertalanffy (1968) and Malithong (1997) said that the factors of system consist of 4 parts 1) Input, 2) Process, 3) Output and 4) Feedback. And Bittel (1978), Smith (1982), Schoderbek et al. (1990) said that system consists of 5 factors i.e. 1) Input, 2) Process, 3) Output, 4) Feedback and 5) Environment. However, researcher realizes that the fifth factors; environment does not relate directly to Educational Management System in Small Primary School. It was supported by Rodjai's (2009) study of Analysis Factors Affecting to Efficiency of Small Primary School found that the factors affecting to efficiency of small primary school consisted of 8 variables: leadership of administrators, teachers competency, management administration, learning management, learning environment management, participatory of community, policy to practice and efficiency of small primary school. it was related to American institutes for research's (2007) opinion of A study Educational Management in Educational Reform should have five important factors i.e. The administrators were able to coordinate cooperation of communities, Teacher could analysis individual learners and support them to learn at their own pace, Curriculum could support to students' needs and communities, Techniques of learning and teaching focused on friendship atmosphere, Parents and communities realized and paid attention to educational management. It was supported to Wilson's (2005) opinion in A Study of Transformational Leadership in Small School, it found that the factors of quality management administration consisted of 5 aspects: curriculum supporting community's needs, learning management focusing on learners, exchanging and sharing teacher's ideas, providing environment for learning, supporting student's learning by parents. Besides, it was related to Lomsai's (2009) opinion in a research in the title of The Factors Influence in Development Thinking Process in Basic Education Schools , it revealed that the factors influence in development thinking process in basic education schools consisted of 6 factors: 1) Learning and teaching management, 2) Characteristics of learners supporting thinking process, 3) Participatory of communities, 4) Leadership of administrators, 5) Rearing of family and 6) Leadership of teachers.

II) The results of current situations problems and guidelines to develop Educational Management System in Small Primary School found that there were not enough teachers for the class, the teacher did not teach his major subject, the teachers had both extra works and their teaching, teachers could not teach students in child-center in learning. Administrators did not realize about supervision and follow up developing student's quality, not providing learning sources and technology, not cooperation of development student's quality by parents and communities, low learning achievement of students. And the needs of Development Educational Management System in Small Primary School found that administrators and teachers needed to develop about learning management focusing on learner center. It showed that current educational management are not still successful as Thiengkham's (2009) research in the title of A Study Effects of Evaluation and Internal Quality Assurance Process in Small School, Unwarranted School External Quality Assurance, The Office of Primary Educational Services Area Nakhonprathom 2, found that the most problem section was section 9: Teachers had ability to

manage learning and teaching efficiently and to focus on learner center. However, the problems of quality assurance process in schools found that most administrators did not realize internal quality assurance because they did not follow the principles of quality assurance, they might follow some steps. So, it affected to educational management no quality. It was supported to Opstad's (2010) opinion that "A Study Following up and Evaluation: A Small School Management Model", revealed that suitable model of following up and evaluation in small school should control with talking, review the target goal and define future expectation continuously. And school and communities had to cooperative working to be working efficiently and effectively.

III) The findings of Educational Management System in Small Primary School revealed that the main factors consisted of 4 aspects, 11 sub-factors including indicator in each 41 indicators as follows: 1) Input including with 8 sub-factors, 17 indicators; 2) Process including with 2 sub-factors, 7 indicators; 3) Output including with 2 sub-factors, 10 indicators; 4) Feedback including a sub-factor. It showed that the factors of success in Educational Management System in Small Primary School were stake holders or persons involved who had to proceed working in every indicator. I was supported by Charoenkhum's (2009) opinion in Best Practice Model of Schools in Bangkok, revealed that the factors of Best Practice comprised 5 factors i.e. administration of school, administrators, administration infrastructure of school, students, teachers and education personnel, parents and communities. It was related to Sergiovanni's (1999) opinion in Analysis Efficiency School or Success School said that characteristics of an effective school were as follows: 1) focusing on learner center, 2) an effective academic plan, 3) providing learning and teaching to support learners' learning, 4) good learning atmosphere, 5) promoting good interaction among groups, 6) providing developing personnel continuously. Moreover, it was supported by Ruenthong (2007) in A Study Effective School Administration Model consisted of 8 factors i.e. 1) learning organization, 2) professional administrators and teachers, 3) accountability, 4) providing environment for learner's learning, 5) participatory vision and objective, 6) focusing on learning and teaching, 7) teaching objectively, 8) high expectation to students.

IV) The results of examining of usage Educational Management System in Small Primary School revealed that pre- treatment of usage educational management system was in the 'poor' level. However, post- treatment of usage educational management system was in the 'most' level. The learners' quality; pre- treatment found that some students could not read and write in basic words of class curriculum. The post- treatment showed that learners could read and write basic words of class curriculum. Besides they also could calculate the basic mathematics, except learner disability (LD) in the class. Furthermore, the student's national test (NT) in 2013 increased more than student's in 2012, it increased 3.31%. And the student's O-NET in 1013 increased more than student's in 2012, it increased 2.90%. It implied that the system developed by researcher could solve the problems of educational management in small primary school. It was supported by Scwartz and Wendy (2009) referred to a research "Reducing Class Size and Students in City". It revealed that a small classroom was easier to improve and develop student's learning achievement. And teachers could have a good relationship and closely get familiar with the students. These made the students feel safe oneself and they had good performance. And the important issue of reducing class size made students has an equal chance and it was the right way to solve this problem. As Shap (2008) referred to the research in the title " Leader of Small School : A Study Development Emotional Abilities of Leader in Specific Small School", it revealed that small school became the most popular school to develop current students because it involved in developing student's learning achievement. And administrator and teachers could follow up and checked students closely. Besides, it was to support the students to be leader and show their suitable performance. As Thomas (2005) said that A Study Educational Management in Small School in New Mexico had the good point small school i.e. it was a good relationship between schools and communities, teachers and parents got familiar with each other and got a good cooperation in working, teachers could look after every student closely and had a good relationship each other, support student's potentiality individually. Moreover, the findings found that students in small school were more confident in their performance and it was to build a good discipline of students.

## 11. Suggestions

Policy suggestions

1) The Office of the Basic Education Commission Level

Office of the Basic Education Commission should change evaluation of teacher's portfolio to scroll accreditation. The evaluation should be addressed in development the real student's quality, not be focused on the documents as nowadays.

2) The Educational Service Area Level.

The Office of Educational Service Area should develop supervisors to be real specialists about learning

management focusing on learner center because they could help teachers at small school.

3) School Level

Small school has limited teacher, teachers did not come to class on time, and teachers did not teach their major subject and some of them could not teach some subject. Thus, school should develop teachers about learning management focusing on learner center and check and follow up development student's quality continuously.

## 12. Suggestions for Usage the Results of the Study

1) Administrator teacher and involved person should study more details of usage manual of educational management system and sub-system understandably before trying it out at school.

2) The small primary schools are quite different in its context. So, usage educational management system in small primary school, administrators can adapt and improve sub-factors or some indicators to suit their situations in order to get through the real goal.

3) The educational management system in small primary school can be more efficiency if the administrator should be academic leader and be a good coordinator in working.

## 13. Suggestions for Further Research

1) Researcher or interested person should study about Best Practice System of learners in small primary school.

2) Researcher or interested person should study about development enhancing self-learning for learners in small primary school.

3) Researcher or interested person should study about development individual learning management system in small primary school.

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