

## **Chapter 5**

### **Conclusion, Discussion and Suggestion**

This research is a research and development with three objectives which are (1) to develop the standards and quality indicators for educational management in community college, (2) to create and develop the model for educational quality assurance in the community college, and (3) to study the test/experiment of educational quality evaluation in the community college. The methodology of the research is divided into three steps. In Step 1 the researcher develops standards and quality indicators for quality indicators for educational management in the community college. In Step 2 the researcher constructs and develops the educational quality assurance in the community college. In Step 3 the researcher studies the result of educational quality evaluation in the community college. The details of the implementation are given as the followings.

Step 1 develops standards and quality indicators for educational management in the community college through the synthesis of known standards and quality indicators for educational management. From materials and related literature in domestic and overseas, the researcher checks the appropriate standards and indicators for application. The sample group consists of the administrator teams and heads of educational quality assurance in the community colleges with a total of 133 people. The tools used for data gathering are the recording form for the synthesis of standard and indicators and the questionnaire on the checking/auditing the appropriateness of the standards and indicators. The data is collected by synthesizing the data in the record form and then asking the questionnaire to be sent back through post from the samples. The statistics used for the data analysis is frequency value, percentage and the Content Analysis. After the synthesis of standards and indicators, to get more reliability the researcher calculates the construct validity of the standards and indicators. The educational quality assurance in the community college is usually done through the check on the appropriateness of the Measurement Model or the tests of methods with the empirical data. The sample group consists of some 440 personnel of the community college. The tools used are the questionnaire for checking the appropriateness of the standard and indicators for educational quality assurance in the community college. It has a reliability value equal to 0.916, and the data is gathered by returning the set of questionnaire by mail by the samples. For the statistic used for the data analysis is finding Means, standard deviation (SD), Exploratory Factor Analysis and Confirmatory Factor Analysis.

In Step 2 the researcher creates and develops a model for educational quality assurance for the community college which has been built from the standard and the indicators found in Step 1. The developed model will be using demographic data in construction of the model after synthesis the model for educational quality assurance. Also utilized are the secondary data, related literature and the research work of educational organization, and the reports of the internal quality assurance in 19 community colleges. Afterwards the researcher drafts a model. The sample group consists of heads of quality assurance (a total of eight people). The tools used for data gathering are the recorded form of brainstorming. The data is gathered by the researcher. The data analysis is done through the content analysis method. After that the calculation for model's appropriateness and feasibility for application is done by 24 experts. The main tool used for data gathering is the set of questionnaire on the attitude towards the model. The researcher collects the data directly through the questionnaire that are sent back to the researcher through post.

In Step 3 the researcher studies the test of the developed means to evaluate the educational quality of the community college. The model is implemented as part of the experiment in a community college. The administration board and personnel of the community college are composed of chairpersons of the community college, directors, instructors, special/hired-in instructors, students, people and personnel. The tools used for data collection are the field note and the questionnaire on the result of the test on the evaluation of educational quality in the community college, and the data collection is accomplished through the evaluation process of internal educational quality. The data collection involves checking the documents/evidence and conducting interviews and observation by the evaluator team and a research assistant who records field notes, voices and photos. For the statistic used for the data analysis are frequency distribution, percentage, Mean, standard deviation (SD), and Content Analysis.

## **Research findings**

### **1. The result of developing a set of standards and quality indicators for the educational management in the community college**

#### **1.1 Standards and quality indicators for the educational management in the community college**

This research can develop the standards and indicators which have the content validity, construct validity, and level of appropriateness to be applied in the evaluation of the educational quality in the community college. The set of standards and indicators is composed of 6 standards and 34 indicators as the followings.

Standard 1, on the plan for educational management and academic development consisting of 6 indicators, are (1) participation of relevant people in identifying philosophy, objectives, strategy, identification and implementation plan, (2) the strategic plan to be the annual implementation plan, (3) the success based on the indicators of the implementation plan that consists of the missions, (4) the system for the development and curriculum administration by emphasizing the need of community and participation, (5) the system for developing the instructional management by emphasizing student-centered principles, and (6) the success of developing the learners' potential before entering the associate degree level.

Standard 2, on the production of graduates to society consisting of 7 indicators, are (1) quality of instructors, (2) the graduates who passed the standard criteria in the course of vocational certificates, high vocational certificate and associate degree with the GPA of 2.50 or beyond, (3) the graduates can apply their knowledge and experience from the community college to perform their occupation, (4) development of their work and their community, (4) satisfaction of the manufacturers or employers of the graduates towards the graduates from the community colleges, (5) training processes which create occupations for the trainees, (6) academic service process that responds to the need of the community, and (7) successful trainings and academic service to society.

Standard 3 on student development consists of three indicators which are (1) the system and student service, (2) the process to promote the students' affairs and (3) successful improvement for student's quality to needs of society.

Standard 4 on the research has three indicators which are (1) the research to develop the instructional management and the research of the institution, (2) the research to develop the localities, and (3) a system for knowledge management from the research findings or the instructional innovation.

Standard 5 on maintenance of religion, arts and culture has three indicators which are (1) the process to maintain religion, arts, and culture, (2) the integration of religion, arts, and culture and the teaching and learning and student's activities, and (3) successful maintenance of religion, arts, and culture.

Standard 6 on the management administration have 12 indicators which are (1) success on administration under the supervision of the community

college council, (2) success on academic administration under the supervision of the community college council, (3) leadership of the administrators of the community college, (4) the development of institution to the learning institution, (5) the administration of the educational unit, (6) success on developing the information technology system in the administration, (7) the administration of personnel with participation and happiness in working, (8) administration of risk, (9) financial and budget system, (10) effectiveness and maximization of expenditure, (11) system and mechanism for internal quality assurance, and (12) success on internal educational quality assurance.

### **1.2 Result of construct validity measurement**

The result of measuring the construct validity reveals that every indicator has construct validity. The indicators in each standard have Factor Loading which are the indicator on the standards on educational management plan and academic development (the range between 0.525 and 0.847). The indicators on the standard on producing graduates to society have a range between 0.515 and 0.729. The indicators on the standards on the development of students have a range between 0.721 and 0.816. The indicators on the standards on research have a range between 0.796 and 0.822. The indicators on the standard on maintenance of religion, arts and culture have a range between 0.760 and 0.785, and the indicators on the standard on administration have a range between 0.520 and 0.801.

### **1.3 Result on checking/auditing appropriateness**

The result of checking/auditing appropriateness reveals that every indicator has appropriateness to be applied for evaluation. The indicator in each standard has the average appropriateness. The indicators on the standard on the plan for educational management and academic development have the range between 3.545 and 3.786. The indicators on the standard on producing the graduates to the society have the range between 3.643 and 3.861. The indicators on the standard on student's development are ranging between 3.536 and 3.586. The indicators on the standard on research have a range from 3.139 to 3.159. The indicators on the standard on maintenance of religion, arts and culture range from 3.620 to 3.655, and indicators in the standard on administration range between 3.293 and 3.616.

### **1.4 The result of studying the appropriateness of the model for measuring the quality of educational management of the community college with the empirical data.**

1.4.1 The analysis result is to construct the factor score, classified according to the 6 sub-models which are the model for the standard (1) on educational management and academic development, (2) on producing graduates to society, (3) on student's development, (4) on research, (5) on maintenance religion, art and culture,



and (6) on the administration. The analysis reveals that every model has good correlation with the empirical data which is derived from the sample group. The Chi-square values of these 6 sub-models are equal to 4.70, 14.23, 0.00, 0.00, 0.00, and 22.48, respectively. The probability values (P) for these sub-models are equal to 0.19, 0.08, 1.00, 1.00, 1.00, and 0.31 with the Goodness-of-fit Indexes (GFI) equal to 1.00, 0.99, 1.00, 1.00, 1.00, and 0.99, respectively. It can be concluded that the set of 6 sub-models which are the LISREL of indicators for the educational quality assurance in the community college can be the model for assumption in this research. The set has appropriateness and consistence with the empirical data very well. In addition, the analysis of the Factor Loading of the 34 indicators reveals that the Factor Loading in every factor has high statistical significance. It reveals that all indicators are important indicator for the educational quality assurance in the community college in each standard.

1.4.2 The analysis result to develop the total/whole indicators on the educational quality assurance in the community college reveals that the model is highly consistent with the empirical data from the sample group. When considered from Chi-square that is equal to 362.49 and the probability value (P) equal to 0.51, it means that the Chi-square is not different from zero. This score means that the model for measuring which is constructed by research as the assumption of the research is appropriate with the empirical data. The Goodness-of-fit Index (GFI) is equal to 0.95. It can be concluded that the measuring model is LISREL model of the quality indicator for educational management in the community college. This is the proper model for model of assumption in this research. It has high appropriateness with the empirical data. In addition, the analysis of factor loading (b) of 6 standards reveals that the factor loading scores of the indicators range between 0.64 and 1.00, and every value has statistical significance at  $P < 0.01$ . This shows that every standard stands as important factor for the quality of educational management in the community college. The standards can be prioritized chronologically order of the standard as the followings. The first rank is the standard on the plan for educational management and academic development, followed by the second rank on producing graduates and academic service to society. The third rank is maintenance of religion, arts and culture, and the fourth rank is on administration. The fifth and sixth ranks are on student development and on research, respectively.

## **2. The result of constructing and developing the quality model for quality assurance in the community college**

The results of construction and development of the model for educational quality assurance in the community college, the appropriateness, and feasibility for application compose of target for educational quality assurance, standard and indicator for educational quality assurance in the community college, the

implementation of educational quality assurance in the community college on Quality Control, Quality Audit and Quality Assessment can be summarized as the followings.

### **2.1 Target for educational quality assurance**

The target for educational quality assurance is to make every personnel aware and see the importance of educational quality assurance by participating in improving and developing the educational quality by controlling quality, auditing quality and evaluating educational quality in the community college to construct reliability to society in implementation according to the mission of the community college which lead to the educational quality standard and acceptance by society.

### **2.2 Standards and indicators for educational quality assurance in the community college**

The standards and quality indicators for educational management in the community college are composed of Standard 1 (the educational management plan and academic development with 6 indicators), Standard 2 (producing graduates to society with 7 indicators), Standard 3 (on student's development with 3 indicators), Standard 4 (on research with 3 indicators), Standard 5 (on maintenance of religion, arts and culture with 3 indicators), and Standard 6 (on administration with 12 indicators); a total of 34 indicators.

### **2.3 Implementation for educational quality assurance in the community college**

The implementation of the educational quality assurance in the community college is on Quality Control, Quality Audit, and Quality Assessment as the followings.

2.3.1 On Quality Control is the process on supervising, monitoring and following-up the educational quality of the community college and set consistency between these activities and standard and quality indicators for educational management as well as the quality development plan of the college. The implementation are (1) to appoint the committee board for the educational quality assurance, (2) to develop personnel to have knowledge, understanding and positive attitude toward educational quality assurance, (3) to participate in making the implementation plan to achieve the standard and indicator, and (4) to launch implementation according to the plan.

2.3.2 Quality Audit is the process to make inquiry on evidence, trace, checking/auditing from the quality control process and the self-assessment report to improve the educational quality of the community college to be consistent with the educational standards. The implementation is done through the following phase: (1) appointing the committee board to check/audit the educational quality, (2) checking the trace and evidence of implementation, (3) auditing and supervising the administrators/ heads of departments or units, and (4) producing self-assessment reports, working group, or educational unit.

2.3.3 Quality Assessment is the process for judging the educational quality of the community college, i.e. how much the implementation responds to the criteria and identified standards. The committee board will implement the quality evaluation. The implementation is done as what follows: (1) appoint the committee board to evaluate the educational quality, (2) check annual report of the community college, (3) check the method for quality evaluation, (4) set criteria for quality evaluation, and (5) make judging over the result of quality evaluation. The details are given as the followings.

1) On appointing the committee board to evaluate the educational quality in the community college, the committee sets composition of 3-member evaluator teams. The evaluator team includes the evaluators who have the name list registered as the educational quality evaluators under the Office of the Higher Education Commission (OHEC). The evaluators have experience on educational management of the community college or have research work on the community college, and the personnel from other community colleges are competent and experienced on the educational quality evaluation. In addition, the evaluators must have knowledge and good understanding on the context and mission of the educational management in the community college. The evaluators have roles and responsibilities to pay the visit to the community college to create understanding on educational quality evaluation. They also gather data and check evidence to know the real condition of implementation, to evaluate the educational quality based on the standard and indicators, to give ideas and suggestion for the educational management, and to produce annual report in which the internal educational quality evaluation reports are included.

2) The annual report of the college has the contents for writing up report such as the general background of the community college, philosophy, vision, mission, objectives and work plan of the college, the result of evaluation based on the standard and indicator, conclusion/summary of evaluation result of the standard on each aspect, and appendix and name list of the producer team of annual report.

3) The method for quality evaluation can be classified into three phases as what follows.

Before the visit. The community college has preparation for internal quality assurance such as preparing the annual report for the evaluator team for at least two week. The college takes care of the preparation on personnel to understand about the educational quality evaluation, preparation of the venue, and preparation for cooperation with the evaluator team. The evaluator team members will prepare themselves before the visit. The chairperson invites the evaluator team to identify the implementation guideline and assigns the work for the evaluator to study the annual report of the community report (or Self-Assessment Report) to analyze and draw conclusion on the issues to consider/judge in making plan for evaluation

together according to the standard and indicator. The evaluators then check the date, time and set appointments for three days.

During the visit. The community college opens the opportunity for the relevant personnel to listen to the chairperson of the evaluator team to identify the objectives of quality evaluation and the evaluation method, including the criteria and the judgment of evaluation result for the personnel who perform the work regularly. However the preparation should be made ready to set interviews with the evaluator team. And the last day of evaluation, the relevant people are allowed to listen to the evaluation result, the feedback data to reflect the real condition of the community college, the suggestion, and the development guideline from the evaluator team. Then everybody exchanges ideas and suggestions. On the first day of implementation for the evaluator team, the chairperson of the evaluator team identifies objectives of quality evaluation, evaluation methods, and the criteria for judgment of the evaluation result to the service user team, personnel and relevant people to the community college. This task includes identification of the evaluation according to the implementation table within three days and solicitation for cooperation from community college personnel on materials/documents, evidence and interviews. The evaluator team members implement the evaluation based on the standards and assigned indicators to confirm the real condition, launching the data gathering with several methods. The evaluators present the findings or gathered data to discuss together to analyze the findings/results. Then they present the findings of evaluation verbally to exchange ideas with administrator team, personnel and relevant people and give opportunity for the college to clarify the unclear or uncovered issues. They draw conclusions from the evaluation findings.

After the visit to the community college by the administration team who bring the evaluation result and the suggestion from the evaluation committee to the meeting, the team sets a development plan or improvement for the implementation based on the mission concretely. The plan may be made into the implementation plan for revision based on the suggestions. The plan's strength should be reinforced as good sample for other community college. The administrators create moral support for the personnel-led implementation, and the feedback data should be given to the evaluators to implement the improvement of the educational quality evaluation in the community college. The feedback data is sent to the evaluator team members that they can also improve or revise the plan. The administrator presents the report on the result of educational quality evaluation in the community college to Bureau of Community College Administration and then publicizes the result to the public. The evaluator team members participate in improving the evaluation result/findings after oral presentation. Then the team prepares a report for the community college in two weeks and sends it to the community college to check the evaluation result. If evaluation result is inaccurate as the real condition or the presentation of the evaluation result is



not precise, the administrator can prepare a protest in 15 days. If no protest is offered, it means that the evaluation findings are accepted as correct.

4) The criteria for educational quality evaluation in the community college can be classified into two parts. The first part is the evaluation criteria of each indicator and the second part is the evaluation criteria of each standard which is composed of the following parts. Standard number 1 on the educational management plan and academic development has 6 indicators in 20 scores. Standard number 2 on producing graduates and academic service to society have 7 indicators in 25 scores. Standard 3 on students' development have 3 indicators in 15 scores and Standard 4 on research has 3 indicators in 10 scores. Standard 5 on maintenance of religion, arts and culture have 3 indicators in 10 scores and Standard 6 on administration has 12 indicators in 20 scores.

5) On judging the evaluation result on educational quality of the community college, the result is considered from the quality of the community college. The result is the presentation of the total scores of all indicators. Then the team sets comparison to consider the quality level on the educational management of the community college based on the judgment of the evaluation result. The community college that passes the standard criteria based on the model for the educational quality assurance in the community college must have (1) total score of the evaluation on the internal educational quality with the average value of 3.51 or higher, (2) Standard 2 (producing graduates and provide academic service to society) must have the evaluation result in the level of Good or above, (3) must not have any indicators that have the quality level of "need improvement" or "need improvement urgently". In case of passing the evaluation of internal educational quality assurance, the community college submits the report of internal educational quality assurance to Bureau of Community College Administration and publicizes the report to the public. In case of failing the evaluation, the community college offers suggestions to improve and develop the educational quality. The development guideline must be made to be the annual implementation plan and a system for the internal educational quality assurance according to the PDCA process for three months must be developed. Then the college allows a second internal educational quality assurance and then reports the evaluation result to the Bureau of Community College Administration.

In addition, there experts on the model for educational quality assurance in the community college as the whole picture reveal that the model has appropriateness in a high level. It can be concluded that the model is appropriate for application of the educational quality assurance in the community college.

### **3. The test/experiment result of evaluating the educational quality evaluation in the community college**

The test/experiment results of educational quality evaluation in the community college show that all 6 standards and 34 indicators are composed of Standard 1 (on the plan for educational management and academic development), Standard 2 (on producing graduates and giving academic provider to society), Standard 3 (on student's development), Standard 4 (on research), Standard 5 (on maintenance of religion, arts and culture), and Standard 6 (on administration). They are appropriate for application. However this set of standards needs improvement and revision in details of indicators list, standard criteria, evaluation criteria, quality control, quality audit, and quality evaluation to improve its consistency. As the whole picture on administrators show that the standard and indicators have appropriateness that can be applied in the educational quality evaluation in the community college because the administrators can bring the standards and target indicators for making implementation plan for educational quality assurance in the community college. The implementation step has clear details of job implementation that the personnel can perform the work clearly and then collect data for monitoring and supervising in each standard and indicator for the personnel. On personnel, it show that practitioners in their responsibilities according to the indicators can bring the guideline for quality control, quality audit as the guideline for supervising the implementation and data gathering of evidence, material according to the standard and each of indicator. In addition, the personnel who change their responsibilities or move from other organization can learn the work in the community college faster. And on the evaluators, it shows that it is the innovation that should be publicized to other community college to be the sample and guideline for implementing the educational quality assurance for the personnel in the community college.

### **Discussion**

1. This research findings show possibility of developing the standards and indicators that have content validity, construct validity and have appropriateness for application in educational quality assurance in the community college. This set of standards and indicators is composed of 6 standards and 34 indicators. They are Standard 1 (on the plan for educational management and academic development, 6 indicators), Standard 2 (on producing the graduates for society, 7 indicators), Standard 3 (on student's development, 3 indicators), Standard 4 (on research, 3 indicators), Standard 5 (on maintenance of religion, arts and culture, 3 indicators), and Standard 6 (on administration, 12 indicators). The findings show that as the whole picture there is correlation between the research findings and the concepts. However there are some differences in details because this research emphasizes on development of indicators to use in the educational quality assurance in the community college. There are no

other known researches which develop the similar model for educational quality assurance in the community college.

The group of indicators in 6 standards which the researcher applies within this research is important set of standards which is used for internal educational evaluation of the community college. Nevertheless there might be some clear differences on the numbers of standards and indicators, names list of the standard and the category of indicators in each standard. For example, the guideline for internal education quality assurance in the Higher Education Institution Level in 2010 (Office of the Higher Education Commission, 2010, pp. 44-93) has Component 1 on philosophy, determination, objectives and implementation plan, Component 2 on production of graduates, Component 3 on activities to develop students, Component 4 on research, component 5 on academic service to society, Component 6 on maintenance of arts and culture, Component 7 on administration and management, Component 8 on finance and budget, and Component 9 on system and mechanic for quality assurance.

Besides, the standards and indicators which have been derived from the research are correlated or consistent with the standards and indicators used in the external quality evaluation in the third round of the community college in the 2011–2015 (Office for National Educational Standards Quality Assurance, 2011, p. 11), which are Standard 1 (on the quality of graduates and the persons who pass the training), Standard 2 (on research or the creation under the community college context), Standard 3 (on academic service to society), Standard 4 (on maintenance of arts and culture), Standard 5 (on administration and institute development), Standard 6 (on development and internal quality assurance), and Standard 7 (on identification of community college). This arrangement is also consistent with other research findings such as with the results of developing indicators and the study of educational management quality of the community college (Kanjana Torung 2006) or the findings of study on the model of internal quality assurance in the school of Rajamangala University of Technology Thanyaburi of Suchitra Phahongsa (2001). Also interesting are the findings of the model for educational quality assurance of Faculty of Education Rajabhat Institute by Somkul Tharwonkit (2001), the result of developing the system for internal quality assurance in private vocational school by Vichian Puncreobutr (2005), and the result of developing the system for educational quality assurance in the program of educational technology of Rajabhat Institute of Paiboon Paonin (2000). The similar findings also appear in studies abroad on evaluation of indicator which is used in the community college in the US (Joseph and Henrik 2004), research finding on the quality indicators that are used for measure the effectiveness of community college by Thomas (2001), the research finding on the indicators that are appropriate for evaluating the effectiveness of Jamestown Community College (Denise et al. 2002), and the research finding on studying the indicators for the effectiveness of the community college of Woodward (1990). Each of the research findings above has the research finding similar to one another on the

educational quality assurance that it should be measured through standards and various indicators. The six standards and 34 indicators from this research are covering the standards and indicators which have been used in some researches.

The result from arranging the priorities of six standards show that the most important standard is the plan for educational management plan and academic development, followed by the second most important standard of producing graduates and academic service to society. Maintenance of religion, arts and culture stands as the third most important standard and administration stands in the fourth rank of importance. Student development and research (fifth and sixth in important) have correlation with the result of developing the system for internal quality assurance in the vocational school by using the principle of action research: the case study of Siri Thee-Asana (2006) showed that the strategic plan has the highest average score. Different result appears from the result of developing indicators and the study on the quality of educational management in the community college by Kanjana Torung (2006). The findings of the last study show that the most important component is the qualification of administrators. However there is ranking arrangement of importance to check how much is certain component or factor important but in reality this research finding has the loading factor of each component in a rather high value. The value range is between 0.520 and 0.847. Therefore the derived rank is like presenting the order of importance of standards. In this part the researcher must consider the loading factor of each of the standards side by side. Research findings reveal that the model to measure the LISREL of the indicators for the education quality assurance in the community college, which is the assumed model for this research, is consistent with the empirical data rather well. The 34 indicators are important in each component which influences the internal educational quality assurance in the community college.

2. This research finding gets the model for educational quality assurance in the community college which is appropriate and feasible for application. It is composed of the target for educational quality assurance, standards and indicators for educational quality assurance in the community college. The implementation of educational quality assurance in the community college on Quality Control, Quality Audit, and Quality Assessment shows high level of the model's appropriateness. In conclusion it is the appropriate model for use in educational quality assurance in the community college. The factors that influence the developed model are appropriateness in application. It should come from the process for developing the model that has systematic principles and steps. The researcher synthesizes the model for educational quality assurance from the study in each level which is composed of the model for educational quality assurance of Ministry of Education (Ministry of Education 2000, pp. 2-3). This model applies for educational quality assurance of basic education school (Office for National Educational Standard and Quality Assurance 2003, p. 37). The model also applies for the educational quality assurance



in the higher educational institution (University Council, 2001, pp. 4-5) and for the universities under the Ministry of Public Health (Rajanok Institute). From Paiboon Paonin (2000, pp. 66-67) and the Educational Quality Assurance of Department of Vocational Education (2002, pp. 6-7), the research utilizes the participation process in making draft of the model with the working group of educational quality assurance in the community college. Besides, experts are allowed to check the appropriateness and feasibility for application. The model is covering the contents and has unique character to be the model for internal educational quality assurance in the community college.

In addition the model is consistent with four research findings. The first is the model for educational quality assurance of Faculty of Education, Rajabhat Institute of Science (Somkul Tharwonkit 2000) that shows a model for educational quality assurance consisting of principles for quality assurance, system and mechanism for the administration of quality assurance and the methodology to implement the educational quality assurance. The second is the result of developing the system for educational quality assurance by using the program in the course of educational technology in Rajabhat Institute by Paiboon Paonin (2000) showing that the system for educational quality assurance is composed of five steps, i.e., identifying policy, developing tools for quality assurance, setting quality control, launching quality audit, and preparing quality evaluation. In each step the researcher identifies the components that need to perform which lead to certifying the quality. The third is the result of developing the system for quality assurance in the private nursing educational institution by Jureewan Maneesaeng (2543/2000). The findings show that the developed system for quality assurance is composed of the system structure and the system administration, the step for the process of activities in the system and the quality component, indicator and checklist, and the steps on the process of activities in the system for internal quality assurance. The system consists of three processes. The first process is done for quality control with three main activities (to identify the component of quality and indicators to measure quality, to implement control on the quality/improve the quality continuously, and to prepare the readiness to check self-assessment report). The second process is accomplished to check the internal quality evaluation with three activities (studying the self-assessment reports (SSR), implementing the audit result and internal quality assurance, and making the report of auditing). The third is the process to improve the quality on the preparation for the external quality assurance that has four activities (are studying the report of auditing, improving the quality, making the self-assessment report, and implementing according to the identified state of the external organizations that evaluate and certify the institution. The finding of studying the model for internal quality assurance in the school of the technical college in the Northeast Technical College (Saowandee Phanmuang (2001) shows that the model for implementation has six steps which are (1) the preparation of personnel, (2) the planning for implementation, (3)

implementing according to the plan, (4) auditing the evaluation results, (5) improving the evaluation results, and (6) producing a self-assessment report.

It can be concluded that developing a model of educational quality assurance in the community college will be beneficial for the persons who will apply it in the implementation of internal educational quality assurance. They are the administrator groups who can set the model into use in the planning for the educational quality assurance in the community college because the model has the implementation steps of educational quality assurance in each of the standards and indicators by having the details for controlling the quality. The administrators can utilize the model as the data for monitoring and supervising, using each standard and indicator to the personnel. For the personnel, they can apply the guidelines for quality control to audit the quality and the quality evaluation to be the guideline for supervision of the implementation according to the responsibility; and then they collect the evidence and materials according to the standards and indicators. The model will be the guideline for the personnel when they change their duties of implementation or transfer from other organization that can learn and implement the work in the community college faster. Among the evaluators they perceive that the model is an innovation that should be publicized to other community colleges to be used as an example for guideline for implementation on educational quality assurance to the personnel of the other community college as tools for implementing the educational quality assurance.

3. The results of testing the educational quality assurance in the community college will be discussed in summary as what follows.

The results of test on educational quality assurance in the community college show that six standards and 34 indicators are composed of Standard 1 (on the plan for educational management and academic development), Standard 2 (on production of graduates and academic service to society), Standard 3 (on student development), Standard 4 (on research), Standard 5 (on maintenance of research, arts and culture), and Standard 6 (on administration) which appropriate to be applied. It should be improved and corrected on the details on name list of indicators, standard criteria, evaluation criteria, quality control, quality auditing, and quality evaluation to make it more consistent. It is stated that to add the term “identification” in Standard 1 because identifying the college is identifying the target of success based on emphases and the strength that reveal the outstanding or dominant character of the college (Office of Office for National Education Standard and Quality Assurance, 2012, p. 34). The term “identification” in Standard 3 means personalities which occur in the learners according to the philosophy, vision, mission, and objectives of the community college which get approval from the community college council (Office of ONESQA, 2012, p. 32) which is consistent with the external evaluation third round of the ONESQA Office. There is an additional suggestion on adding standard and criteria that the graduates stay in the communities for one year to apply their knowledge and experience from the community college to practice with the average value of 3.51 up

(in the standard number 2). This suggestion is consistent with the principle of educational management in the community college in response to the communities to develop local social economic conditions. This is the production resources and the human development on economic sector, in term of agricultural business and industry that emphasize the creation of occupations for entrepreneurship. After the entrepreneurship to create locals' own business and labor to the markets the community college helps the training and improvement of the skills for the laborers in the production sector of the society and country (Bureau of Community College Administration, 2004). This target and vision are consistent with the external evaluation third round of ONESQA Office. In indicator number 3 the graduates and people who pass the training should remain in the communities. For the standard on research, although the Phrae Community College has the evaluation result in the level on "need improvement urgently" but the college accepts the standards and indicators and the standard criteria for evaluation. The college administrators see that research to develop instructional development, research for institution, and research for developing the locals are important for developing the educational management and community college based on the four main missions of the higher education institution. These missions are producing graduates, launching research, providing academic service for society, and maintaining religion, arts and culture.

## **Suggestions**

### **The suggestion for the application of the research findings**

#### **1. For application in evaluating the educational quality evaluation in the community college**

The research findings show that the evaluation of educational quality in the community college has six standards and 34 indicators to use for the educational quality evaluation. The evaluators should implement as the followings.

1.1 The evaluators should use all components/factors to evaluate the educational quality in the community college. They should not cut some indicators.

1.2 If the evaluators need to select only some or certain indicators in each standards the evaluators can consider or make judgment to select the indicators from average values that are used in this research to explain the appropriateness of indicators which will be used for evaluation. Therefore the evaluators may consider or make judgment to select from the indicators that have the highest average values and the next highest that these indicators are good enough for the need to make judgment to evaluate the standards. Similarly this research has utilized the Loading Factor to explain the importance of indicators in each standard. These evaluators can consider the value of Loading Factors by making decision to select the most important indicators and the next highest to make it enough for the need for making decision in evaluating the standards.

1.3 In making decision to select indicators in each component/factor, the evaluators should consider to select the indicators that are consistent with the indicators of external quality evaluation of the community college used by the ONESQA Office. The indicators are taken according to the acceptance of implementation of government in the community college level, indicators for the quality assurance in the school of higher than education level, and the indicators of the Bureau of Community College Administration which are the important indicators for education quality assurance of the community college.

1.4 Evaluating the educational quality evaluation in the community college is to evaluate to improve and develop the educational quality and create reliability for society to implement according the mission of the community college to the accepted standards of educational quality standards and of society. Therefore the external evaluators not only have knowledge on educational quality assurance but also on experience on educational management in the community college.

## **2. For the application of the educational quality assurance in the community college**

The developed model for educational quality assurance in the community college is not only used for educational quality evaluation but the stakeholders or relevant can use it to implement the educational quality assurance in the community college as the followings.

2.1 Administrators can bring the model for educational quality assurance in the community college to use in controlling the quality of education according to the process of supervision, monitor, and follow-up the quality of educational quality of the community college that it follows the guideline for educational quality assurance and the educational quality development. This action eases the community college to have clarity in controlling and monitoring the internal educational quality.

2.2 The personnel can bring the model of educational quality assurance in the community college to use in quality control and quality audit under the supervision of the implementation according to assigned responsibility and gathering evidence or documents according to the standards and indicators. This will make the quality auditing from the work and it is also useful for the personnel who can change their responsibility to work or transfer from other organization. They can learn about the work in the community college faster.

2.3 Apply the model of educational quality assurance in the community college for quality control and quality auditing as the guideline for the implementation to ensure the educational quality in the community college. Application also relies on the administration of each college which may have unique style that can apply the model appropriately to the context of the college.

2.4 The application of the model for educational quality assurance in the community college on the internal educational quality assurance should be done by



the evaluators who have certain qualifications. They must have knowledge, ability, and experience on educational quality assurance and educational management in community college.

### **Suggestion for future research**

This research is the studying of standards and indicators for the educational quality assurance in the community college, to construct a model, and to test the model on the educational quality evaluation that the research on educational quality assurance for the community college progress further. The continuous research will make this science prosperous in the future. There are some suggestions on these following issues.

1. The community college should have used the trial of the model for educational quality assurance in the community college both on the quality control, quality auditing, and quality evaluation to check how much the test is appropriate to the real condition in the context of educational management of the community college. The test results can improve and develop the model according to the real implementation.
2. The community college should have research to monitor the result of using the educational quality assurance in the community college on the attitude towards the educational quality assurance in the community college.