Development of Internal Quality Assurance Model
for Basic Education Institutions Using Results-Based Management

Supak Puangkhajorn[a], Chonchakorn Worain[b] and Anucha Kornpuang[c]

[a,b]Research and Development in Education, Faculty of Education, Pibulsongkram Rajabhat University, Phitsanulok 65000
[c]Department of Educational Administration and Development, Faculty of Education, Naresuan University, Phitsanulok 65000
Corresponding author. E-Mail address: supak_puang@hotmail.com[a], Chonchakorn@hotmail.com[b], ytanucha@hotmail.com[c]

Abstract

This research study was set up into three stages. Stage 1 studied states and problems of quality assurance in basic education institutions. The samples were 394 school administrators and teachers responsible for quality assurance within the institutions under the Office of the Basic Education Commission. Stage 2 constructed and developed a model of quality assurance within basic education institutions by means of performance management, including 21 experts. Stage 3 evaluated schools according to the model of quality assurance in basic education institutions by means of performance management, with six of the best practice schools and ones with failed appraisals. The data was collected by an analysis of the query documents and questionnaires. The quantitative data was analysed by using descriptive statistics: frequency distribution, percentage, mean, standard deviation, median, interquartile range and qualitative data were analysed using content analysis.

The research found that the basic quality assurance model within basic education institutions with the appropriate management approach consisted of eight components: 1) Organizational Planning; 2) Determining the details of performance indicators; 3) Quality Management Development; 4) Risk Management; 5) Measurement and Quality Monitoring; 6) Effective use of information; 7) Maintain and improve the quality of education continuously; and 8) Reward. According to the results, it was found that the structure of the composition was the most appropriate. When considering sub-components of suitability, possibility, clarity, ease of use, they were at High to Very High levels. In terms of evaluation results of the institutions through the model of quality assurance in the basic education institutions by means of performance management, it was revealed that the best practice groups and those with failed appraisals had the quality in implementation of the basic structure on quality assurance in basic education institutions by means of results-based management. The results of the evaluation on the quality of learners according to the learning standards overall were at a high level.

Keywords: Development of Quality Assurance Model, Results-Based Management,
Internal Quality Assurance of Basic Education Institutions

Introduction

The development of education quality has its important goal in human development. It is believed that every individual has the capacity to learn and self-develop throughout their life as stated in the National Education Act of Year 2542 B.E. and the Adjustment (2nd Issue) in Category 4-Education Management Guideline, Section 22 -Goals of Education Reformation in 2nd Decade (Year 2552-2561 B.E.). Its content focuses on the development of education quality and standard, the increase of opportunity in education and learning as well as the promotion of sharing from every sector. Also, education quality assurance is an important mechanism in quality development and standard section of Thailand's education effectively. In Category 1, Section 6, it is stated that education management needs to be done for developing Thai citizens to be a complete human with good mind, clever, knowledgeable, ethical, and having a living culture. They should be able to live with each other happily. Moreover, in Category 6, Section 48, it is stated that institutions must manage their quality assurance systems and take the internal quality assurance to be part of their education management continuously (Ministry of Education, 2002).

According to the 3rd evaluation result of external quality assurance (Year 2554-2558 B.E.) of institutions under the Office of the Basic Education Commission, Year 2554 B.E., it was found that for the evaluation result of 7,042 institutions in basic education level, only 4,923 institutions (69.91%) are qualified for its standard. There are 2,119 institutions (30.9%) (Bureau of Education Testing, 2013b, p. 7). Most of them demonstrate that Index 5-Learning outcome is in an average level and Index 6-Efficiency in teaching and learning management with learner-focus and Index 12-Promotion outcome in institution enhancement for higher standard and reaching education reformation are in an important level. According to related research in internal quality assurance, it was found that learners gain essential knowledge and skills as stated in the curriculum containing considerations and low outcome (Suechawakornkul, 2007; Chaichana, 2007; Jantakun, 2007). This suggests the Office of the Basic Education to set up guidelines in promoting and developing internal quality assurance for institutions in accordance with the ministerial regulations in criteria system and methods of quality assurance (B.E. 2553). The aim is to evaluate the implementation continuously as well as to promote and develop teachers and educational staff with various ways of quality assurance management. In addition, institutions are suggested in curriculum development according to their context. They are also well organized on their internal quality assurance to be parallel with the ministerial regulations and announcement of internal quality assurance in basic education level (Bureau of Education Testing, n.d.). Some research studies concerning internal quality assurance for basic education institutions show that the setting up of management system is the most problematic. Therefore, there should be some trainings about internal quality assurance for basic education institutions for teachers and staff concerning this matter (Nunkaew, 2009) and internal quality assurance implementation. As a result, a guideline for management system for administration and information technology is needed (Motam, 2009). It is found from the 2012 evaluation of internal quality assurance in institutions under the Office of the Basic Education Commission regarding the implementation in internal quality assurance system development that standard for learner's quality received the lowest evaluation for 5th standard—knowledge and skills needed for learners also received the lowest evaluation and for 4th standard—learners are able to think systematically, creatively, and to make decision and solve problems logically (Bureau of Education Testing, 2013a, p. 128), respectively. According to 2013 evaluation result of quality assurance development system and promotion section, the Office of Primary Education Service, Area 2, Sukhothai Province, it was found that 5th standard—knowledge and skills needed for learners also received the lowest evaluation (Sukhothai Primary Education Service Area Office 2, 2013, p. 30).

For developed countries, they have applied the quality management system for continuing process and enhancing their country's competing capability. For instance, USA has set up criteria for Malcolm Baldrige National Quality Award (MBNQA) (Office of the Public Sector Development Commission, 2011, pp. 1-3) whereas New Zealand has achieved education management with "Chain of Quality" theme in moving forward internal quality assurance in institutions because the quality assurance system is considered to be an implementation, checking, and evaluation as guidelines for administrators to develop and improve education quality. Moreover, there is a quality assurance process in institutions related to three steps: the internal quality assurance, the follow-up of education quality, and the development of education quality (Bureau of Education Testing, 2011b, pp. 11-12). Process of quality management for education in institutions is the sharing of work among staff. This is considered as a "Total Quality Management: TQM" for achieving goals and focusing on learner's quality to be the key index for quality assurance. A management process aiming toward an achievement or strategic management that allows

stakeholders to share their work and take part in the development should be supported. Therefore, it is assured that every step of processing will be successful as expected with checking and self-evaluation process in every step. Moreover, there should be a report of implementation (United Nations Development Group, 2011, p. 2), an internal quality assurance in institutions focusing on a work done, an evaluation of outcome of the implementation by using incoming index, process, outcome, and result. In order to do this, it is necessary to determine key index details, goals and objectives in advance with cooperation from stakeholders through four steps of outcome focus: organization's strategic planning, key index details set up for implementation and work checking, as well as reward giving (Bureau of Education Testing, 2011a, pp. 20-21).

Thus, in order to achieve their goals and focus on learner's quality as a key index for quality assurance, a management process with outcome focus must be taken to develop quality assurance in institutions. As a result, this research study aims to create a model in internal quality assurance for basic education institutions by using results-based management as guidelines for improving the management and enhancing the level of quality standard for institutions' work, helping institutions manage their work effectively. Also, the model can be used as guidelines for leaner's quality development considered as the most important matter contributed by learners themselves. It covers the area of learning management and results in a quality development of institutions to reach a standard of learner's quality and a standard of educational management.

Research Objectives

1. To study conditions and problems in internal quality assurance in basic education institutions

2. To create and develop a model in internal quality assurance in basic education institutions by using results-based management

3. To evaluate institutions according to internal quality assurance model in basic education institutions by using results-based management

Research Methodology

This research is classified as research and development (R & D) which has three steps as follows:

Step 1: Studying conditions and problems in quality assurance in basic education institutions which can be sub-divided into two steps below:

Sub-Step 1: The step concentrates on basic principles of quality assurance, area of data source (i.e. documents), and research concerning quality assurance for education. It uses results-based management, quality assurance system in institutions, documents concerning basic educational standard, guidelines for quality assurance evaluation according to educational standard/key index of basic educational standard, as well as a key index of standard for external quality assurance. The research instruments for data collection are a record of content analysis and a record of education standard analysis/key index. The variables are the educational standard/key index for quality assurance in institutions according to basic educational standard, including principles of quality assurance in institutions by using results-based management.

Sub-Step 2: This step looks at conditions and problems in quality assurance for basic education institutions, and area of data source. Research populations and sample groups are people working in institutions under the Office of Basic Education Commission, Ministry of Education from 28,470 schools in 183 district areas of four

regions. The size of sample group is 394 schools. The research instrument is a questionnaire asking on 5-level of measurement. There are questions concerning conditions in quality assurance management by using results-based management in institutions, as well as problems regarding the implementation of quality assurance in institutions. The IOC value is between 0.71-1.00, and the coefficient of reliability of the whole questionnaire equals to 0.754. The data collection was conducted during November-December 2014 by distributing questionnaires to schools. Each school received two questionnaires. The 680 questionnaires (86.29%) were sent back. The data analysis was done by:

1) analysing general data of staff and institutions with frequency distribution, and percentage calculation;

2) analysing the result of the study on conditions of quality assurance management by using results-based management in institutions by finding mean ($\bar{x}$) and standard deviation (S.D.), comparing these numbers with criteria set by the researcher (in this case, the mean value equals to 4.49 or lower) and further developing the data to be a model of quality assurance for basic education institutions using results-based management;

3) analysing data problems in the implementation of quality assurance in institutions by finding mean value ($\bar{x}$) and standard deviation (S.D.), comparing these numbers with criteria set by the researcher (in this case, the mean value equals to 1.50 or higher) and developing the data to be a model of quality assurance for basic education institutions using results-based management; and

4) analysing added opinions and suggestions regarding quality assurance in institutions for content analysis and frequency arrangement

Step 2: Creating and developing a model of quality assurance for basic education institutions using results-based management which can be sub-divided into two sub-steps below:

Sub-Step 1: Drafting of quality assurance for basic education institutions using results-based management. This draft comes from

1) Research results of step 1—Synchronizing documents concerning concepts, principles, and studying conditions and problems of quality assurance for basic education institutions to support the draft

2) Taking the draft of a model of quality assurance for basic education institutions using results-based management to propose to the advisor

3) Taking suggestions from the advisor to improve one's implementation.

Sub-Step 2: This step checks a model of quality assurance for basic education institutions using results-based management, area of data source, data from professionals i.e. institution administrators who have the best practice, supervision of experts who are responsible for internal quality assurance and 21 university level scholars. The research instrument is a 5-level questionnaire to check 4-dimension of quality: appropriateness, possibility, clarity, and easiness to use. The data from questionnaire was presented with the draft of quality assurance for basic education institutions using results-based management. The data collection was conducted by distribution of questionnaire by post. The questionnaires were sent to experts, and all 21 of them were sent back. The data analysis was conducted by:

1) analysing quality assurance for basic education institutions using results-based management from experts' opinions with descriptive statistic value—median, and interquartile range with criteria set for consideration;

2) considering the concordance of selection criteria, i.e. each question or each dimension should have its median not lower than 3.5, and its interquartile range from experts' answers not over 1.50. Moreover, the analysis of opinions and added suggestions should be taken from the analysis of quality content;

3) statistics for data analysis in terms of median (Mdn.) and interquartile range (IR).

Step 3: Evaluation of institutions following a model of quality assurance for basic education institutions using results-based management

The area of data source was collected from 30 staff working in three schools with the best practice and three schools that did not pass their external quality evaluation under the Office of Basic Education, Ministry of Education. The staff were: one administrator, one teacher, one committee, and two staff outside the educational institutes. The research instrument is a 5-level performance assessment form evaluated according to a model of quality assurance for basic education institutions using results-based management. Also, the evaluation is from two reflected dimensions: 1) Learner's quality according to learning standard; and 2) Educational quality regarding the management of institutions. The data collection was conducted during 16th December 2016-31st January 2017. The data analysis was conducted by: 1) analysis of comparison on the evaluation result following a model of quality assurance for basic education institutions using results-based management which have the best practice as well as institutions which do not pass their external quality evaluation. The analysis was done in order to find mean ($\bar{x}$), and standard deviation (S.D.); and 2) analysis of obstacles for evaluating institutions following a model of quality assurance for basic education institutions using results-based management.

Results

There are three sections for the research results of the development of internal quality assurance model for basic education institutions using results-based management as follows:

Section 1: Conditions and problems regarding quality assurance for basic education institutions

According to the study of conditions and problems regarding quality assurance for basic education institutions, three main findings were found:

1) The basic principle of educational quality assurance is a continuing process containing a quality control, a quality checking, and a quality evaluation to be a quality assurance system following institution's educational standard. There are criteria and guidelines concerning quality assurance in institutions. The implementation is conducted by the sharing of community and related organizations with the set-up of educational standard by the institutions themselves. Moreover, there is a set-up of educational plan aiming towards the quality following institution's educational standard as well as a set-up of management system and information and technology. The implementation is done according to the educational development plan by institutions with a follow-up for educational quality check and a quality evaluation. The annual report needs to be done in order to report the internal quality assurance for a continuing of quality development. Two levels of an implementation of quality assurance development should be concentrated: Level 1-Level of core subjects in order to support learning and quality assurance of core subject group which is considered important for learner's quality development and Level 2-Level of institutions which is the level of quality assurance in basic education institutions. This two levels are considered in accordance with the basic educational standard and the outcome focus taken to be applied with quality assurance in institutions. There are four important steps:

The organization had a strategic plan in order to analyse internal and external environment (SWOT Analysis) for bringing organizations' vision, mission, objectives, target and strategic implementation. The key index details set-up for measuring the implementation included quantity, quality, time and place with the measurement and checking of implementation as well as the reward giving.

2) The result of the study involved conditions and problems in quality assurance for basic education institutions, and the conditions of management system for quality assurance for basic education institutions using results-based management. The group of institution's administrators and teachers who were responsible for internal quality assurance had their opinions towards the conditions of quality assurance management in a good level and set up their institution's vision clearly, and this contains the most value. Also, they announced their institution's educational standard to public which contains the lowest value. Moreover, problems in quality assurance implementation in institutions demonstrated that institution's administrators and teachers responsible for internal quality assurance had their opinions towards problems in quality assurance implementation for institutions at the low level. Also, the conducting of annual report in internal quality assurance evaluation contained the lowest value.

3) According to the result of drafting in creating a model of quality assurance for basic education institutions using results-based management, the study was created into a 2-dimension structure: 3.1) Institution's Quality Assurance Dimension; and 3.2) Outcome Focus Management Dimension with the composition of quality assurance in institution and continuing process. There are five steps to do this:

1) management of educational quality development

2) management of risk control

3) follow-up of educational quality check

4) evaluation of educational quality

5) continuing maintenance, improvement and development of educational quality with outcome focus dimension which contains five important steps: 1) organization's strategic planning; 2) key index details set-up for the implementation; 3) measurement and implementation check; 4) use of effective data; and 5) reward giving.

Section 2: Creating and developing a model of quality assurance for basic education institutions using results-based management

According to the result of conditions and problems regarding quality assurance in basic education institutions in Section 1, the draft of model of quality assurance for basic education institutions using results-based management had a 2-dimension structure: 1) institution's quality assurance dimension; and 2) Outcome-focus management dimension. There are eight steps which can be described in Figure 1 below:
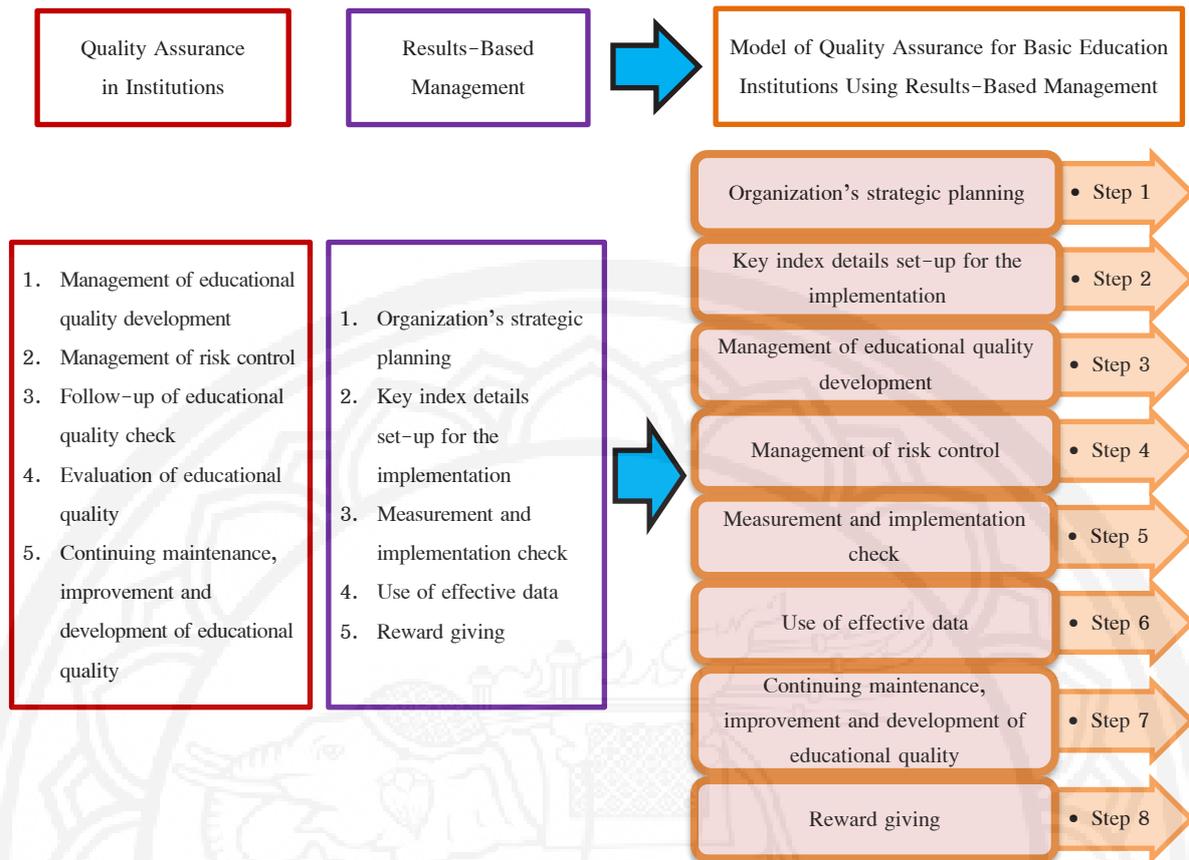
Figure 1 A model of quality assurance for basic education institutions using results-based management (Pre-Model)

The draft of model of quality assurance for basic education institutions using results-based management was proposed to 21 experts. It was found in the quality evaluation of model as follows:

1) In terms of appropriateness aspect of model structure of quality assurance for basic education institutions using results-based management, it was found that it is appropriate in the most level. Experts also have their opinions on every point the same way; and

2) The result of quality check for the model of quality assurance for basic education institutions using results-based management shows the good level to the most level on appropriateness, possibility, clarity, and easiness to use in brining quality assurance model to apply for their management. However, the experts had their opinions differently on the reward giving in Sub-composition 3: Extra allowance

3) Regarding the result of quality check for model of quality assurance for basic education institutions using results-based management from experts' suggestions, it was found that for the key index details set-up for the implementation, details of cost should be added. For the bringing of result from the implementation, activities should be added in the implementation, the use of accurate data, the speed and update, the perfection as well as the compaction and clarity are related and go along with each other. For reward giving, there should be a certificate, or a diploma given to honour receivers as demonstrated in Figure 2 below:

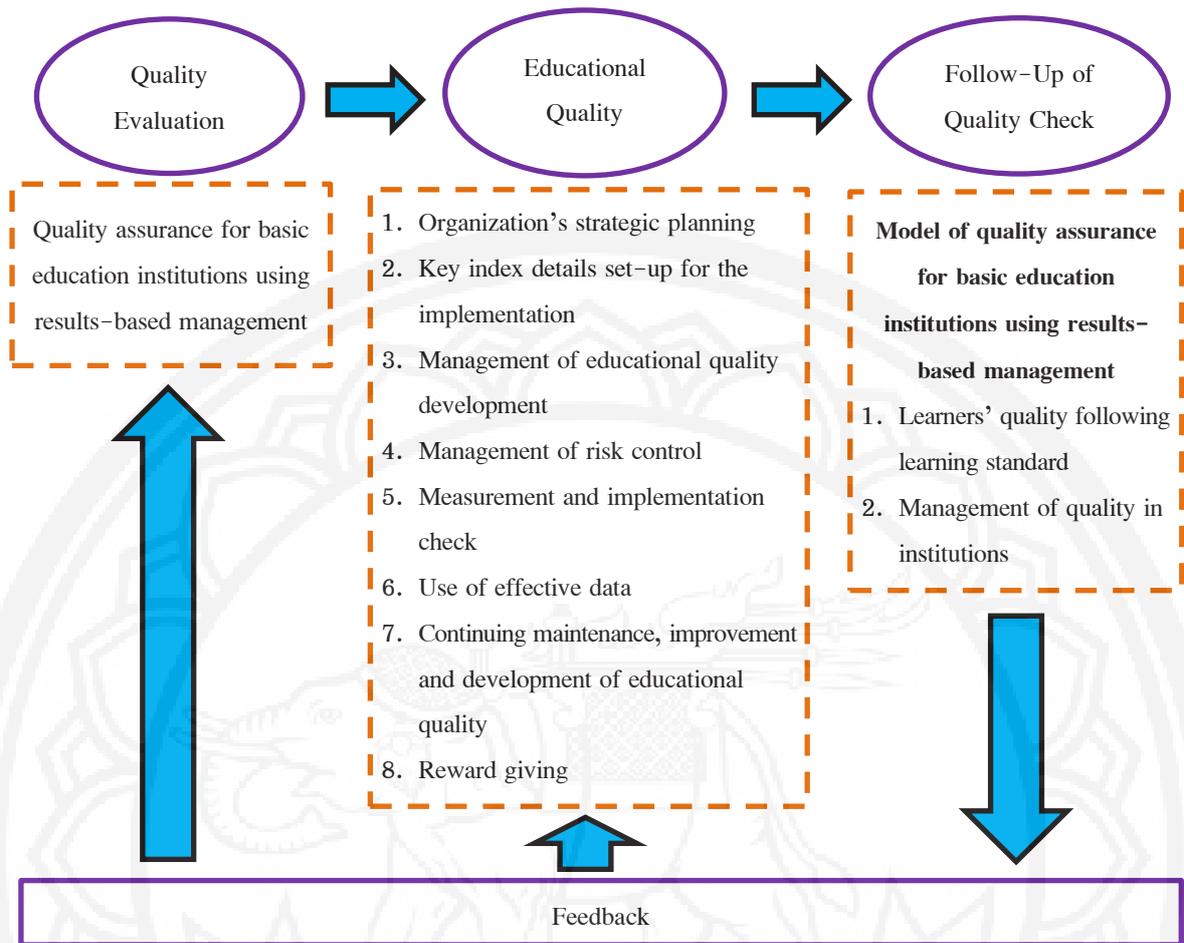**Model of quality assurance for basic education institutions using results-based management**

Figure 2 Model of quality assurance for basic education institutions using results-based management (Post-Model)

Section 3: Institution evaluation following a model of quality assurance for basic education institutions using results-based management

From the research, the findings are as follows:

1) The evaluation result following a model structure of quality assurance for basic education institutions using results-based management demonstrates that overall institution group had the best practice and quality for their implementation following a model of quality assurance for basic education institutions using results-based management in the good level. Moreover, for Composition 3: Management of educational quality development had the most value whereas Composition 8: Reward giving was in the lowest level which did not pass the evaluation for the external evaluation, but they still had some quality following a model structure of quality assurance for basic education institutions using results-based management. Their overall picture was in a good level. In addition, for Composition 3: Management of educational quality development was in the most level, and Composition 2: Key index details set-up for implementation was in the lowest level

2) The two aspects of evaluation result according to its reflections are below.

2.1) Reflection on learners' quality according to learning standard: Group of institutions with best practice had their reflection on learners' quality according to learning standard overall in the good level. Also, students' learning evaluation had the most value of level, and students' sharing and supporting in their learning had the

lowest value of level. Group of institutions which did not pass the evaluation for the external evaluation had their reflection on learner's quality according to learning standard overall in the good level. Moreover, the building of confidence for students had the most value as the planning and designing for learning with experiences for students had the lowest value

2.2) Reflection on educational quality in institution management: Group of institutions with best practice on management of educational quality overall was in the good level. Moreover, standard of ethics and professionals had the most value while standard of community in taking responsibility and support for students and professionals was in the lowest value. Group of institutions which did not pass the evaluation for the external evaluation had their reflection on management of educational quality; overall was in the good level. Teachers and professionals for community were in the most value of level. Shareholders and cultural response were in the lowest value of level

3) Problems and obstacles in institution evaluation following a model of quality assurance for basic education institutions using results-based management: Administrators realised and acknowledged the importance of internal quality assurance. The implementation according to different policies was adjusted too often. It concentrated on work rather than teaching, and this resulted in the unsuccessful teaching and learning activities. In addition, the establishment of educational quality in learning was mostly run by teachers who were teaching according to learning plan. However, in many schools, teachers did not teach the subject that they were expertise. This case occurred differently depending on different contexts of each institution. Some schools did not have enough teachers and some assigned their teachers to teach what was not their major. Despite this fact, teachers understood process of quality assurance in institutions' patterns, especially for educational quality in learning. For organization's strategic planning in most of institutions, the responsibility belonged to directors and heads of department only. Institution committees only understood part of the work due to they did not engage in every activity. The measurement and evaluation of quality were checked by outsiders who might not know the real context and quality because they did not share the practice with insiders.

Conclusion

According to conditions and problems in quality assurance for basic education institutions, there are principles of quality assurance for basic education institutions using results-based management as well as concepts, theories, methods, and steps of internal quality assurance which is a continuing process. In addition, there are quality evaluation, quality development, as well as quality check. The research results can be categorised according to the concept structure with quality evaluation, for instance:

- evaluation of a model of quality assurance for basic education institutions using results-based management
- quality development such as organization's strategic planning, key index details set-up for implementation
- management of educational quality development, management of risk control
- measurement and follow-up of quality check
- use of effective data
- continuing maintenance
- improvement and development of educational quality
- reward giving
- quality check (i.e. the follow-up and check on learners' quality following learning standard and quality of institution management)

According to the result of conditions and problems in quality assurance for basic education institutions, it was found that, for management of conditions in quality assurance for basic education institutions using results-based management, the group of institution administrators and responsible teachers have their opinions towards management conditions in quality assurance for basic education institutions using results-based management; the overall is in the good level. There is clearly a declaration of institution's vision which has the most value, as well as a management of educational standard to public which has the lowest value. Regarding problems in the implementation of quality assurance for basic education institutions, the group of institution administrators and responsible teachers for quality assurance have their opinions towards problems in quality assurance implementation; the overall is in the low level.

The building of model of quality assurance for basic education institutions using results-based management from the result of quality check of this model has its appropriateness in the aspect of model structure of quality assurance for basic education institutions using results-based management. The model structure in the aspect of quality assurance methods in basic education institutions using results-based management are: 1) Organizational Planning; 2) Determining the details of performance indicators; 3) Quality Management Development; 4) Risk Management; 5) Measurement and Quality Monitoring; 6) Effective use of information; 7) Maintain and improve the quality of education continuously; and 8) Reward. The evaluation result is appropriate and in the good level. The experts also have their opinions the same way in every point. When considering the quality check of model of quality assurance for basic education institutions using results-based management in the effectiveness aspect of appropriateness, possibility, clarity, easiness to use and taking quality assurance in institutions in basic education level using results-based management to be used in management, it was found that they are at the good to the best level. However, experts have their opinions differently on the aspect of reward giving in terms of giving extra allowance. After considering the quality check of model of quality assurance for basic education institutions using results-based management from experts' suggestions, their opinions are listed as the followings: 1) There should be an adding of cost detail in the key index details set-up for implementation; 2) There should be activities added to the taking of result for implementation with accurate, fast, up-to-date, complete, compact and clear data. These points should go along with each other; and 3) There should be an adding of certificate, and diploma giving for the composition in reward giving in order to honour receivers.

For the evaluation of institutions following a model of quality assurance for basic education institutions using results-based management, the evaluation result according to a model structure of quality assurance for basic education institutions using results-based management that group of institutions which has the best practice and which does not pass the evaluation for the external evaluation, has their quality in the implementation following a model structure of quality assurance for basic education institutions using results-based management; the overall is in the good level. For Composition 3: Management of educational quality has the highest value. The group of institutions which has the best practice gains Composition 8: Reward giving which has the lowest value. The group of institutions which does not pass the evaluation for the external evaluation acquires Composition 2: Key index details set-up for implementation which has the lowest value and the evaluation result according to its reflection in two dimensions. For Dimension 1-Reflection result on learner's quality following learning standard, both groups of institutions have their reflection on learner's quality following learning standard, overall is in the good level. For Dimension 2-Reflection result on educational quality in institution's management, both groups have their reflection on educational quality in institution's management; overall is in the good level. Moreover, regarding

problems and obstacles in the evaluation of institutions following a model of quality assurance for basic education institutions using results-based management, administrators have realised and acknowledged the importance of internal quality assurance which has been running smoothly. The implementation on work rather than teaching is has resulted in the unsuccessful of teaching and learning activities. In addition, the building of educational quality in learning is mostly run by teachers who are teaching according to learning plan. However, in many schools, teachers do not teach the subject that they are majoring in. This case has occurred differently depending on different contexts of each institution. Some schools do not have enough teachers and some assign their teachers to teach what they are not majoring in. Despite this fact, teachers understand process of quality assurance in institutions' model especially for educational quality in learning. For organization's strategic planning, in most of institutions, the responsibility belongs to directors and heads of department only. Institution committees only understand part of the work due to they do not engage with every activity. The measurement and evaluation of quality check by outsiders. They might not know real context and quality because they do not share the practice with insiders.

Discussions

From the conditions and problems in quality assurance for basic education institutions, there are principles of quality assurance for basic education institutions using results-based management. Also, there are concepts, theories, and continuing process methods of internal quality assurance as well as quality evaluation, quality development, and quality check. These go along with the concept that educational quality has its process related to three steps: (1) internal quality evaluation in order to take the result to be used in the developmental plan; (2) follow-up; and (3) educational quality check which is the following up and checking process for the updates of implementation in accordance with the institution's developmental plan (Bureau of Education Testing, 2011b, pp. 11-12; Eakkata, 2007, pp. 18-20; Lekawattana, 2008, pp. 18-19). The information and technology is needed to show quality development trend of learner's quality and quality of institution's management. The educational quality development is a developmental process that suits national educational standard by having educational standard's system and structure set-up. The planning and the implementation must be continued under the responsibility of everybody.

According to conditions and problems in quality assurance for basic education institutions, it was found that conditions of management in quality assurance for basic education institutions using results-based management, group of institution administrators and responsible teachers have their opinions toward this condition overall in the good level. There is a clear declaration of institution's vision which is in the most level. Also, there is a clear announcement of educational standard of the institution to public which has the lowest value. This goes along with the research in the study of implementation and its result in system development of internal quality assurance for responding to external evaluation of institutions in basic education level situated in the lower Northern region of Suebkham, Chumjanjira and Yoonui (2006). It was found that conditions in internal quality assurance for implementation; the overall is in the good level. Most problems concerning implementation of quality assurance in institutions show that the group of administrators and responsible teachers in charge of internal quality assurance has their opinions toward concerning implementation of quality assurance in institutions; the overall is in the low level. This goes along with the research of Rhimthet (2007) in the study of conditions and problems for the implementation of internal quality assurance following PDCA under the Office of Education Service Area 1, Phichit, the research found problems in the implementation of internal quality assurance following PDCA; the

overall is in the low level. Furthermore, in regarding to institution's developmental educational management plan according to educational standard of each institution, the overall is in the highest level. The publishing of annual report proposed to the head organization and other related organizations to public in order to target to quality development and reach educational standard as well as to response to external quality evaluation (Ministry of Education, 2002, pp. 24-25). According to conditions of quality assurance management in institutions using results-based management which has its implementation average value of 4.49 and lower, the draft of model of quality assurance for basic education institutions using results-based management was used for development, and its implementation problems average value is at 1.50. Also, the draft was developed into internal quality assurance management using results-based management and guidelines for internal quality assurance implementation which goes along with Nunkaew (2009)' statement that what creates the most problem in the implementation of quality assurance in institutions in basic education is the management of administrative system. It also suits Motam (2009)' statement that level of quality assurance implementation in institutions must find developmental guidelines in the management of administrative system and information technology.

A model of quality assurance for basic education institutions using results-based management and its structure consist of eight steps: Step 1 – Organization's strategic planning; Step 2 – Key index details set-up for implementation; Step 3 – Educational quality development; Step 4 – Risk control and management; Step 5 – Measurement and follow-up of quality check; Step 6 – Use of effective data; Step 7 – Continuing maintenance, improvement of educational quality development; and Step 8 – Reward giving. These steps go along with the quality assurance system of University of Cambridge (University of Cambridge, 2016) that has its educational guidelines and policy with local quality assurance system, external quality system, and learning and teaching strategies focusing on the importance of teaching and learning. Moreover, Goldsmiths University of London (Goldsmiths University of London, n.d.) has its academic standard code with quality and can build up and promote its academic purposes. In addition, educational quality system in Finland provided by Finnish National Agency for Education (2015) describes that quality assurance in Finland consists of quality management from VET (Vocational Education and Training) and external evaluation. It focuses on the responsibility of effective teaching and learning as well as educational quality. Moreover, in Hong Kong, there is a quality assurance system in this Special Administrative Region (Education Bureau, The Government of the Hong Kong Special Administrative Region, 2013) which has framed quality assurance into two parts: School Self Education (SSE) and Quality Re-check (QR). Last but not least, educational quality assurance system in New Zealand (New Zealand Qualifications Authority (NZQA), n.d.) has NZQA organization to do the integrated quality assurance implementation consisting of self-evaluation in every step, qualified maintenance, external evaluation and review as well as risk management.

The evaluation of institutions following a model of quality assurance for basic education institutions using results-based management has its result of quality assurance model structure of quality assurance for basic education institutions using results-based management. The group of institutions which has best practice and which does not pass the evaluation for the external evaluation are qualified in the implementation of quality assurance model structure for basic education institutions using results-based management. The overall is in the good level. For Composition 3: Management of educational quality development has the most value. This is due to the fact that educational quality development plan is a document showing projects, activities and processes in advance by having stakeholders to share their ideas and make decisions thoughtfully. This is considered to be some leading tools to respond to the organization's goal, vision and mission, as well as to achieve it within the implementation

timeframe clearly. This plan has its developmental duration focusing on quality following educational standard of each institution which is suitable for institution's context, and it will reflect strategic planning process in developing and improving for moving forward to the goal according to educational standard set. The group of institutions with best practice has Composition 8: Reward giving at the lowest level. This might be because the reward giving can be in many ways such as positive compliments, special reward, extra budget, certificate, diploma and honouring. However, some of reward giving cannot be in action; for example, the giving of special reward is similar to bribing or the giving of extra budget which cannot be done due to the implementation of institution's budget. The group of institutions which does not pass the evaluation for the external evaluation has Composition 2: Key index details set-up for implementation at the lowest level. This might be because the key index details set-up for implementation has all of quantity index, quality index, time index and place index which are the essential goals, as well as the key index set-up in cost which is described in details might not cover every aspect. Also, there are two aspects of reflection in the evaluation result found. Aspect 2: Reflection concerning learner's quality following learning standard can be described as follows: the group of institutions with best practice and the group of institutions failing the evaluation for the external evaluation have their reflection on educational quality institution's management overall at the good level. This might be due to the compliance of their mission, vision, and main value with morality and professional ethics, cultural response to the curriculum standard of teaching-learning and evaluation, community standard in taking care and supporting students as well as the professional of school staff for the community.

Finally, according to the research result, it is believed that a model of quality assurance for basic education institutions using results-based management can help solving problems of learner's quality following learning standard and quality of institution's management by having ever step according to the model of quality assurance for basic education institutions using results-based management.

Suggestions

1) According to the study result of conditions and problems in quality assurance for basic education institutions, it was found that quality assurance in institutions using results-based management stated in the announcement of institution's educational standard to public has the lowest value. Therefore, institutions should promote the implementation according to the announcement of educational standard to public to be acknowledged. Also, regarding problems in the quality assurance implementation in institutions for making developmental plan in educational management to reach institution's educational standard. Thus, head department should promote and support institutions to have this developmental plan continually.

2) The implementation of development following a model of quality assurance for basic education institutions using results-based management should be open for every staff engaging in this matter because they would see the importance of being a co-host. This is considered to be a quality development following each institution's educational standard.

3) The measurement and follow-up of quality check should be conducted by internal staff or related staff continually at least two aspects: 1) aspect of learner's quality following learning standard; and 2) aspect of institution's management. Doing it this way, internal staff or related staff would know each implementation process better.

Acknowledgement

References

Bureau of Education Testing. (n.d.). *Guidelines for Support Applying Evaluation Results for Development of Internal Quality Assurance System of Educational Institutions*. Bangkok: The Agricultural Co-operative Federation of Thailand.

Bureau of Education Testing. (2011a). *Management and Information Management in Schools under the Ministerial Regulation on the Quality Assurance System of Educational Institutions and Regulations 2010*. Bangkok: The Agricultural Co-operative Federation of Thailand.

Bureau of Education Testing. (2011b). *The Development of Internal Quality Assurance System of Educational Institutions under the Ministerial Regulation on the Quality Assurance System of Educational Institutions and Regulations 2010*. Bangkok: The Agricultural Co-operative Federation of Thailand.

Bureau of Education Testing. (2013a). *Operating Development of Internal Quality Assurance System of Educational Institutions under the Office of the Basic Education Commission*. Bangkok: The Agricultural Co-operative Federation of Thailand.

Bureau of Education Testing. (2013b). *Summary of Third-Round External Quality Assessment (2011-2015) of Schools under the Office of the Basic Education Commission, 2011*. Bangkok: Prikwarn Graphic.

Chaichana, S. (2007). *The Internal Quality Assurance in the Small Schools under the Office of Khon Kaen Educational Service Area 4*. (Master's independent study). Khonkaen University, Khonkaen.

Eakkata, W. (2007). *Managing Information System for Internal Quality Assurance of Small Education Institutions, Chiang Mai Educational Service Area 3*. (Master's independent study). Chiang Mai University, Chiang Mai.

Education Bureau, The Government of the Hong Kong Special Administrative Region. (2013). *Quality Assurance Framework*. Retrieved from http://www.edb.gov.hk/en/edu-system/preprimary-kindergarten/quality-assurance -framework/index.html

Finnish National Agency for Education. (2015). *Quality Assurance National Reference Point: Quality Assurance and Evaluation.* Retrieved from http://www.oph.fi/english/education_development/quality_assurance_and_evaluation

Goldsmiths University of London. (n.d.). *A Brief Guide to Quality Assurance.* Retrieved from http://www.gold.ac.uk/quality/quality-assurance/

Jantakun, C. (2007). *The Practice on Internal Educational Assurance: A Case Study of Ban Khon Deang School in Loei Educational Service Office Area 1.* (Master's independent study). Loei Rajabhat University, Loei.

Lekawattana, T. (2008). *A Development of an Internal Quality Assurance Model for Basic Educational Schools Using the Benchmarking Approach.* (Doctoral dissertation). Naresuan University, Phitsanulok.

Ministry of Education. (2002). *Internal Quality Assurance Internal Quality Assurance System Basic Education Level: Framework and Implementation Framework.* Bangkok: Kurusapa Printing Ladphrao.

Motam, U. (2009). *The Relationship between Management and Effectiveness of Internal Quality Assurance within the Schools Providing Key Stages 1-3 under the Offices of Nakhon Phanom Educational Service Areas.* (Master's thesis). Nakhon Phanom University, Nakhon Phanom.

New Zealand Qualifications Authority (NZQA). (n.d.). *NZQA's Quality Assurance System for Tertiary Education Organisations.* Retrieved from http://www.nzqa.govt.nz/providers-partners/qa-system-for-teos/

Nunkaew, K. (2009). *The Management of Basic Educational Sites' Internal Quality Assurance in Phu Sang District, Phayao Province.* (Master's independent study). Chiang Rai Rajabhat University, Chiang Rai.

Office of the Public Sector Development Commission. (2011). *Public Administration Quality Improvement FY 2011.* Bangkok: Institute for Good Governance Promotion, Office of the Public Sector Development Commission.

Rhimthet, W. (2007). *A Study of State and Problem on Internal Quality Assurance of school in Phichit Educational Service Area offce1.* (Master's thesis). Phetchabun Rajabhat University, Phetchabun.

Suebkham, J., Chumjanjira, P., & Yoonui, S. (2006). *A Study of Implementation and Performance of Internal Quality Assurance System for External Quality Assessment of Basic Education Institutions in the Lower North.* (Master's independent study). Naresuan University, Phitsanulok.

Suechawakornkul, C. (2007). *Internal Quality Assurance Performance as a Basis for the Second External Evaluation of Pong Laung Wittaya Ratchamongklapisek School, Lampang Province.* (Master's independent study). Chiang Mai University, Chiang Mai.

Sukhothai Primary Education Service Area Office 2. (2013). *Report on the Results of Internal Quality Assurance Evaluation at Educational Service Area of Academic Year 2013.* Sukhothai: Supervision, Monitoring and Evaluation for Educational Provision Group.

United Nations Development Group. (2011). *Results-Based Management Handbook: Harmonizing RBM Concepts and Approaches for Improved Development Results at Country Level.* Retrieved from https://www.undg. org/wp-content/uploads/2016/10/UNDG-RBM-Handbook-2012.pdf

University of Cambridge. (2016). *Educational and Student Policy.* Retrieved from http://www.educationalpolicy. admin.cam.ac.uk/quality-assurance/