QUALITY ASSURANCE POLICIES IN THAI HIGHER EDUCATION

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This dissertation explores the perceptions of university administrators concerning internal quality assurance policies administrated by the Office of the Higher Education Commission (OHEC) and the external quality assurance policies administrated by the Office for National Education Standards, and Quality Assessment (ONESQA) in Thailand's higher education. A pre-developed questionnaire and guided interview questions for the telephone interviews were developed to investigate the administrators' perceptions toward four aspects of the policy implementation: 1) the current practices of national quality assurance policies, 2) the major components of institutional quality assurance, 3) the roles of state governments and national quality assurance agencies, and 4) the policies' recommendations. The 80 completed questionnaire surveys of overall surveys distributed to 153 targeted higher education institutions were returned for an overall response rate of 52.3% in addition to 6 administrators participated in the interviews.

The findings in this study revealed a consensus exists among the administrators about the current practices of national QA policies. In general, the administrators showed positive perceptions on the presence and objectives of the policies and desire for improvement on the policies' administration. The major components of institutional quality assurance for Thai higher education derived from analysis of the administrators' perceptions encompassed QA process, QA system, QA people, budget investment, and QA outcomes. The findings revealed that most

administrators held positive views toward the existing role and functions of OHEC and expected OHEC to focus on being a quality management supporter and increasing the effectiveness of the policy administration. Meanwhile, the perceptions toward the ONESQA's role and functioning were somewhat negative, and many administrators supported ONESQA to seriously reinforce its role as an external QA agency. The statistically significant associations found in this study suggested that public and private universities may view the major components of institutional quality assurance and the existing roles of OHEC and ONESQA differently. The findings also confirmed that quality awareness and collaboration in higher education institutions were very important for the success of the policy implementation. Based on the result of this study, a model for effective QA policy implementation in the Thai higher education system was proposed.

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LIST OF ACRONYMS

CHE	Commission on Higher Education, Thailand
EdPEx	Education Criteria for Performance Excellence
EQA	External Quality Assurance
IQA	Internal Quality Assurance
NQF	National Qualifications Framework
OHEC	Office of the Higher Education Commission, Thailand
ONESQA	Office for National Education Standards, and Quality Assessment
	(Public Organization)
QA	Quality Assurance
RMUT	Rajamangala Universities of Technology
SAR	Self-assessment report
TQF: HE	Thai Qualifications Framework for Higher Education

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1.0 INTRODUCTION

This study aims to examine the state and problems of the national quality assurance policies for higher education institutions in Thailand. To achieve this goal, the study will investigate how Thai university administrators perceive the current practices of national quality assurance policies in Thai higher education system as well as their perceptions on the administration from the state government and national quality assurance agencies. The result of the study will demonstrate formative information about national quality assurance practices and policy recommendations for Thai higher education policymakers at both national and institutional levels. Furthermore, it will help the government and the quality assurance agencies to formulate and execute effective and appropriate quality assurance policies and plans that best assure quality performance of the Thai higher education institutions and support the further development of higher education system.

1.1 RESEARCH PROBLEM

Concerning the world of higher education, quality has been an issue of worldwide growing concern and scrutiny in many countries over the past decades. Universally, the notion of quality is recognized as amorphous and contextual. However, despite its confusion about the concept and how academic quality should be defined and measured, quality assurance has become prominent application in higher education systems. Various quality assurance techniques and approaches have been applied and implemented to promote a culture of quality within institutions of higher learning. It is believed that with good quality control and assessment, a higher education institution will provide a high-quality education to its stakeholders at an appropriate cost. Besides, growing demands for quality in higher education have raised concerns of making higher education institutions more accountable to their constituencies and made the issue of quality assurance become the focal agenda on higher education policy. Consequently, today's governmental agencies and higher education institutions are expected to pay special attention to issues of quality and to increase quality control, customer satisfaction, and valueadded outcomes of their performance. In most countries, state governments and national quality assurance agencies have significant roles and functions in assuring quality performance of higher education institutions.

Higher education in Thailand has entered an era of continuous change. The latest development of Thai higher education is currently undergoing the second decade of the national education reform with the goal of aspiring toward quality of education. According to the 15-Year National Plan for Higher Education Development for 2008 to 2022 formulated by the Office of the Higher Education Commission (OHEC), the Royal Thai Government has given high priority to upgrade quality of Thai colleges and universities to achieve international standards of excellence while upholding their academic freedom and social responsibility (OHEC, 2008). Meanwhile, an economic downturn on the national level translates into fewer resources for public and private universities. The type and magnitude of the internal and external forces challenge higher education institutions in Thailand to seek effective mechanisms for coping with dynamic environments, diverse constituent expectations, and changing societal values.

Moreover, competition among public and private universities has also placed significant pressure on higher education institutions to maintain their image, provide educational quality, concern having qualified teachers, and generate efficient administration and management. Hence, the need for institutional flexibility, responsiveness, and overall quality improvement has increasingly become evident.

Currently, promoting quality assurance in both public and private higher education institutions is an important concern for the Thai Government. One must always be mindful of the fact that Thai higher education system is now facing both qualitative and quantitative crisis. Higher education institutions both public and private are trying to expand and improve to respond to the dramatically rising social demands. Furthermore, to cope with a greater number of enrollments, many higher education institutions tend to create a more diverse academic system. The government is willing to grant a larger budget considering equity principles to provide equal opportunities of access to higher education for people from any social class. But if the quality of higher education is poor, it can be reflected in its product – low quality graduates. It means that national resources are spent for social problem enlargement instead of social well-being development. Therefore, a caution must be taken to ensure that the increasing of enrollments either at public or private institutions is accompanied by higher educational standards and quality assurance measures.

Quality assurance is a systematic review of educational institutions and programs to ensure that acceptable standards of education, scholarship and infrastructure are being maintained. Thailand has been through various stages of development to provide quality higher education. Different experiences have been developed to search for satisfying and effective quality assurance policies and practices within the confines of the national needs and

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circumstances. In order to move forward, it is of crucial importance for the higher education policymakers and practitioners to understand the roles of quality assurance policies in Thai higher education system and its implementation in the higher education institutions at present. The perspective of quality assurance administrators, as the main actors of the policies implementation who are in-between government and higher education stakeholders, comes to be an important object of analysis. It is expected that the output of this study will be useful to the government, the relevant participants, and also higher education institutions. The results of the study can help better understand outcomes of the policies and develop proper quality assurance policies and programs. It can also be an important instrument to help enhance quality awareness as well as facilitate higher education institutions to perform their quality assurance process effectively.

1.2 PURPOSE OF THE STUDY

There are four main purposes of this study as the following:

 To study the perceptions of university administrators concerning the current practices of national quality assurance policies implemented in the Thai higher education institutions

This study is an exploratory research leading to better understanding of the practices of national quality assurance policies in the Thai higher education system. It aims to examine the state and problems in implementing the national quality assurance policies at the higher education institution level. To achieve the goal, this study will investigate how Thai higher education administrators, especially those who are working on national quality assurance policies, perceive the current practices of the policies and their implementation at the institutional level.

2. To state the important components of the higher education institutional quality assurance practices in the Thai context

The study is expected to explore and identify the most important components for quality assurance in Thai higher education institutions, particularly at the university level. The study under this purpose will look at the reality in administrating quality assurance process in different higher education institutions.

3. To define the roles of state governments and national quality assurance agencies in assuring quality performance of the higher education institutions

The third purpose of this study is to examine the perceptions of university administrators concerning the government and national quality assurance agencies' roles in assuring quality performance of the Thai higher education institutions. Their perceptions on the quality assurance administration from the government and national quality assurance agencies will also be explored.

4. To find the relevant factors that are important for the development of national quality assurance policies

This study aims to explore the most important factors that have a significant influence on the improvement of the Thai national quality assurance policies throughout the perceptions of quality assurance administrators at the higher education institution level.

1.3 RESEARCH QUESTIONS

The main research question (or problem) which forms the foundation of this study is: 'What are the university administrators' perceptions about the national quality assurance policies in Thai higher education system?' The following four subsidiary research questions provide the focus aspects of the perception of university administrators on the quality assurance policies in Thai higher education:

- 1. How do Thai higher education administrators at higher education institutions perceive the current practices of national quality assurance policies?
- 2. What are the major components of institutional quality assurance for Thai higher education?
- 3. How do Thai higher education institutions define the roles of state governments and national quality assurance agencies in assuring quality performance of the higher education institutions?
- 4. How can the national quality assurance policies be effectively organized and respond to the higher education institutions and the society appropriately?

1.4 SIGNIFICANCE OF THE STUDY

The four questions will guide this study and the research design. The study of quality assurance in higher education is not new, and there is an abundance of literature covering the subject. This study differs from previous studies in which it focuses on the national policies and the perspective of university administrators as a policy implementer. The findings of this study will reflect the higher education administrators' perceptions toward quality assurance issues, the Thai national quality assurance policies, and their current practices at the institutions.

The perceptions of university administrators can be an important insight to better understand these policies because they have the first-hand experience of the influence of the current practices of national quality assurance policies in the higher education institutional context. Focusing on the perceptions of the policy implementation's personnel will also provide leaders and policymakers of the Thai government, the national quality assurance agency, and the universities with formative information that will contribute to understand the actual state of the national quality assurance policies' implementation. It will also help to indicate differences and similarities in the policy implementation process. Another contribution of this dissertation is that it provides recommendations for the policymakers and future research regarding the improvement and development of quality assurance policies and implementation. It will also contribute to the body of knowledge related to the quality assurance process and practices in Thai context. Finally, being able to know the perceptions and the factors that influence the implementation of national quality assurance policies is of great significance not only for the theoretical development but also for administrators and other stakeholders who are involved or interested in this area.

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2.0 **REVIEW OF THE LITERATURE**

This section is a review of prior research and documents grounded in higher education literature with respect to the notion of quality assurance in higher education system. It examined current articles, books, scholarly papers and official documents to identify varying approaches of defining quality in higher education institutions and how to measure it. It also introduced and explained various quality assurance procedures and practices that can be found in current higher education systems across the world. In addition, it specifically examined the roles of state governments and national quality assurance agencies in assuring quality performance of higher education institutions. Finally, the literature on relevant theories, related research, and essays by informed experts were also reviewed to develop the understanding of the ongoing discourse and predicament about the quality monitoring in academic institutions.

The literature review consists of five parts: the theoretical concept of quality in higher education, the major components of institutional quality assurance, the roles and functions of government authorities and national quality assurance agencies, the challenges and difficulties in quality monitoring in academic institutions, and best practices and lessons learnt from different national quality assurance systems.

2.1 THEORETICAL CONCEPT OF QUALITY IN HIGHER EDUCATION

There is much confusion about the concept of quality, especially what quality is and how it should be measured. Theoretically, dozens of "What is quality?" have been defined in the literature over the past decades.

2.1.1 Definitions of quality

The word "quality" comes from the Latin word qualis meaning "what kind of" which refers to the characteristics of a product or service. Quality, thus, can be defined and described in various ways. According to the dictionaries, the meaning of quality is defined as "the standard of something as measured against other things of a similar kind" or "the degree of excellence of something" (Oxford Dictionaries, 2013). However, these definitions are way too vague, and the terms such as "standard" and "excellence" beg a slew of other questions. Hence, the dictionary definitions are usually inadequate in helping a quality professional understand the concept.

Many authors have been engaged in the definition of quality (Crosby, 1979; Garvin, 1988; Juran, 1989; Pirsig, 1974). When discussing quality in the commercial world, quality is usually focused on the purpose of goods and customer's needs or satisfaction. For example, Juran (1989) suggested that quality is "fitness for use". This term is functional in the sense that if a product serves the purpose it is designed for, then it is of quality. Crosby (1979) simply defined quality as "conformance to requirements" considering that there are certain things or requirements that a customer expects in a product or service and the quality is perceived when those things are met. Whether the definition is related to objective facts or subjective feelings, quality can mean different things to different people. Pirsig (1974) illustrated the elusive nature

of the concept in his famous book "Zen and the Art of Motorcycle Maintenance" describing that quality is a third entity independent of the mind and matter, yet concluded, "Even though quality cannot be defined you know what it is" (p.213). Therefore, quality is the concept known for its ambiguity inherent which cannot be defined in a very straightforward way (Garvin, 1988; Pirsig, 1974).

While no absolute consistency is possible, review of the literature suggests that there may be a few attributes of quality upon which we can all agree. As proposed by Gummesson (1990), rather than looking for a single definition of quality, it might be more useful to create an insight into the many dimensions that form a fuzzy entity referred to as quality through social consensus. In searching for a working definition of this concept, Garvin (1988) classified the various definitions of quality arising from scholars in four disciplines (philosophy, economics, marketing, and operations management) into five major approaches:

- 1. Transcendent definitions. These definitions define quality as a philosophical concept like truth and beauty which are subjective and personal. Quality is an "inner excellence" that we are intuitively understood and learn to recognize only through experience. It is eternal but goes beyond measurement and logical description.
- 2. Product-based definitions. Quality is seen as a precise and measurable variable found in the objective attributes of a product. In this sense, quality reflects the presence or absence of such measurable and desired product attributes.
- 3. User-based definitions. Quality is a means for customer satisfaction. The highest quality products are those that best satisfy the customers' preference. As individual customers are assumed to have different needs, this makes these definitions individual and partly subjective.

- 4. Manufacturing-based definitions. Quality is seen as conformance to requirements and specifications. Once a design or a specification has been established, any deviation implies a reduction in quality.
- Value-based definitions. These definitions define quality in relation to costs and prices. Quality is perceived as providing good value for costs. (Lagrosen, Seyyed-Hashemi, & Leitner, 2004, p. 62)

Conflicts among these approaches are inevitable because each approach defines quality from a different point of view. Quality is, by nature, cross-disciplinary encompassing from philosophy through business fields and is a complex and multifaceted concept. The different approaches to defining quality described above imply that concept of quality involves both objective and subjective aspects and open to multiple perspectives. Discussion of what quality is about thus remains a great source of confusion depending on the purpose and for whom we are talking.

2.1.2 Quality in higher education

Quality in higher education is a much more complicated term than a product and a service quality in the general business arena. The academic organizations have unique characteristics that make their functioning elusive and very different from other organizations. Defining concept of quality in the context of higher education, therefore, becomes so problematic and requires more constructive approaches.

A number of authors on higher education have also acknowledged the indeterminate nature of the concept of quality. Vroeijenstijn (1992), for example, pointed to the complex and subjective nature of quality. Harvey and Green (1993) stated that quality is a slippery concept

that is not only relative to the user of the term and the context in which it is used, but also to the processes that result in the desired outcomes (p. 10). Williams (1990) claimed quality in higher education "intangible and unquantifiable". Bauer (1992) indicated that the idea of quality is likely to vary with different political cultures, national traditions, and education systems.

The literature on quality in higher education has presented several different meanings, from quality as academic excellence to quality as value for money. However, many academics found Garvin's approaches to defining quality are difficult to use in the context of higher education. The rationale is that it is not easy to define the product, the customer, and the manufacturing process of a higher educational institution.

According to Nodrvall and Braxton (1996), there are three traditional approaches to defining academic quality: the reputational approach, the resources approach, and the valueadded approach (pp. 484-485). In the first approach, quality is defined by a university's rank in the pecking order of institutions. The higher ranked institution is perceived as having higher quality. The resources approach is an attempt to specify and assess quality of higher education using the criteria that are the bases for institutional reputations such as SAT or ACT scores of entering first-year students, the number of books in the institution's library, or the scholarly productivity of its faculty. Under this approach, the higher the quality of the institution. The last approach defines quality in terms of the value-added effects of college on students' cognitive and affective development. Thus, the greater the impact a college has on its students in the desired direction, the higher the quality of the institution. Although these traditional approaches are rooted in a concern for delineating the quality of an academic institution, they present problems of finding agreement upon criteria, measuring the performance of these criteria in a reliable manner, and not providing much useful information for the quality improvement.

Perhaps the most popular and pragmatic approach to define quality in relation to higher education is the nature of the concept of quality proposed by Harvey and Green (1993). They provided an investigative framework for understanding the different ways of thinking about quality in higher education by suggesting that it could be grouped into five interrelated concepts of quality:

- in terms of exceptionality. Quality is regarded as something special or distinctive. This is a rather traditional perspective linked to the ideas of excellence (exceeding high standards) and passing a required standard or quality checks. The problem of this concept lies in the fact that standards are subjective which tend to change and vary over time.
- as perfection or consistency. This concept defines quality as the consistent flawless outcome. The focus is on processes and specifications that are aimed to be perfectly met exhibited through "zero defects" and "getting right the first time."
- 3. as fitness for purpose. Quality has meaning only in relation to the purpose of the product. In traditional quality management, this notion is related to the customer (Juran, 1989). In higher education, this view of quality is usually based on the ability of an institution to fulfill its stated objectives or mission.
- 4. as value for money. Quality is equated with levels of specifications and is directly related to monetary costs. Quality is seen by stakeholders in terms of return on investment through efficiency and effectiveness which provides a strong correlation to accountability practices (Lomas, 2002).

5. as transformative. This concept sees quality as a qualitative process of change from one state to another. In higher education, transformation refers to the development or empowerment of the student through the learning process, or to institutional changes which might transform student learning.

This framework is a rigorous attempt to clarify how various stakeholders view quality. For instance, to governments and community as funding authorities, quality will be understood in terms of fitness for purpose and value for money; to students, the interpretation of quality may be one of excellence as they want to ensure a relative advantage in career prospects; to academics and administrators, quality can be interpreted as perfection or consistency where the behavioral norms are met and the core ethos is upheld in order that job satisfaction can be achieved; and to future employers, quality may be linked to fitness for purpose concept as they look for the competencies of the graduates (Lagrosen et al., 2004, p. 64).

These reflect that the role of customer-oriented and systems approaches to defining quality has entered the higher education debate. In applying the customer-driven definition, which rather speaks about stakeholders in higher education, Weert (1990) argued that quality results from balancing the different interests and different perspectives of all those who have an interest in the quality of higher education. His analytical framework is illustrated in Figure 2.1.

In the study, Weert (1990) defined quality in higher education in terms of the goals which are to be accomplished. He proposed a theoretical framework which handles the concept of quality in more operational terms by classifying goals of higher education into a societal, institutional, and individual level of analysis in which each of these goals have both an internal and an external dimension. In addition, he emphasized that these goals are undifferentiated in terms of importance, and all of them have to be equally taken into account when defining quality in higher education.

Goals	Internal	External
Societal	 the amount of education available variety/diversity of the higher education system (university and non-university sector) 	 relation between supply and demand of graduates value to the economy in terms of productivity and international competitiveness scientific and socio-cultural function of higher education
Institutional	 availability of resources; financial, material, personnel student entry qualifications and admission policy internal efficiency 	 improving students' educational and professional qualifications development of independence of mind and moral autonomy institutional responsiveness to the external environment
Individual	 contribution of the educational program to the desired outcome (value-added) learning strategies and processes availability of course options, support and advice 	 students' program in accordance with employer's needs acquiring extracurricular skills; organizational, communicative, sports

Source: Weert, 1990, p. 61

Seymour (1991) also supported the idea of viewing quality in higher education from multi-perspectives of higher education constituencies and using quality as the context for assessment and accountability and nurturing a commitment to excellence. He concluded that "in the end, quality in higher education has only one meaning – a vision of what the campus community can be at its very best" (ibid, p.10). Sarrico, Rosa, Teixeira, and Cardoso (2010) agreed that the multidimensionality of quality in higher education should be combined with the demands put forward by students, universities and society each time one intends to assess quality. Skolnik (2010) pointed out that the different viewpoints of quality were its political dimensions. Barnett (1994) described the quality debate by different stakeholders in higher

education as a "power struggle", where each stakeholder tried to fight for their voices to be heard and taken into account when assessments of quality are undertaken.

Furthermore, the systems view of quality is recognized. It was discussed that every higher education institution is a dynamic system, encompassing an environment that inputs some form of energy to the system which undergoes transformative process to give some outputs into the environment, and must be seen in its own uniqueness and totality for quality management (Mishra, 2007; Mukhopadhyay, 2005). In a more recent work, Dew (2009) emphasized a concept of quality as continuous improvement and the growing appreciation of quality management systems through the application of new technology. Therefore, the quality in higher education is not just the product, but also a process and should be focused on a whole range of factors associated with fulfillment of higher education's mission, namely the quality of inputs, outputs, and processes.

Subsuming a wide range of discussions to define "quality" in higher education, The United Nations Organization for Education, Science and Culture (UNESCO) concluded that:

Quality in higher education is a multi-dimensional, multilevel, and dynamic concept that relates to the contextual settings of an educational model, to the institutional mission and objectives, as well as to specific standards within a given system, institution, programme, or discipline. Quality may thus take different, sometimes conflicting, meanings depending on (i) the understanding of various interests of different constituencies or stakeholders in higher education (e.g. students; universities; disciplines; the labour market; society; a government); (ii) its references: inputs, processes, outputs, missions, objectives, etc.; (iii) the attributes or characteristics of the academic world worth evaluating; and (iv) the historical period in the development of higher education. (Vlãsceanu, Grünberg, & Pârlea, 2004, pp. 70-71)

A review of the literature on the theoretical concept of quality pointed to the difficulties of defining quality in higher education. From the various definitions as mentioned above, it is obvious that the notion of quality is recognized as amorphous and contextual. Although attempts to define quality in higher education have resulted in a variety of labels being attached to the concept, its similar explanations are evident. That is, as stated by Watty (2006, p. 293), quality in higher education is about efficiency, high standards, excellence, value for money, fitness for purpose and/or stakeholder focused. Each approach of viewing quality in higher education has advantages and disadvantages, being more or less suitable for a specific period of time and institutional or national context. Most importantly, defining quality in higher education requires recognizing the multidimensional and relative nature of the concept, viewing higher education as a system, and understanding the different conceptions that inform the preferences of different higher education's stakeholders.

2.1.3 Measurement of quality in higher education

Measurement of quality seems to vary in exactly the same ways as the conceptions of quality itself. Quality has been measured differently in different disciplines. For instance, in manufacturing, quality has been measured as the efficiency and reliability of the manufacturing processes. Researchers in services marketing have measured service quality as it is perceived by the customer (Parasuraman, Zeithaml, & Berry, 1985). Likewise, differences in meaning of quality in higher education have led researchers to measure it by employing different methods (Dew, 2009; Tam, 2001). According to the literature, there were three general research approaches to measuring quality in the higher education setting (Tan, 1986).

2.1.3.1 Reputational studies

The first approach pioneered inquiry into quality in higher education through the use of reputation. The reputational studies focus on ratings of the higher education institutions and programs in descending order, often termed as a university ranking system, based on defined

combination of factors or criteria which are subjectively perceived as "quality" of the institutions. Over the last decade, a number of university rankings systems had been increasingly in use around the world. The proliferation of ranking exercises, which compare the performance of different institutions, is primarily based on an attempt to provide information about the excellence of academic institutions and programs to their stakeholders. Bogue and Hall (2003) emphasized effects of university rankings as the studies of reputation that they serve keeping the concern for quality in universities visible and active, reflecting the power of innovation, demonstrating the power of perseverance, and creating a competitive edge (pp. 71-72).

Nonetheless, reputational studies were criticized for several reasons. Firstly, reputation is not necessarily equivalent to quality (Lawrence & Green, 1980; Tan, 1992). Furthermore, reputational ratings have many methodological drawbacks, such as problems with alumni and rater biases, and may establish a misleading "pecking order" (Tan, 1992). Besides, it was argued that reputational ratings are tools for the different purpose, and different ranking systems have very different definitions of quality. Thus, any ranking is controversial, and no ranking is absolutely objective. The act of choosing a set of indicators and weightings in ranking systems imposes an issue of a one-size-fits-all definition of quality and disregards the institutional environment which can affect reputational ratings tremendously. The contribution of university rankings to quality issues is also skeptical. It was plainly pointed out by Lawrence & Green (1980) that ratings of the institutions and programs did not offer the specific information necessary for quality improvement.

2.1.3.2 Objective indicator studies

The second approach was the use of "objective" indicators to measure quality (Tan, 1992). The indicator systems approach to evaluating the quality of universities compares the quantitative and

qualitative performance of the institutions across a range of indicators (Johnes & Taylor, 1990). In order to obtain simplified information for decision-making purposes, complex subjective judgments are turned into a single objective measure. In this research approach, various variables had been deployed as there are different variables assumed to be linked to quality in higher education. The researchers had categorized the objective indicators into five general types (Tan, 1986):

- 1. *Studies based on faculty*. These studies associate higher educational quality with the overall quality of the faculty. Consequently, objective indicators such as faculty research productivity, faculty awards, and the academic credentials of faculty are used as the quality measurement.
- 2. *Studies based on students*. These studies measure quality through an analysis of student characteristics such as the proportions of alumni in graduate and undergraduate programs, student selectivity, and student performance.
- 3. *Studies based on outcomes*. The focus of the researchers in these studies is more on outputs than inputs. The outcome variables comprise the products of students and alumni.
- 4. Studies based on resources. These studies consider departmental, institutional, and human resources as indicators linked to quality. The measures include human resources (the numbers of the faculty, staff and students, etc.), physical facilities (libraries, laboratories, office and computer facilities, etc.), financial resources (expenditures per student and per faculty, faculty salaries, research funds, etc.) and other resources (departmental programs services, the diversity of programs, etc.).

5. *Studies based on multiple criteria*. These studies utilize multiple variables to measure quality. This approach is influenced by the assumption that the quality in higher education is multidimensional, and its measurement should not be as susceptible to fluctuations in just one or two variables.

The use of objective indicators showed promise in measuring quality in the academic setting. However, it was not without methodological flaws. The main problem was that each of these studies, particularly the first four types of indicator studies, employed only a part of academic components in the computation of quality. Additionally, in the absence of a theory of quality, it was difficult to generate a consistent set of objective indicators that could be used to indicate the quality of faculty, students, or academic outcomes. Buela-Casal et al (2009) attempted to analyze the quality indicators used at the international level and found that material resources, research, and human resources were the three most frequently used categories when evaluating quality of the most prestigious universities in different countries. Establishing the general criteria to assess the quality of higher education may not be impossible. Still, problems remain unresolved were those whether the chosen variable would adequately represent quality and whether the same indicator could be used to measure the excellence of all academic institutions and programs (Tan, 1992).

2.1.3.3 Quantitative correlate studies

The third approach measured quality by examining the interrelationship of quantitative variables that are associated with quality. This approach was rather an attempt to identify potential correlates of quality (either measured by reputation or some objective indicators) and their interaction. For example, Conrad and Blackburn (1985) found that faculty research productivity, faculty grantsmanship, the number of students, the average academic ability of students, the size of the library, and curricular concentration are the best correlates of program excellence. Weaknesses of these studies are that researchers rely on their intuitive perception of what might be linked empirically to quality instead of identifying potential correlates based on a theory of quality (Tan, 1992). Moreover, results from the correlate studies are not possible to infer a cause and effect relationship and subjected to the issues of generalization.

The relevant literature had suggested that a single approach has been criticized for being not applicable for diverse and complex organizations as institutions of higher education. Even though some measures are problematic for comparative purposes due to higher education institutional diversity, each of them offers great value for understanding longitudinal performance within a single institution. Tan (1992) pointed to the limitations of utilizing each approach described above and proposed the multivariate approach as an alternative in his study to measure the quality of doctoral sociology programs. The study found that the use of the multivariate approach permitted the assessment of departmental excellence to be relatively free from subjective evaluation and also allowed for the in-depth study of the interrelationship of variables potentially linked to quality (ibid, p. 218). Since quality is a multidimensional construct, focusing on several variables simultaneously or on relationships among variables in measuring the higher education quality were suggested to be more meaningful than using the univariate approach (Stark & Lowther, 1980). In addition, quality, in its aspect of a continuous improvement process (Dew, 2009), is also seen as cumulative over time. For that reason, the longitudinal studies have been advocated to be more appropriate than the cross-sectional for measuring quality in higher education (Stark & Lowther, 1980).

It is clear, then, that quality in higher education is a complex and contested concept as there are no clear-cut and single-valued criteria or standards according to which quality can be defined and measured. Whatever quality is, everybody wants it. Therefore, conceptualizations and measurement of quality have become increasingly important issues in the field of higher education in which many factors should be carefully taken into consideration. Research on quality in higher education is valuable in providing various insights for the institutions and its stakeholders to use in their specific situations and contexts. Apparently, though it is not an easy task, many scholars have been struggling to develop effective and innovative approaches to managing quality in higher education institutions.

2.2 MAJOR COMPONENTS OF INSTITUTIONAL QUALITY ASSURANCE

Although quality remains an elusive and difficult concept (but not impossible) to define and measure, quality assurance has been an essential part of higher education management. Quality assurance is an "umbrella" term that includes assessment, accreditation, audit, and other quality management and measurement tools. According to the quality assurance literature, quality assurance in higher education systems comes in various forms and different approaches to quality can be taken.

2.2.1 Basic elements of quality assurance model

The literature has suggested that quality assurance systems vary both in their underlying objectives and approaches. Though, each approach has advantages and disadvantages, being

more or less suitable for a specific period of time or institutional and national context, common to all of these quality approaches is the integration of the following three elements (Kis, 2005; Martin & Stella, 2007; Sarrico et al., 2010; van Vught & Westerheijden, 1993).

2.2.1.1 Self-assessment

Self-assessment is a central component in most quality assurance procedures. The term is defined in the UNESCO glossary as "the process of self-evaluation consists of the systematic collection of administrative data, the questioning of students and graduates, and the holding of moderated interviews with lecturers and students, resulting in a self-study report" (Vlãsceanu et al., 2004, p. 37). It provides a standard against which the higher education institutions can measure itself and a framework for building up a definition of quality (Kis, 2005, p. 8). The application is underlie by the assumption that an institution that really understands itself is likely to be more successful in carrying out its educational mission than one without such self-awareness (Martin & Stella, 2007, p. 65). Sarrico et al (2010), however, stated that its main purpose is usually "to allow the institution or one of its units to supply appropriate, relevant, and updated information about itself, either to internal or external stakeholders" (p. 44).

Self-assessment is commonly guided or helped by a list of areas of attention to be addressed or a set of predetermined standards and criteria. Under self-assessment, academics and administrators within the department/institution discuss the strengths and weaknesses as well as potentials and limitations in their units, identify the causes of possible weaknesses, and decide strategies to be used to improve quality (Martin & Stella, 2007). Thune (1998) remarked that a self-review helps the higher education institution check how far it is achieving its strategic mission and goals as well as allows it to prepare an action plan for further development. Therefore, self- assessment is envisaged as a collective institutional reflection and an opportunity for quality enhancement (Vlãsceanu et al., 2004).

In the context of higher education, the self-assessment exercise is highly regarded by academic audiences as they see themselves as the "guardians of quality", a self-critical academic community (Tan, 1992). However, this method is highly subjective which raises some doubts about its reliability. One of the problems being frequently expressed by many evaluation agencies is that self-evaluation reports by institutions are sufficiently "evaluative" (J Brennan & Shah, 2000). Expecting higher education institutions to carry out a truly critical analysis is of very unrealistic when the stakes are high such as when quality assurance processes may lead to sanctions, or approval is essential for the continuing operation of the program or the institution (International Institute for Educational Planning [IIEP] (UNESCO), 2006). Results from his survey, Frazer (1997) found out that the meaning of self-evaluation is becoming distorted by the pressure of accountability, and is often interpreted by some to mean "presentation of self to external body" rather than self-reflection.

2.2.1.2 External review

The second critical component of quality assurance is an external review which has become internationally accepted (IIEP, 2006). The UNESCO glossary distinguished between self-assessment and external review as the difference between internal and external evaluation procedures (Vlãsceanu et al., 2004). According to the UNESCO, the external review is defined as "the process whereby a specialized agency collects data, information, and evidence about an institution, a particular unit of a given institution, or a core activity of an institution, in order to make a statement about its experts, peers, or inspectors, and usually requires three distinct operations: analysis of the self-study report; a site visit; and the drafting of an evaluation report

(ibid, p. 37). Often, self-assessment is a first stage in a process which leads to an external review (Martin & Stella, 2007).

The external review, normally, involves an evaluation carried out by quality review panels that are faculty and administrative peers in the profession or acknowledged experts in the field being evaluated, reviewing the self-study, and conducting site visits. The review panel may include not only professional or academic experts but also others who have an interest in higher education, such as representatives of employers in the Danish quality assurance system (Thune, 1998). The external review is expected to provide an outsider perspective and professional judgment (Martin & Stella, 2007). Since self-assessment needs external validation of both the procedures and criteria used, a team of external experts not directly related to the institution is considered to be the best place to give such validation.

This element is not being exempt from criticism. The main purpose of the external review is to ensure threshold quality based on established criteria rather than making comparative judgments between institutions. There are also some doubts about its effectiveness, reliability, and the legitimacy of the review. The questionable reliability is attributed to the biases of the reviewers as their judgments are a product of their educational, social, and institutional backgrounds. Correspondingly, it is suggested by Vroeijenstijn (1995a) that academics are more likely to listen to their peers' opinion than to be controlled by administrators, inspectors or the like. External monitoring is very often considered as an invasion on the autonomy and academic freedom of the higher education institutions (Mishra, 2007).

2.2.1.3 Decision-making and public reporting

The third important element of quality assurance model is a decision-making and reporting the outcome. In general, the institution that undergoes the quality assurance process provides

relevant information to the quality assurance agency through a self-assessment report which followed by a site visit of an external review team and this process results in a report about the quality of the institution or programs (UNESCO, 2010). The report can, then, be used to determine or to inform decisions or judgments either by the institution or a public authority (e.g. the ministry of education). The higher education institutions can also use the report as instruments of presentation in their marketing activities to attract investment and support or as a tool for recruitment (Sarrico et al., 2010).

The extent of public disclosure of the quality assurance outcome varies (Martin & Stella, 2007). In some systems, the reports are published, while in others they are not (Billing, 2004). According to a European Association for Quality Assurance in Higher Education (ENQA) survey, the publication of the report often depends on the approach used by the quality assurance agency (as cited in Kis, 2005, p. 11). In most cases, it appeared that the reports are not published when the agencies carry out accreditation as the primary activity but are published when they do evaluations (ibid). The arguments against public disclosure of quality assurance reports are that a critical report might have a negative impact on the institution in areas such as student enrollment or external grants for teaching and research. The proponents of public reporting argue that the reports contain valuable information on the quality of higher education which is potentially highly relevant to the general public. In addition, it might commit the institutions to improve on weaknesses and avoid negative consequences. Nevertheless, the well-accepted trend is moving towards public disclosure of more information to the relevant stakeholders (IIEP, 2006, p. 42).

Likewise, the content of the reports varies from one system to another. Some reports present only the results of the analysis in the form of conclusions or recommendations. In other reports, the judgments are presented in the relevant analytical context together with the reason why a specific recommendation is offered (ibid, p. 40). In Europe, almost all reports contain a conclusion, and a large majority also contain analyzes and recommendations, while only one-third of the cases contain empirical evidence (Kis, 2005, p. 11). Regarding this, the study by IIEP (2006, p. 39) concluded that the reporting strategy is influenced by a combination of the national context, the overall objective of quality assurance, and international developments.

Aside from these three elements, some higher education scholars have identified additional common quality assurance principles. For example, van Vught & Westerheijden (1993) included a national coordinating body for the quality assurance scheme in the general model which can be found in different variations all over the world. They further argued that the process of self-evaluation and review by peers or external assessors are usually brought together in a wider system of accreditation, especially in the U.S., in which the formulation of standards is another crucial element used to make the decision to give or withhold accreditation (van Vught & Westerheijden, 1994). Influenced by Deming's Plan-Do-Check-Act theory, Dew (2009) listed leadership, a systematic approach, stakeholder engagement, embracing the concept of knowledge management, and aiming for improvement as the vital components of quality assurance in the higher education organizations.

2.2.2 Quality assurance process

Viewing quality assurance as a policy domain, Perellon (2007) argued that the crucial point of quality assurance process in every higher education system is the fundamental choices to be made concerning five dimensions. These dimensions consist of objectives, control, areas, procedures, and uses. First of all, the aims and objectives of institutional quality assurance policy have to be clearly decided because they are tightly linked to the use that will be made of the

quality assurance outcomes. The second dimension is about ownership related to the bodies that should be responsible for the procedures of quality assurance and to the extent to which this responsibility should be controlled. The third choice concerns about areas of assessment or the unit of analysis such as research activities, study programs, and general institutional management. Next dimension considers how the quality assurance procedures are set up. The last dimension refers to uses of the collected information or outcomes of the quality assurance practice. The purpose of quality assurance, areas of assessment for institutional quality, and approaches to institutional quality assurance are discussed in this section.

2.2.2.1 Purpose of quality assurance

Applying the concept of quality as fitness for purpose which is given high attention in the field of higher education, the purpose of institutional quality assurance is to ensure that the defined objectives can be achieved (Kettunen, 2012). According to the literature, quality assurance procedures can serve two major purposes which are accountability and improvement (Kis, 2005; Perellon, 2007; Sarrico et al., 2010). Martin and Stella (2007) distinguished three main broad purposes of the external quality assurance systems: quality control; accountability or guidance; and improvement purposes. Quality assurance for accountability purposes, which is frequently linked to the concept of value for money, transparency, and public assurance, implies the use of a summative approach (Kis, 2005; Martin & Stella, 2007). These objectives stress the importance of assuring quality based on criteria set down by external authorities and institutions. In some cases, the results of the quality assurance are also linked to sanctions or incentives. Most recently, the emphasis of the quality conformance in higher education is placed on external regulation, mutual recognition, and international comparability of standards (Perellon, 2007). On

the other hand, quality assurance for improvement purposes is focused on improving rather than controlling quality which implies a formative approach (Kis, 2005). The procedures are thus aimed at promoting future performance rather than making judgments on past performance. In these cases, based on the results of the quality assurance, higher education institutions can act on their resources and activities to improve their performance such as pedagogies of teaching and learning, organizational models and community services.

There is a wide body of literature discussed the relationship between the two purposes of quality assurance whether they are compatible or mutually exclusive (IIEP, 2006; Kis, 2005). According to the study by IIEP (2006, p. 24), most quality assurance systems certainly address them all in one way or another, while are usually more geared to one than to the others in practice. Nonetheless, it is recommended that although quality assurance exists and has legitimacy because stakeholders are interested in the quality of higher education institutions and programs, it should not be merely developed as an answer to performance assessment exercises. Rather, quality assurance process should be an internal concern of the institutions with its improvement and be implementing as an integrated management tool in their operational decisions (Sarrico et al., 2010).

2.2.2.2 Areas of assessment for institutional quality

In general, quality in higher education is properly assessed across at least three levels: 1) individuals, including students and staff; 2) departments, including academic and administrative units; and 3) institutions (Stark & Lowther, 1980, p. 286). Widely debated in the literature, though, is whether the quality assurance in the field of higher education should focus on the institutional level or, instead, on academic programs. The institutional quality assurance investigates the institutional mission and objectives achievement. This level is a generic

approach that looks at the institution as a system of which academic programs are a part. The programmatic quality assurance focuses on individual study programs. Since each study program prepares students for a specific profession, its policy on student recruitment, standards, and curricula may vary from one program to another. The quality assessment of each study program may be related to the particular professional expectations and be subjected to requirements arising from national qualification frameworks. Focusing on a program-wide approach is, therefore, a strong tool to address issues of deficient quality at the departmental level where improvement decisions must be taken (IIEP, 2006, p. 36).

The level of which quality is addressed in a higher education institution varies depending on the institutional and national context. Both approaches have advantages and disadvantages. The program-wide approach is criticized for being more time-consuming and expensive but allows for more depth and details evaluation that results in feedback and recommendations for further curriculum improvement. While the institutional review which asks for fewer experts and includes less involvement at grass-roots level provides insufficient feedback at discipline level and lack of recommendations for improvement (Kis, 2005). It is observed that there has been a trend towards programmatic approaches in many countries as their systems experienced growth in professional fields of study (El-Khawas, Pietro-Jurand, De, & Holm-Nielsen, 1998). Arguably, it is believed that institutional and programmatic quality assurances are interlinked because institutional assessment cannot be conducted without looking at programs, and programmatic assessment must look into the broader institutional environment (IIEP, 2006).

The literature on higher education quality assurance suggested that there was agreement on the areas of assessment for institutional quality. Regarding this, Martin and Stella (2007) noted that most institutional quality assurance systems looked "at the same things, albeit with different emphases" (p. 68). According to Peace Lenn (2004, p. 8), institutional quality assurance focuses most frequently on nine areas of analysis. Hayward (2006) categorized major areas of the higher education institutional review relative to an examination of input, process, and output criteria. Quality assurance and higher education experts from eight countries participated in the UNESCO meeting on "Indicators of Quality & Facilitating Academic Mobility Through Quality Assurance Agencies" for the Asia-Pacific region in August 2002 and identified ten key areas to assess institutional quality (IIEP, 2006). The summary of their classifications on the important areas of assessment for higher education institutional quality is illustrated in Figure 2.2.

	Peace Lenn (2004)	Hayward (2006)	Quality Assurance and Higher Education Experts
The areas of assessment for institutional quality	 Mission Governance Effective Management Academic Programs Teaching Staff Learning Resources Students and Related Services Physical Facilities Financial Resources 	 Curriculum quality Human resources Budget resources Quality of students and faculty Teaching quality (e.g. peer evaluation of teaching quality, student evaluations of teaching quality) Efficiency criteria (e.g. pass through rate, first year failure rates) Output criteria (e.g. quality of graduates, employment data, research output, service output and contributions). 	 Integrity and Mission Governance and Management Human Resources Learning Resources and Infrastructure Financial Management Student Profile and Support Services Curricular Aspects Teaching-Learning and Evaluation Research, Consultancy and Extension Quality Assurance

Figure 2.2. A summary of the areas of assessment for higher education institutional quality

Source: Hayward, 2006; IIEP, 2006; Peace Lenn, 2004

Noticeably, similar aspects were given attention when assessing the quality of higher education institutions. Perellon (2007) concluded that quality assurance procedures generally address three categories namely research activities, study programs, and general institutional management. The third category refers to broader activities of higher education institutions such as the proper use of financial subsidies or the type of institutional government.

The relationship between the evaluation of teaching and research is also subject to wide debate in the literature. Vroeijenstijn (1995b) argued that teaching and research require different types of expertise in the assessment and thus should be assessed separately. Perellon (2007) agreed that "looking into the study programs and research performance is generally done through different procedures and, most of the time, by different bodies and agencies" (p.163). However, Kis (2005) contended that the close connection between the teaching and the research needs to be taken into account and suggests "the best way is to assess teaching and research separately, although it will be useful if each assessment is planned with the other mind" (p. 21).

2.2.2.3 Approaches to institutional quality assurance

In the context of higher education, there are three main approaches to quality: accreditation, assessment, and audit. The quality assurance systems can focus on each approach or use a combination of these (Kis, 2005). Accreditation is the process by which the performance of a higher education institution as a whole or a specific educational program is evaluated against a predetermined set of minimum criteria or standards (Bogue & Hall, 2003). This process usually results in awarding of a status (a yes/no decision), of recognition, and sometimes of a license to operate within a time-limited validity (Vlãsceanu et al., 2004, p. 19). Typically, accreditation processes concentrate more on the input (e.g. mission, resources, curricula, staffing, and procedures) and less on the outcomes (e.g. learning outcomes, graduates, employability) of a higher education institution or program.

Assessment is the process of systematic evaluation of higher education institution or program that leads to making recommendations and critical judgments (Kis, 2005; Vlasceanu et

al., 2004). Assessment usually aims at identifying the strengths and weaknesses of an institution or a program. It is an improvement-oriented, developmental approach that can be focused on the input, the process (e.g. teaching, learning, support, services), or the outcome and includes using of qualitative and quantitative information.

Lastly, the quality audit is conceptually different from assessment or accreditation, in the sense that it focuses on internal procedures adopted by a higher education institution in order to achieve its objectives (Kis, 2005, p. 5). Rather than directly evaluating the quality of an institution or program's resources and activities, audits focus on specific internal quality monitoring procedures and their effectiveness to assure and improve the quality of the institution's performance. In addition to these approaches, Weber, Mahfooz and Hovde (2010, p. 1) indicated that common approaches to quality assurance in higher education currently in use include: a) minimum standard accreditation; b) accreditation of excellence; c) supportive evaluation; d) audits of internal quality assurance processes; e) comparative evaluation of the state of a discipline; f) benchmarking between institutions; and g) rankings.

2.2.3 Current development of quality assurance practices

Certainly, quality assurance systems have different implications and characteristic depending on their educational systems and traditions (Woodhouse, 1999). Quality assurance serves various purposes and can be carried out in various ways. As higher education institutions are academic organizations characterized by multiple objectives, seeking for a suitable process for assuring academic quality has become more challenging. Sarrico et al. (2010) suggested that quality assurance "should be based on a more integrated view about what a higher education institution is and less a set of different assessment exercises put together – teaching, research and

management" (p. 52). They further pointed out that there was some application of institutional quality assessment models that provided this integrated view of higher education quality and frameworks for better institutional management as well as continuous quality improvement such as the Balanced Scorecard and Benchmarking exercises. Scholars in the field of higher educational quality assurance have distinguished between internal and external academic quality assurance practices though its applications are not clear-cut. Followings in this section are examples of external quality assurance practices that are currently implemented in many countries across the world (Dill, 2007).

2.2.3.1 National qualifications frameworks

The notion of National Qualifications Framework (NQF) has been adopted so readily by a growing number of countries and international agencies (e.g. OECD, ILO, EU, ASEAN) and an intensive debate on its development can be observed in the literature (Dill, 2007; Organisation for Economic Co-operation and Development [OECD], 2005; Young, 2007). The NQF was defined by OECD (2005, p. 6) as an instrument for the development and classification of qualifications according to a set of criteria for specified levels of learning achieved. It aims to integrate and coordinate national qualifications in relation to the labor market and civil society. In this context, the qualifications framework is defined in terms of learning outcomes by describing required standards and the range of knowledge and skills expected from academic study. It is expected that the prescribed outcomes would provide a clear standard for judgment, and all higher education provision would have to meet those standards. The NQF, thus, serves as the driving force for academic accreditation and quality assurance. Furthermore, the framework

is designed to ensure that the quality of higher education is comparable to international standards as well as be the starting point to develop regional mutual recognition agreements.

The establishment of the new framework receives many criticisms arisen from the higher education sector. A common concern is expressed that it would become a regulatory device for assuring the fitness of purpose of academic degrees (Dill, 2007). Some scholars have seen NQFs as a governmental policy instrument to enforce higher education institutions to exhibit greater transparency and accountability (Young, 2007). Young (2003) pointed out that NQFs have less to do with improving the quality of education and rather an instrument for making educational institutions more accountable and quantitative measures for comparing different national systems (p. 228).

Arguably, the complaints could be read simply as a reaction to threats to university autonomy. It is not surprising that universities, in particular, may feel threatened by what they perceived to be an attack on their right to set standards, design curricula and assess quality within a new framework. The principles of the NQF as it presently stands poses a radical threat to academic freedom in the sense that it constitutes an attempt to undermines universities' distinctive role in higher education provision. Likewise, setting higher educational standard and promoting linkage between academic and professional community both nationally and internationally imply that there will be an increasing role of key stakeholders (whether the government, national qualifications authorities, leaners, prospective employers, professional agencies, the public, etc.) to involve and have an influence in the provision of higher education. Nevertheless, Dill (2007) argued that the qualifications framework can contribute to external quality assurance by "helping to redirect public and academic debate about academic quality from curricula issues to socially beneficial learning outcomes" (p. 10). In addition, a trend towards the use of outcomes of the educational process as a measure of quality in higher education can positively be seen as a mechanism to foster the development of the quality improvement.

2.2.3.2 Quality assessments

According to Dill (2007, p. 6), there were three new assessment practices that many national governments initiated to assess quality in existing higher education programs and institutions including academic audits, subject assessments, and new forms of academic accreditation. Each of these practices adopted the three basic elements of quality assurance model as mentioned earlier – an institutional self-study, an external peer review, and a public report of findings – with different emphasis. Subject assessments involved systematic evaluations of the quality of delivered performance of study programs with the emphasis on curriculum, teaching, and program relevance to graduates and the economy. Academic audits focused on the processes of evaluating quality that institutions use to assure themselves that their chosen standards are being achieved. The innovative approaches to accreditation focused on study programs rather than institutions in which the effectiveness of program quality assurance activities is given comprehensive attention. Dill (ibid, p. 7) argued that all these new practices positively encouraged dialogue and collaboration among academic staff regarding the improvement of student learning and assurance of academic standards within academic institutions. However, they reflect an increasing centralized control of academic quality by external assessors and/or state authorities which could encourage a culture of compliance and, as a result, the institution may invest time and effort to develop policy documents and quality infrastructures rather than to actively improve academic standards.

2.2.3.3 Public provision of information

The third practice implies the trend that public provision of information on academic quality has become a critical component of national quality assurance frameworks in many countries. The quality assurance system produces information on academic quality and communicates the outcomes and activities of the institution to the management, personnel, students and external stakeholders (Kettunen, 2012, p. 519). However, many existing quality assurance instruments such as the traditional output measures, performance indicators, common exams or tests, common surveys of student experience, and quality rankings by commercial publications, explicitly have limitations in providing useful information to the public on academic quality and helping maintain and improve academic standards. Increasingly, the development and provision of valid and reliable academic quality information has been encouraged and subsidized, especially by the governments, in order to offer more valid and informative indicators of academic quality for potential students as well as academic staff. Examples of these practices are those systematic survey research on effective teaching and student learning such as the Australian Course Experience Questionnaire (CEQ) which surveyed graduates' perceptions of teaching quality, skills learned, and their satisfaction with their education in their academic program and the US National Survey of Student Engagement (NSSE) which asked currently enrolled students to report on experiences in their educational program known to be associated with effective learning (Dill, 2007).

In conclusion, considering the differentiation of higher education systems and increasing complex organizational structures and process, it is widely recognized that quality assurance efforts need to be more flexible and sensitive to the particular missions of the given institutions. Nonetheless, quality assurance is also something more than a series of data-collection activities (Terenzini, 1993). It is an ongoing way of doing business and should be viewed as a process that requires continuous attention and monitoring. Therefore, the new challenge for higher education is to figure out suitable measures and procedures to provide more transparency to respective stakeholders, such as students and employers, along with encouraging the improvement of academic standards and quality.

2.3 ROLES AND FUNCTIONS OF GOVERNMENT AUTHORITIES AND NATIONAL QUALITY ASSURANCE AGENCIES

Traditionally, all systems of higher education have established control mechanisms over academic activities. However, the nature and extent of these mechanisms vary widely in different higher education systems. Clark (1983) set out three coordinating powers in the higher education system: the academic oligarchy, the state, and the market. These encompass three different types of instruments that can be used for quality assurance, depending on which power is the strongest: direct monitoring by the state, professional self-regulation, and market regulation (Clark, 1983; Dill, 2003).

Governments generally have a broad range of policy approaches to influencing academic quality. According to Martin and Stella (2007), quality assurance agencies in most countries may be established by the government, by higher education institutions, or by private groups such as specialty councils or professional bodies. They indicated that there are four types of affiliation for establishing a quality assurance agency (ibid, p. 82). Firstly, it can be established as a governmental (or quasigovernmental) agency, perhaps as a unit in the ministry as in the cases of Cambodia and Hungary. Secondly, it can be a private body fully independent of the government

in its establishment and functioning such as those established by the higher education institutions as in the Philippines and the USA. The third type is a quasi-governmental buffer body or established under a local buffer organization which is governed independently of the government as in the case of Egypt. The last type is a body established without the government or by higher education institutions having played any role in its establishment or functioning. Professional accreditation is a typical example in this case. Quality assurance agencies, with the exception of a few agencies owned by the higher education institutions themselves or established with the major support of the higher education institutions, have been developed as governmental initiatives and clearly serve government functions (ibid, p. 79).

Although the agency is by nature an independent organization with a steering body, institutions and government may be represented on the board of the quality assurance agency, or contribute to the funding of the agency or evaluations (Kis, 2005). The ownership of the quality assurance agency is directly related to the issue of quality assurance's purpose (whether the system is focusing on control, accountability, or improvement) and who is exercising the power over the quality assurance process (whether professional community, the state, or the market). Some literature had discussed the important role of state governments and national quality assurance agencies as external bodies performing quality assurance functions.

2.3.1 Relationships with higher education institutions in the process of quality assurance

As aforementioned, government bodies often play a significant role in the quality assurance of higher education everywhere (Kis, 2005). For instance, in the US, the United States Department of Education, a federal agency is one of the two institutions that carry out the recognition of accrediting agencies (Eaton, 2004). According to the ENQA survey (2003), the main source of

funding of quality assurance in higher education in Europe was the government. Evaluation system in Denmark is owned by the government (Thune, 1996). Similarly, in Japan independent evaluation bodies must be recognized by the Ministry of Education, Culture, Sports, Sciences and Technology (Kimura, Yonezawa, & Ohmori, 2004). As pointed out by Salter and Tapper (2000) "The politics of governance in higher education is dominated by a discourse of quality assurance which assumes the external regulation of academic activity to be the natural state of affairs" (p. 66).

Schmidtlein (2004) discussed that the increasing governmental interest in assuring the quality of higher education institutions mainly resulted from an emerging view of higher education as an "industry", concerns about efficient resource allocation, a lack of trust and confidence between governmental and institutional officials, a desire to reduce uncertainty in government/higher education relationships, and lack of confidence in institutional governance (p. 263). These factors have changed the relationships between governments and higher education and driven the political agendas towards: legitimizing changes in sectorial structures and funding; focusing on value for money practices; reducing the autonomy of higher education, 2008, p. 62). As a result, the introduction of national quality assurance agencies and governmental involvement in academic quality assurance through formal assessment techniques and accountability processes are developed.

As previously stated, a national QA agency can either be a non-governmental or a governmental organization. The main purpose of the quality assurance agencies is to support the development of the quality of higher education institutions. The quality assurance agencies have formally been recognized by public authorities in the European higher education area as agencies

with responsibilities for external quality assurance (Costes et al., 2008). Thus, these agencies regularly perform external quality assurance as a core function. Brennan and Shah (2000, p. 28) pointed out that the national QA agencies exist within a more complex set of relationships between higher education and the state, of which funding is the most universal and generally most important factor to consider. The national QA agencies play an important role in the higher education systems as an external body to measure quality performance of the higher education institutions. The results of national QA agencies' exercises usually contribute to the governments' decision-making on their direct control over funding, curriculum, or licensing of the higher education institutions. In general, the national QA agencies differ in terms of their legal status and sources of funding. The extents to which they themselves possess powers over higher education institutions, to which they can affect the decisions of other central authorities, and to which they produce information directly useful to key stakeholders also vary (ibid, p. 32).

Another highly controversial issue in the relationships between governments and higher education institutions in the process of quality assurance is whether the allocation of public funding to institutions should wholly or partially be based on the results of evaluation procedures (Thune, 1998). Constrained from proliferating demands for higher education quality and limited budgets, governments are increasingly requiring their public colleges to demonstrate that they are serving important economic and social needs and providing quality education. Hence, before governments appropriate resources for higher education, they want to know if their spending will help meet key goals. According to Alexander (2000), many governments have inclined to increase the accountability of their higher education systems by implementing an array of performance measures that attempt to determine what is called "value for resources" (p. 422). Linking quality to funding (e.g. performance-based funding policies) is seen as important for accountability and an incentive to quality improvement (Ewell, 1999). However, pros and cons of linking the results of quality monitoring to funding were subject to wide debate in the literature.

2.3.2 Functions to be performed

The literature had addressed different quality assurance functions to assure the quality of higher education institutions and programs that may be performed by the governments and national quality assurance agencies. The study from IIEP (IIEP, 2006, p. 14) reported that roles of the governmental authorities and national quality assurance agencies in the quality assurance processes can be grouped into three overlapping functions namely administration, co-ordination and decision-making. The responsibilities of each function are illustrated in Figure 2.3. The functions reflect the different level of involvement that the governmental authorities and national quality assurance systems and have implications for resource requirements and their staff profile.

Figure 2.3. A summary of the three major functions of the governments and national quality

Administrative functions	Co-ordination functions	Decision-making functions
 Notifying the higher education institutions Developing the roster of experts Publishing the final quality assurance outcome 	 Organizing activities for the development of the quality assurance framework e.g. monitoring the major phases of quality assurance, training experts to perform the process, and helping institutions to prepare for self-study Upholding the credibility of the QA agencies 	 Participating in assessment visits Taking a role in assessment activities such as report-writing Having a role in making decisions

assurance agencies in the quality assurance processes

Source: IIEP, 2006, p. 14

The report by World Bank (2003) suggested that the governmental authorities and quality assurance agencies generally perform various functions in assuring academic quality encompassing opening-initial assessment (commonly called "licensing" and leading to the status of a publicly recognized), supervision of the current functioning (commonly relating to minimum standards, also including the supervision of administration and finance), accreditation, professional certification of graduates in chosen professional fields, and the provision of information on the recognition and accreditation status of both institutions and programs. Considering these functions and the types of affiliation for establishing a national quality assurance agency, the basic functions a quality assurance agency may perform can be listed as following (IIEP, 2006, p. 15):

- 1. Determining the range, scope and general orientation of the quality assurance scheme to be applied. One of the most important functions is to determine the fundamental aspects of the quality assurance process, as mentioned earlier in the previous section e.g. objectives, control, areas, procedures, uses, and how these specific decisions should be implemented. It is essential that the agency consider those decisions in the light of the context in which it has to operate.
- 2. *Preparation of methodology*. This function includes developing the quality assurance methodology (e.g. standards, criteria, assessment instruments for academic quality assurance), preparing the implementation plan, and disseminating information dissemination (e.g. guidelines, manuals and handbooks for the quality assurance process) to reach out to the academic community or key stakeholders.
- 3. *Managing the processes*. The management of quality assurance processes involves liaison with higher education institutions, selection and training of external reviewers,

constitution of the review team and conduct of the site visit, and reception of the review team's recommendations. It is crucial that these functions are carried out in a professional manner.

- 4. *Decision-making and reporting on the outcome*. Reporting and disseminating the outcome of the processes is also another important function as the well-accepted trend is for systems to move towards public disclosure of more information to stakeholders on the quality assurance outcome.
- 5. *Capacity building*. This function refers to developing strategies and implementing activities that will strengthen the capacity of the higher education institutions to contribute to and benefit from the quality assurance exercise. It is suggested that the capacity building must be done at three levels: among reviewers; higher education institutions; and the agency staff.

2.3.3 Accountability of the national quality assurance agencies

The system of quality assurance needs a structure, which is most commonly materialized through the creation of a national quality assurance agency. Brennan and Shah (2000, p. 30) regarded the quality agencies as "buffer organizations" between higher education and the state They advocated that a strong degree of independence may be necessary to their operational success. These agencies serve as agents that supposedly work on behalf of the public interest to monitor the institutions and safeguard the quality of provisions in an education sector (Law, 2010, p. 70). Therefore, their independence is crucial to eliminate a conflict of interest and to protect institutional autonomy (Kis, 2005). However, Martin and Stella (2007) emphasized that the quality assurance agencies are expected to be "accountable to many stakeholders to prove the credibility of the process and to ensure the objectivity and transparency of their decisions or recommendations" (p. 91). Perellon (2007, p. 175) indicated that the "accreditation of the accreditors" had constituted an important aspect of quality assurance policy, particularly at the European level. In the USA, external quality monitoring is done by regional, national, and specialized agencies in which these agencies in turn are accredited by Council for Higher Education Accreditation and/or the United States Department of Education.

Guaranteeing the credibility and acceptance of the quality assurance process requires clarity in policies, appropriateness of the quality assurance framework, transparency of the procedures, integrity of the people involves, and the desired impact on the system (Martin & Stella, 2007, p. 91). In addition, the government may have various mechanisms in place in order to ensure the accountability of the quality assurance agencies for instance built-in checks in their functioning (e.g. having the various stakeholders and in particular a cross-section of academia represented in the governing bodies, requiring annual reports on their performance, and making the reports public), recognition from an umbrella body, voluntary coordination in regional networks and adherence to their standards and criteria, and periodic assessment of agencies (ibid). In all cases, co-operation and communication between the government and the agency are nonetheless considered important.

2.4 CHALLENGES AND DIFFICULTIES IN QUALITY MONITORING IN ACADEMIC INSTITUTIONS

Changes in the context surrounding higher education, such as massification, globalization, the presence of the market as a tool of public policy, the expansion of private higher education

providers, and the increasing competition in quasi-markets multiplied the uses of evaluation and of its results. A review of the literature reveals that monitoring the quality of academic institutions is difficult and challenging (Kis, 2005). One frequently reported reason for difficulties in academic quality assurance processes is the difference of interests and conceptions of quality between stakeholders in higher education. Particularly, there is a wide gap between academic and governmental approaches to quality (Kis, 2005; Vroeijenstijn, 1995a). The government has a more summative approach while the approach of the universities tends to be more formative. From a government standpoint, quality is achieved when a proper balance between quality, opportunity, and cost is maintained. Accordingly, the government is interested both in accountability and quality improvement in which its emphasis is at demonstrating justifiable decision on higher education policy to the society (such as allocation of funding or termination of academic programs). On the other hand, the academic sees the quality in noninstrumental terms, as residing in certain values intrinsic in academic work but not necessarily related to extrinsic ends (Newman, 1982). Their main objectives are toward an analysis of strengths and weaknesses and the formulation of recommendations for further quality improvement (Kis, 2005). Watty (2006) argued that academics adopt a variety of behaviors when quality led initiatives are implemented such as portraying a lack of engagement in the process or more likely to participate effectively in quality assurance systems that are designed to ensure the attributes of quality they deem important.

Next problem identified in the literature is the difference between planned outcomes of quality assurance policy and the outcomes of the implementation process, what Newton (2000; 2002) called the "implementation gap". Based on qualitative data from semi-structured interviews with both frontline staff and academic managers, he concluded that the

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implementation gap of quality policy resulted from the tension between quality at the level of management objectives and quality as manifested at the operational level through the activities of "frontline" academic staff. Newton studied behavioral responses of academics to quality policy (e.g. sinking, coping and reconstructing), and emphasized the views of front-line academic staff engaged in the implementation of policy were particularly important because they were in fact makers and shapers in the policy implementation process, not mere passive recipients of management objectives. Furthermore, he suggested that the factors such as the situated perceptions of the frontline staff, the loss of frontline academics' autonomy, the quality bureaucratization that led to unjustified workload burdens, and the situational factors and context seemed to be of particular importance. The outcomes of the implementation process and success of quality assurance strategies, being either the rigor of application or the neatness of the dry documented quality assurance system, are to some extent influenced by these factors.

Lack of preparedness of staff to quality assurance activities is another problem identified in the literature (Kis, 2005). Study by Sabiote and Gutierrez (as cited in Kis, 2005, p. 25) reported that some of the major reasons for the weakness of the quality assurance system in Spain were the lack mechanisms of analysis of the information gathered during the quality review, inadequacies of the selection process of and the training offered to evaluators, and the lack of effectiveness of evaluation committees.

The impact of external quality assurance on institutional autonomy can also make the implementation of quality assurance processes become more difficult. Stensaker (2003) noted that there was a trend towards greater centralization in higher education institutions – in procedures and organizational decision-making – as a consequence of external quality assurance activities. Harvey and Newton (2004, p. 152) pointed out that "compliance and accountability

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have been the dominant purposes and any improvement element has been secondary" in the current implementation. It is argued that the setting up of a new quality assurance mechanism takes away the decision-making power from the individual and collective bodies of academics at the institutional level and puts it in the hands of other actors such as the government and the quality assurance agencies (Martin, 2007. p. 52). In other words, quality assurance processes, especially the use of rewards and sanctions to ensure implementation and overly bureaucratic procedures, reflect its underlying intention of management control and a shift of power that impinges on academic freedom. Stensaker (2003) argued that some external quality assurance systems were more concerned with organizational requirements surrounding higher education, than teaching and learning. Numerous analysts claimed that evaluation systems created a considerable workload for academic staff (Harvey, 2002; Stephenson, 2004). Harvey (2002) noted that there was a risk to emphasize procedural elements of quality rather than innovative processes, and it would result in detailed paper trails but entirely stifle development and innovation. Likewise, Newton (2000) suggested that if the complaints against external quality assurance activities were not appropriately addressed, many academics will tend to treat quality monitoring processes as game-playing and quality assurance systems as beasts to be fed through ritualistic and largely meaningless practices.

Another problem is the linkage between performances and funding which increases the complexity of the relationship between government authorities and higher education institutions in implementing effective quality assurance functions. As mentioned earlier, there are pros and cons of linking the results of quality monitoring to funding. The information-driven funding approach is a controversial issue in the literature. Thune (1998) discussed the argument warning against a direct link between evaluation and funding which pointed to the real danger of creating

a compliance culture among the higher education institutions. Similarly, Middlehurst and Woodhouse (1995) stated that funding rewards generate a compliance culture and skew the system to follow the money. In contrast, proponents of direct linkages between quality and funding argued that linking funding to evaluation results serves the objective of accountability and can constitute incentives for quality improvement and that risks of compliance exist under any evaluation system whether they are linked to funding or not (John Brennan, 1997; Vroeijenstijn, 1995b).

2.5 BEST PRACTICES AND LESSONS LEARNT FROM DIFFERENT NATIONAL QUALITY ASSURANCE SYSTEMS

A variety of quality assurance practices is followed all over the world. Still, the field of quality assurance in higher education appears to be in a state of adolescence, with varying and shifting approaches and confusion in both objectives and terminology (Weber et al., 2010, p. 1). Therefore, the question of how effective quality assurance systems should be designed and implemented has been given considerable attention. A number of best practices and lessons learned for developing the quality assurance systems can be garnered from the literature.

Weber et al. (2010) conducted a comparative research of different national quality assurance systems for higher education institutions in a cross-country system (the EUA institutional evaluation program) and seven countries; namely Irish Republic, Hong Kong, Scotland, France, Swiss, Austria, and Germany. The analysis concerned four criteria; the object and nature (formative or summative) of evaluation, the relative role of higher education institutions, agencies, and governments, the consequences and impact of decisions and/or recommendations, and the costs of higher education institution quality assurance systems in relation to the expected benefits. From their findings, the characteristics of "best practice" quality assessment system were the system that should a) examine the strategies followed by a higher education institution in the light of the institution's intended purposes, b) focus on quality assurance processes more than on pre-defined criteria, c) be as much institution-driven as agency-driven, d) be as light as possible (push the concerned higher education institution to do a great part of the work), and e) be adapted to the types of higher education institutions in the country (ibid, p. 3).

The research by Kis (2005) also indicated some features of effective quality assurance systems. These features included clarity of purposes, legitimacy, dynamic link between internal and external processes, flexibility, confidence in higher education institution and more focus on internal processes, adequate follow-up procedures, feedback linked to action, regular and cyclical quality monitoring, viewed as a process, and prudence and flexibility in linking results to funding. Martin & Stella (2007, p. 105) emphasized the three points of caution that quality assurance is not an aim in itself. It has a cost both financial and human, and the existence of a quality assurance mechanism does not necessarily and automatically imply that the higher education system is of adequate quality.

Taking into account the new age of academic globalization and massification, Dill (2013) suggested that a) the self-organization of internal governance arrangements, b) the importance of face-to-face communication among peers for increasing trust, and c) the active collective monitoring of valid measures of performance are the critical design principles for assisting higher education institutions to voluntarily address collective action dilemmas in assuring academic standards. The study by IIEP (2006) advocated good practice for the quality assurance

agency to have a sufficient level of autonomy as regards both the state bureaucracy and the academic community so that the judgments made in its reports cannot be influenced by third parties.

Finally, the study by Skolnik (2010) which considered quality assurance in higher education as a political process is also worth mentioning. He asserted that the different viewpoints of quality, the pressures toward conformity within academe, and imbalance of influence among different stakeholders contributed to the political nature of quality assurance in higher education (ibid, p. 85). In this respect, Skolnik recommended that employing the "responsive model" of evaluation that includes the collaborative efforts of all higher education stakeholders could make quality assurance more effective in improving educational quality.

3.0 THAILAND'S CONTEXT

This chapter serves as a brief background information about the higher education system in Thailand and a special emphasis on the national quality assurance policies for higher education institutions. The current national policies on quality assurance in Thai higher education system are divided into internal quality assurance and external quality assurance.

3.1 HIGHER EDUCATION SYSTEM IN THAILAND

Higher education in Thailand is offered at universities, institutes of technology (polytechnic institutes), vocational and technical colleges, teachers colleges, and other professional colleges such as nursing colleges, and police and military academies. The Ministry of Education, through the Office of the Higher Education Commission (OHEC), regulates and oversees all state universities and private institutions of higher education, vocational and technical colleges, and teacher training colleges. Specialized training institutions fall under the purview of the relevant ministries, such as tourism and sport, culture, defense, transport, and public health. The general administration of Ministry of Education in Thailand is illustrated in Figure 3.1.



Figure 3.1. The general administration of Ministry of Education in Thailand

Source: Office of the Higher Education Commission (2014b)

Office of the Higher Education Commission is responsible for higher education at both undergraduate and graduate levels. According to Ministry of Education Regulatory Act of 2003, OHEC has the authority to strategize, manage, and promote higher education on the basis of academic freedom and excellence of degree-granting institutions. OHEC serves as Secretariat to the Commission on Higher Education Board having Secretary-General as Chief Executive Officer and serves as Secretary to the Commission on Higher Education Board. The Board, with diverse membership including individuals from academia, the public and private sector, local administrations, and professional associations, has the authority to formulate policies and issue regulations in accordance with the National Economic and Social Development Plan, and the National Education Plan.

Key responsibilities of OHEC include the provision of resources and support, promotion of equity in higher education, and monitoring educational outcomes. The main functions of OHEC include policy setting, licensing of new private institutions¹, resource allocation for public institutions, promoting faculty development and research capability, financial aid, and monitoring /evaluating higher education institutions and programs.

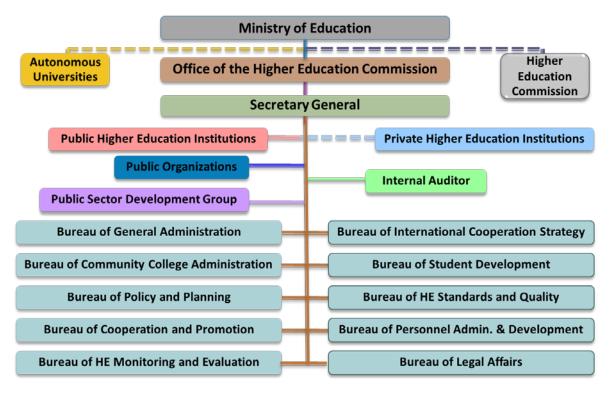
The OHEC's administration consists of 10 bureaus including Bureau of General Administration, Bureau of Community College Administration, Bureau of Policy and Planning, Bureau of Cooperation and Promotion, Bureau of Higher Education Monitor and Evaluation, Bureau of International Cooperation Strategy, Bureau of Student Development, Bureau of Higher Education Standards and Evaluation, Bureau of Personnel Administration and Development and Bureau of Legal Affairs (See Figure 3.2). There are also two public organizations under the supervision of OHEC including Office for National Education Standards, and Quality Assessment (ONESQA) and the National Institute of Educational Testing Services (NIETS).

In recent years, there has been significant growth in the number of higher education institutions operating in Thailand. In order to respond to increasing demand for higher education, there has been not only a primary growth in the private sector but also a reorganization of the public sector. This reorganization has led to newly independent campuses being created from existing universities, the upgrade of teaching colleges to Rajabhat Universities (and an expansion of the programs they can offer), and the reorganization of 35 institutes of technology into nine regional universities (known collectively as Rajamangala Universities of Technology²).

¹ The establishment of a private higher education institution requires a license from the Minister of Education, based on the advice of the OHEC.

² Rajamangala Universities of Technology (RMUT) is a system of state run universities in Thailand providing undergraduate and graduate level of advanced vocational education. RMUT consists of nine universities found in all regions nationwide and most of them have multiple campuses located throughout the region.

Figure 3.2. OHEC organization chart



Source: Office of the Higher Education Commission (2014c)

Over the past years, OHEC has promoted regulation concerning the administration of both public and private higher education institutions. This legal framework aims to increase both institutional autonomy and flexibility and encourage self-management under the supervision of university councils. The decentralization of public higher education institutions has been pursued through the development of autonomous universities. Many state universities have been granted autonomy from government control in recent years, a move that has been met with a degree of skepticism from students and lecturers concerned about increasing fees and a lack of accountability. Autonomous universities have been granted full status to operate as independent government agencies, receiving funding through block grants from the national budget, and have full autonomy to establish their administrative structures or formulate rules and regulations relating to personnel and staffing (The World Bank Group, 2009, p. 23). Private universities have full control over their internal affairs and receive no public subsidies.

At present, the OHEC supervises and oversees a total of 173 institutions of higher education which consists of 31 public universities, 73 private universities and colleges, 40 Rajabhat Universities (former teachers colleges), 9 Rajamangala Universities of Technology (former polytechnic institutes) and 20 community colleges³ (OHEC, 2014a). Among these, there are 15 universities that are autonomous. The list of all higher education institutions under the supervision of OHEC that offer academic programs at bachelor's and master's degrees (excluding community colleges) classified by types and regions is shown in Appendix A.

About 22% (or 57 institutions) of Thailand's higher education institutions are located in Bangkok metropolis where 10% of the population resides. There are 20% in Central and 21% in the Northeast regions respectively. The North has 16%, and the South has 15%. While there has been a recent expansion of higher education access at the provincial level, the East region has only a small number of institutions or campuses (6%). The regional distribution of higher education institutions and their campuses in Thailand which are under the supervision of OHEC is shown in Figure 3.3.

Public higher education institutions can be categorized into selective admissions universities, open admissions universities, autonomous universities, and community colleges. Private institutions are grouped into three categories: universities, colleges, and institutes. Although roughly equivalent in terms of numbers (100 public versus 73 private institutions), public universities enroll about 85% of students.

³ Community colleges in Thailand do not offer bachelor's degree program. Course offerings at these institutions include 2-year associate degree programs and short-course trainings catering to local economic and social development needs. Its objective is to provide vocational and professional training according to the needs of local community.

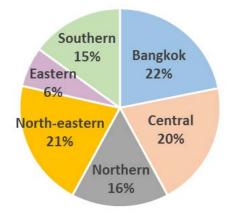


Figure 3.3. Thailand's higher education institutions and campuses by region

Source: Office of the Higher Education Commission (2014d)

The two open universities in Thailand account for a huge share of almost two million higher education students (the academic year 2013). Ramkhamhaeng University, which has an open enrollment policy and a reported 330,205 enrollees attending one of 34 campuses or studying via distance learning, is by far the biggest educational institution in Thailand. Sukhothai Thammathirat Open University has an enrollment of 126,293 students who participate in all the courses remotely. Dropout rates at the two institutions are high.

Student enrollment in higher education institutions, including those attending open admissions universities, increased from 2,066,478 in 2012 to 2,147,427 in 2013. This growth in higher education is likely to continue as it is estimated that high school graduates in Thailand will increase dramatically due to active promotion of access to education by the government and social demands for higher learning (The World Bank Group, 2009). The student enrollment in Thailand's higher education institutions in the 2012-2013 academic year classified by types of institutions and educational levels is shown in Table 3.1.

	2012				2013			
Institutions	Lower		Higher		Lower		Higher	
	than	Bachelor's	than	Total	than	Bachelor's	than	Total
	Bachelor		Bachelor		Bachelor		Bachelor	
Public institutions	40,645	1,535,641	185,103	1,761,389	38,010	1,606,348	195,244	1,839,602
Selective admissions	17,676	909,551	74,732	1,001,959	16,314	978,917	78,615	1,073,846
Open admissions	2,602	410,850	60,657	474,109	3,221	390,809	62,468	456,498
Autonomous	3,869	215,240	49,714	268,823	3,589	236,622	54,161	294,372
Community college	16,498	-	-	16,498	14,886	-	-	14,886
Private institutions	5,103	274,822	25,164	305,089	10,579	268,801	28,445	307,825
Private universities	2,942	231,317	23,486	257,745	7,288	228,188	23,202	258,678
Private colleges	660	30,996	1,060	32,716	895	29,206	4,618	34,719
Private institutes	1,501	12,509	618	14,628	2,396	11,407	625	14,428
Total enrollment	45,748	1,810,463	210,267	2,066,478	48,589	1,875,149	223,689	2,147,427

Table 3.1. Higher education enrollments in the 2012-2013 academic year

Source: Office of the Higher Education Commission (2014)

The latest development of Thai higher education system is currently undergoing the second decade of the national education reform with the goal to aspire toward quality of education. The Royal Thai Government has given high priority to upgrade quality of Thai higher education institutions to achieve international standards of excellence while upholding their academic freedom and social responsibility. Consistent with the 15-Year National Plan for Higher Education Development for 2008 to 2022 formulated by OHEC, the categorization of Thai higher education system had been designed to reflect strengths and aspirations of higher education institutions into four sub-systems namely: 1) research and postgraduate universities, 2) specialized including science and technology and comprehensive universities, 3) four-year universities and liberal arts colleges, and 4) community colleges (OHEC, 2015). Each group of higher education institutions was defined to have the differentiated mission, goal, and service areas in response to the emerging needs of the society and economy as well as to serve national priorities and strategies. Furthermore, the Thai Ministry of Education has kicked off a National Research University initiative with an ambitious goal for Thailand to become a world-class regional academic and education hub. In 2009, Ministry of Education by OHEC selected nine

flagship public universities to be upgraded as national research universities⁴ and received additional funding support by the Thai government to fulfill their research mission.

In terms of the regional movement on higher education, as a member of the Association of South-East Asian Nations or ASEAN⁵, OHEC has been exerting joint efforts with the Regional Centre for Higher Education and Development under the South-East Asia Minister of Education Organization (SEAMEO) and other nine member countries on the harmonization of higher education in ASEAN by applying lessons learned from European Higher Education Area under the Bologna Process as a model. The recent initiatives are a pilot mobility program for ASEAN students and promoting research competitiveness among universities in ASEAN by means of Research Clusters and Centres of Excellence (ibid).

3.2 NATIONAL POLICIES ON QUALITY ASSURANCE

OHEC, as a governmental authority responsible for managing and promoting higher education, has continued to play a key role in promoting quality assurance (QA) in both public and private higher education institutions under four leading policies. These policies are 1) developing QA system and mechanisms to maintain the academic standards of higher education institutions, 2) encouraging higher education institution to develop its own indicators for internal quality assurance that fit institution mission and goals, 3) formulating guiding principles and directions

⁴ The 9 National Research Universities namely: 1) Chulalongkorn University, 2) Thammasat University,
3) Mahidol University, 4) Kasetsart University, 5) King Mongkut's University of Technology Thonburi,
6) Chiang Mai University, 7) Khon Kaen University, 8) Suranaree University of Technology, and 9) Prince of Songkla University.

⁵ ASEAN Membership: 10 States — Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.

for the startup of QA procedures, and 4) providing mechanisms for quality audits and assessment at the higher education institutions and faculty levels (OHEC, 2014e, p. 13).

According to the National Education Act of 1999 (2nd Amendment in 2002), quality assurance in Thai higher educational system consists of internal and external quality assurance systems (OHEC, 2013). Internal Quality Assurance (IQA) is the responsibility of the higher education institution and its governing agency. As for External Quality Assurance (EQA), the Office of the National Education Standards and Quality Assessment (ONESQA) is a public organization specially established to responsible for the external assessment of institutions at all levels.

3.2.1 Internal quality assurance

The National Education Act of 1999 (2nd Amendment in 2002) requires all higher education institutions to establish their own IQA system and conducting IQA by coordinating with the external governing agency. Additionally, the law has clearly identified that the IQA is regarded as one of the ongoing education management tasks and should be practiced by the higher education institutions along with relevant governing authorities (ibid). In this regard, OHEC has specified objectives for IQA in all higher education institutions as following:

- 1. To audit and assess the operation of institutions according to predetermined criteria and standards
- 2. To make the institutions aware of their status which will lead to developing quality improvement programs to reach the established targets and goals
- 3. To make the institutions realize their strengths and weaknesses along with receiving suggestions to develop their operations

- 4. To provide public information to stakeholders to ensure qualified educational products
- 5. To provide necessary information for governing organizations (ibid, pp. 11-12).

The baseline for higher education institutional IQA framework lies in the establishment of standard criteria and requirement set forth by OHEC. The process of IQA in Thai higher education consists of quality control, quality audit, and quality assessment (OHEC, 2014e). The current IQA practice involves three levels of assessment: institutional level, faculty level and program of study level. The universities are responsible for establishing an efficient IQA system and mechanisms to control quality of all components used to produce graduates covering "(1) curriculum in all majors, (2) faculty members and faculty development system, (3) education media and teaching techniques, (4) library and study resources, (5) other educational equipment, (6) learning environment and academic services, (7) students' evaluation and outcome, and (8) other relevant components that each institution considers appropriate" (OHEC, 2013, p. 28). Each university may establish an appropriate internal system to audit and assess its educational quality. It may also use a general QA system practices that can be reliable or well-known in the national or international level.

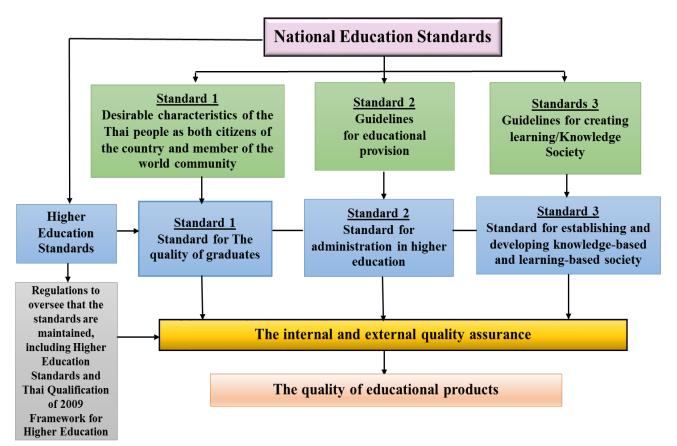
The core standard which is used as the framework for the operations of higher education institutions is the Higher Education Standards announced by the Ministry of Education in 2006. The Higher Education Standards were established to respectively relate to the National Education Standards comprising 3 standards which are 1) the Standard for the Quality of Graduates, 2) the Standard for Higher Education Administration, and 3) the Standard for Establishing and Developing a Knowledge-based and Learning-based Society (ibid, p. 19). However, there are standards set by OHEC and other related organizations that higher education institutions must comply with. These standards are, for example, the Higher Education Institution Standards⁶, standard criteria for higher education curriculum⁷, standard criteria for student affairs, criteria for submitting permission to offer and manage degree program in distance education system, standard and indicators for the external quality assessment in higher education of ONESQA, standards of the Office of Public Sector Development Commission for public universities, and Thai qualifications framework for higher education 2009⁸. These standards will assist higher education institutions in developing their academic and professional capacities, in assuring quality educational provision, and in promoting international standards. The relationship between the Education Standards, relevant criteria and, the education quality assurance system is illustrated in Figure 3.4.

⁶ The Commission on Higher Education had established The Higher Education Institution Standards in 2008 with especially aims to classify Thai higher education institutions into 4 groups according to their objectives and missions namely: 1) research and postgraduate universities, 2) specialized including science and technology and comprehensive universities, 3) four-year universities and liberal arts colleges, and 4) community colleges (OHEC, 2013, p. 20).

⁷ Topics to consider include degree designation, admission requirement, total credits and study duration, structure of study program, number and qualification of instructors, registration, evaluation criteria and graduation, program quality assurance, and program development.

⁸ Thai Qualifications Framework for Higher Education (TQF: HE) was issued by the Ministry of Education In 2009 with an aim to assure the quality of graduates, credits, degrees and qualifications received from higher education institutions. In order to create better and common understanding to the quality assurance system and facilitate the mobility of faculty members and students, key principles of the TQF: HE are developed including 6 levels of qualifications (Advanced Diploma, Bachelor, Graduate Diploma, Master, Higher Graduate, Diploma, and Doctor) and learning outcome standards that categorized into 5 domains: a) Morality and Ethics, b) Knowledge, c) Intellectual Skills, d) Interpersonal Skills and Responsibility, and e) Skills in Quantitative Analysis, Communication, and Information Technology Usage (ibid, p. 21).

Figure 3.4. The relationship between the Education Standards, relevant criteria, and the



education quality assurance system

Source: Office of the Higher Education Commission, 2013, p. 23.

Considering higher education institutional missions, university autonomy, and academic freedom, Commission on Higher Education (CHE) has developed indicators for the internal assessment which serve as a broad outline or basic requirements for each higher education institution to adapt and modify to fit their traditions. These indicators assess input, process, and output/outcome factors covering 9 quality components as major areas of assessment for Thai higher education institutional quality. Within these 9 components, there are 44 indicators to determine the quality of higher education institutions. In 2010, OHEC reviewed these indicators and criteria and revised the indicators within the 9 components. As a result, 23 indicators were determined as a basis for internal quality assurance for higher education (see Figure 3.5).

Quality Components		Indicators
1. Philosophies, Commitment,	1.1	Plan development process
Objectives, and		
Implementation Plans		
2. Graduate Production	2.1	System and mechanisms for curriculum development and
		administration
		Full-time instructors holding doctoral degrees
		Full-time instructors holding academic titles
		System for faculty and supporting personnel development
		Library, educational equipment, and learning environment
	2.6	System and mechanisms for teaching and learning
	~ 7	management
	2.7	System and mechanisms for developing educational
	20	achievements according to graduates' qualifications
	2.0	Success rate in reinforcing moral and ethical character traits in students
3. Student Development	3.1	System and mechanism to provide guidance and information
Activities	5.1	services
Activities	32	System and mechanism to promote student activities
4. Research		System and mechanism to promote student activities
+. Research		System and mechanism to develop research of creative work System and mechanism to manage the knowledge gained from
		research or creative work
	4.3	Funds for research or creative work per full-time
		faculty/researcher
5. Academic Services to	5.1	
Community	5.2	Process of academic services to benefit community
6. Preservation of Art and	6.1	System and mechanism for the preservation of arts and culture
Culture		-
7. Administration and	7.1	Leadership of the institution council and administrators at all
Management		levels of the institution
	7.2	Institutional development towards becoming a learning
		institution
		Information system for administration and decision-making
		Risk management system
8. Finance and Budgeting		System and mechanism for finance and budgeting
9. System and Mechanisms for	9.1	System and mechanism for internal quality assurance
Quality Assurance		

Figure 3.5. The quality components and indicators for the internal assessment

Source: Office of the Higher Education Commission, 2013, pp. 60-62.

Implementation process, audit procedures and review cycles are also depending upon the policymakers in each institution. The higher education institutions are encouraged to appoint units or committee who are responsible for the QA system, to formulate the QA policy that is commonly understood at all levels within the institution, to develop efficient database and

information systems for IQA, and to be aware of the significance of continuous quality assurance process. After conducting IQA, all higher education institutions have to prepare an annual selfassessment report (SAR) that details the internal quality assessment and submit it to the institution council, OHEC, relevant organizations, and the public.

Additionally, the higher education institutions are subjected to quality auditing at least once in every three years by internal assessment committees (assessors) and report the results to the institutions and OHEC as well as to disclose the findings to the public (ibid, p. 29). The committee for the institutional assessment is self-appointed by the institution based on lists given by OHEC. The committee must include at least 5 members depending on the size of the institution in which at least 50% of the members must be external assessors from outside the institution (who have passed the assessor training program offered by OHEC) and the chairman of the committee should come from outside designated from the OHEC's list of internal quality assessment chairman (ibid, p. 46). In this connection, OHEC has developed a central database system for quality assurance called CHE QA Online to facilitate online registration of the common data set and supporting documents, SAR, and assessment results of the quality assessment committees.

The committees use each aspect of the 9 quality components that has indicator and criteria for assessment and score for judgment into 5 levels, with scores from 1 to 5. In case of non-performance or performance below a score of 1, 0 is given. The meaning of each score according to internal assessment is as follows.

Score of 0.00 - 1.50 means performance which requires urgent improvement Score of 1.51 - 2.50 means performance which requires improvement Score of 2.51 - 3.50 means fair performance Score of 3.51 - 4.50 means good performance

Score of 4.51 - 5.00 means very good performance (ibid, p. 55).

Furthermore, to respond to the global challenges, CHE has shifted the priority mission from setting standards to promoting higher education on the basis of academic excellence. In order to promote excellent performance in the private sector, the Malcolm Baldrige criteria have been adopted by the Thailand Productivity Institute as guidelines to select industries, companies, and different organizations to receive the Thailand's Quality Award (TQA). Consequently, the Education Criteria for Performance Excellence (EdPEx) which derived from The Malcolm Baldrige National Quality Award by The National Institute of Standards and Technology (NIST) was introduced as a new approach of IQA for Thai higher education institutions that have IQA or EQA results at a "very good" level. The EdPEx framework is non-prescriptive and focuses on the results to allow the institutions to choose their most suitable tools for facilitating institutional quality improvement for instance Plan-Do-Study-Act (PDSA), Balanced Scorecard, accreditation, and self-studies. The requirements of the EdPEx are embodied in 7 critical aspects of the organizational management and performance as the following Figure.

Currently, OHEC staff and assessors are trained in the EdPEx framework and use its framework for the assessment of the pilot universities. To encourage the application of the new approach, it is promised that the universities that decide to adopt this approach will be waived from the required completion of IQA for OHEC.

Criteria categories	Indicators
1. Leadership	1.1 Senior leadership
	1.2 Governance and societal responsibilities
2. Strategic planning	2.1 Strategy development
	2.2 Strategy implementation
3. Customer focus	3.1 Voice of the customer
	3.2 Customer engagement
4. Measurement, analysis,	4.1 Measurement, analysis, and improvement of organizational
and knowledge	performance
management	4.2 Management of information, knowledge, and information technology
5. Workforce focus	5.1 Workforce environment
	5.2 Workforce engagement
6. Operations focus	6.1 Work systems
	6.2 Work processes
7. Results	7.1 Student learning and process outcomes
	7.2 Customer-focused outcomes
	7.3 Workforce-focused outcomes
	7.4 Leadership and governance outcomes
	7.5 Budgetary, financial, and market outcomes

Figure 3.6. Education Criteria for Performance Excellence's criteria categories and indicators

Source: National Institute of Standards and Technology, n.d., p. 3.

3.2.2 External quality assurance

EQA refers to an education quality assessment by the professional outsiders in order to monitor and verify the educational quality and standards of higher education institutions. The Office of the National Education Standards and Quality Assessment (ONESQA) was established in 2000 as a public independent body responsible for developing of EQA criteria and methods and conducting the external quality assessment of all educational institutions. According to The National Education Act of 1999 (2nd Amendment in 2002), all higher education institutions are required to undergo external quality assessment regularly, at least once in every 5 years after the last assessment, and present the results to relevant organizations and the public (OHEC, 2013, p. 14). OHEC serves as a coordinator with QNESQA by "providing IQA guidelines to higher education institutions, support for knowledge sharing, ensuring effective communication flow, and follow up on further corrective actions of universities after external assessment are completed" (OHEC, 2014e, p. 14). At the moment, ONESQA is performing the third cycle of external quality assessment started in the year 2011 - 2015 which covers both the institutions and faculty levels.

At the higher education level, external quality assessment is performed through analysis of annual reports and other quality assurance documentation, including reports on key performance indicators, as well as institutional visits or site visits by a team of external assessors who are selected and trained from ONESQA. The EQA process consists of document examination (SAR, annual report of the higher education institutions, minutes of meetings, research findings and publications, learners' achievements, maps, charts, statistics, audio or video recordings, etc.), interviewing with the educational personnel (including institution's executives and administrators, faculty members, supportive staffs, students, parents, employers, etc.), and observation (physical survey, institutional management and classroom observation, social surrounding of institution, etc.). According to The National Education Act, the higher education institutions are obligated to cooperate with ONESQA's request or external assessors certified by ONESQA. Generally, the higher education institutions are required to prepare documents and evidence providing relevant information and arrange personnel, institution's council, parents and those associated with the institution to provide additional information relevant to function on EQA task (OHEC, 2013).

After the visit on campuses according to a predetermined schedule, an evaluation report together with findings and recommendations for quality improvement will be sent back to the institutions. In case of higher education institutions not reaching the required standards, ONESQA will submit to their parent organization (OHEC) together with recommendations on corrective measures for improvement within a specific period of time. Necessary remedial action will be taken if the corrective measures are not implemented. Furthermore, there is a clear mandate that the results of overall higher education institutions' standards and quality assessment must be reported to the Council of Ministers, Minister of Education, as well as disseminate to relevant agencies and the general public for acknowledgement.

The external quality assessment process is operated under the objectives, principles and directions set forth in The National Education Act. According to ONESQA's published manual on the Third Round of External Quality Assessment (ONESQA, 2012), the indicators and criteria for EQA at the higher education level were developed to cover all missions of higher education institutions as well as to cover the higher education standards, and enable the measurement of quality. The ONESQA's indicators and criteria were categorized into three dimensions (basic indicators, identity indicators, and social indicator) which include applicable standards and indicators for EQA as shown in Figure 3.7.

The important ONESQA's guiding principles on external assessment are, for instance, a) aiming at developing the quality of education, b) focusing on the educational output and outcome while keeping in mind the higher education institutional uniqueness, c) employing amicable assessment procedures to make the assessment process a friendly reflection of existing quality rather than judging or controlling the institutions, and d) supporting the implementation of IQA system within the institution by utilizes an annual self-assessment report as part of the EQA process. The relationship between the IQA and the EQA is shown in Figure 3.8.

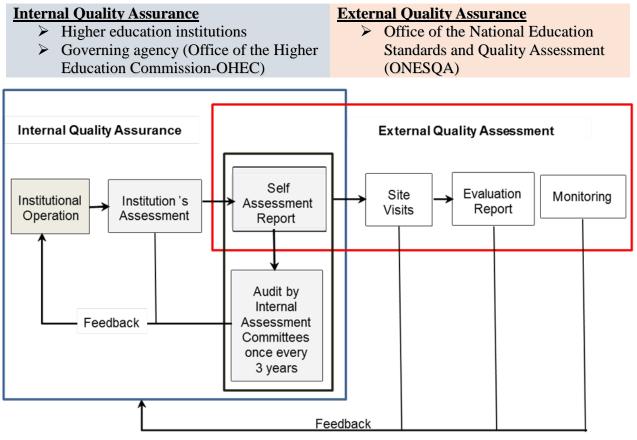
Dimension	Standards	Indicators
1. Basic Indicators	1. Quality of Graduates	 Bachelor degree graduates find their employment or self- employed one year after their graduation Quality of Bachelor's, Master's, Doctoral graduates concur with the Thai Qualifications Framework for Higher Education Academic papers of Master's degree graduates that have been published or disseminated Academic papers of Doctoral graduates that have been published or disseminated
	2. Research and innovation	 5. Research works or creative works that have been published or disseminated 6. Research works or creative works that have been make use of 7. Academic works that have undergone the process of quality assurance
	3. Academic Services	 8. Knowledge and experiences gained from academic services for society that have been brought to develop teaching, learning, and research 9. Outcome of learning that benefit capacity building for the community or external organization
	4. Preservation of Art and Culture	10. Promotion and supporting of art and culture 11. Development of aesthetic in the dimension of art and culture
	5. Institutional Management and Improvement	 12. Institution council functions according in regard to its role and responsibility 13. Institution executives perform in regard to their roles and responsibilities 14. Faculty member development
	6. System of Internal Quality Assessment	15. Assessment of internal quality assurance that has been endorsed by parent organization
2. Identity Indicators		 16. Result of the development of institutional identity 16.1 Outcome of the institutional identity management 16.2 Outcome of the production of graduates in accordance with institutional identity 17. Result of the development of focusing area and strength that reflects uniqueness of the institution
3. Social Indicators		 18. Evidence of guiding, safeguarding, and solving social problems in different areas 18.1 Evidence of guiding, safeguarding, and solving social problems inside the institution 18.2 Evidence of guiding, safeguarding, and solving social problems outside the institution

Figure 3.7.	3-Dimension	indicators	for external	quality assessment	
0				1 2	

Source: Office of National Educational Standards and Quality Assessment, 2012.

Figure 3.8. The relationship between the internal quality assurance and the external quality

assessment



Source: Office of the Higher Education Commission, 2013, p. 34.

The national policy on accreditation in Thai higher education is applied at two levels which are institution accreditation and study program accreditation. University Council through the Academic Board is the body accountable primarily for the approval of study program. In case of the university accreditation, pre-accreditation for both public and private higher education institutions are determined by OHEC. The accreditation process ensures that the university or college meets applicable standards in order to name itself a higher education institution under the supervision and jurisdiction of OHEC in which all study programs, curriculums, and degrees delivered by the institution are officially approved and recognized. If the standards are met, accredited status is granted by the Royal Thai Ministry of Education. However, postaccreditation for private universities is also carried out by higher education standards committees appointed by OHEC.

At the moment, OHEC is in the process of establishing an accreditation system that can be applied to both private and public higher education institutions. It is expected that, in the future, every higher education institution will be accredited under the same standards which are divided into 1) standards for potentiality and capability of higher education, and 2) standard for implementation according to the mission of each higher education institution. As for Standard of curriculum and delivering program provided by all higher education institutions will be subjected to the standard criteria set up by OHEC for each degree level (OHEC, 2014e, p. 14).

4.0 RESEARCH METHODOLOGY

This section specifies the methodology of this study. The research methodology consists of the conceptual framework, data collection, population, research instrument, and data analysis. The conceptual framework is adapted from the literature and used as a guideline for developing research instruments, data collection, and data analysis. For this study, the methods of data collection include a national survey based on a pre-developed questionnaire and telephone interviews based on guided interview questions. Study populations are Thai university administrators who are responsible for quality assurance processes in the higher education institutions. After completing the data collection, the quantitative data were analyzed using a descriptive statistical method while a content analysis were applied to the qualitative data.

4.1 CONCEPTUAL FRAMEWORK

All things considered, this study aims to increase the understanding of current practices of quality assurance in Thai higher education institutions with regard to the national quality assurance policies that might lead to the improvement and development in quality management of the Thai higher education system. The conceptual framework as the form for the study of university administrators' perceptions about the national quality assurance policies in Thai higher education is illustrated as following

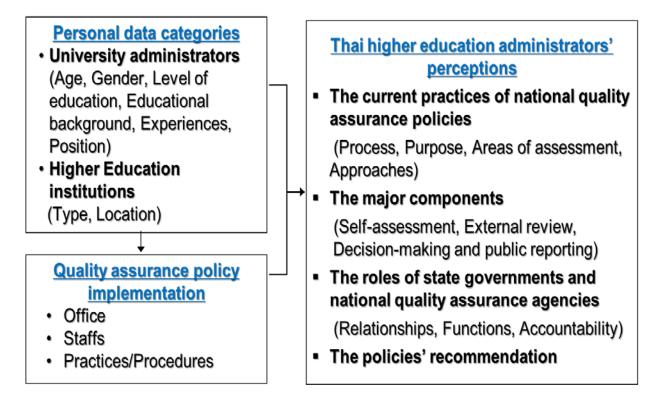


Figure 4.1. Conceptual framework for the study

In the conceptual framework, the perceptions of university administrators were focused on four main categories in order to address the four research questions. The administrators in higher education institutions were asked to share their experiences and perceptions about current practices of the QA policies at the institution, the major components of QA process, the roles of the government authority and national QA agencies in assuring institutional quality, and recommendations for the QA policy improvement. Similarities and differences in the implementation of the national quality assurance policies were also investigated.

4.2 DATA COLLECTION

The study is exploratory in nature, drawing from university administrators' experiences and perspectives. Considering the purposes of this study, the main characteristics of intended inquiry is the comparative and correlational study to capture the overall administrative aspects of the national quality assurance policies' implementation in public and private universities. In order to comprehensively understand the national setting of the quality assurance policies' implementation, information which can be used to represent all higher education institutions in Thailand is required. Therefore, a quantitative method such as survey research which allows the researcher to collect data from large numbers of a population is an appropriate approach for seeking the answers.

Likewise, the study seeks to deeply understand the current work of quality assurance within the universities. An in-depth description of a social phenomenon of administrating quality assurance issue in the institutions, the specific interactions between quality assurance practitioners and their stakeholders (particularly the government authority and national quality assurance agencies), the widely shared values and experiences about quality assurance practices among the university administrators and their viewpoints are expected information of the study. Accordingly, the qualitative research methods which "allow the researcher to get a richer and more complex picture of the phenomenon" is also appropriate for conducting the study (Mertens, 2010, p. 265). Thus, mixed methods which refers to "the use of both qualitative and qualitative methods to answer research questions in a single study" were chosen as an inquiry strategy for this study (ibid, p. 293).

The instruments for the inquiry is based on the conceptual framework for the study. Preliminary constructs were prepared according to the concepts considered in the literature to be predictive of the national quality assurance policy practices. The data collection for this study consists of a national survey based on a pre-developed questionnaire and telephone interviews based on guided interview questions.

A national survey	Telephone interviews
 Based on a pre-developed questionnaire Conduct at the institutional level, particularly at the division or department which is responsible for QA administration in each higher education institution in Thailand Administer through both post mails and electronic mails 	 Based on guided interview questions Purposeful sampling 10 selected case studies (at least 2 interviewees from public universities, private higher education institutions, Rajabhat Universities, and Rajamangala Universities of Technology)

Figure 4.2.	Data	collection	of	the	study
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4.2.1 A national survey

The study was conducted at the institutional level, particularly at the division or department which is responsible for the quality assurance administration in each higher education institution in Thailand. The national descriptive survey using a combined close-ended and open-ended questionnaire is a key instrument to collect quantitative data for the study. The survey was conceptually structured to measure the criteria in three dimensions developed from the literature. These dimensions are (a) demographic characteristics of the higher education institutions and the respondent, (b) descriptors about organizational variables relating to quality assurance policies' implementation, and (c) personal preferences with respect to a wide variety of important societal and work-related issues. Questionnaire items centered mostly on ratings and describing of organizational traits (e.g., how much emphasis is given to the work of quality assurance?) rather than on personal feelings or affection (e.g., how do you like this job?), in order to reduce the possibility of obtaining highly intercorrelated perceptions all related to the general satisfaction of respondents.

The questionnaires with an accompanying letter of explanation and a return selfaddressed stamped envelope were mailed to all targeted higher education institution. As the researcher is a government official working in OHEC, the questionnaires were sent out assisted by the OHEC's executives and staffs such as allowing to use an official dissemination and providing contact information of the higher education institutions. However, it was clearly stated in the letter of explanation that this survey is the researcher's personal study and no foreseeable risks associated with the research study. This effort was included to ensure that the survey dissemination do not influence the research result and decrease response bias.

To increase the response rate, the questionnaire was also administered through electronic mail and online surveys. Before delivering to the respondents, the questionnaire was tested with 5-10 respondents at the institutions included in the survey to safeguard its internal consistency and validity. These pilot study participants were excluded from the main study. The researcher took several steps to mitigate the chances of nonresponse for instance providing incentives to respondents (e.g. a summary of the survey results and explain the relevance of the survey to the organization), advance warning, reminders, brief note of persuasion, and calling nonrespondents to assess the reasons for nonresponse and check if factors specific to the study accounted for the modest response rate. The reminders were done after the questionnaires were sent, two and four weeks, respectively. Anonymity for all respondents and institutions was guaranteed.

4.2.2 Telephone interviews

The interview method was applied in this study to collect qualitative data with the intention of exploring the issues in more depth. Purposeful sampling was applied to the telephone interviews (Babbie, 2010; Mertens, 2010). The study was conducted at specific institutions by using instrumental case studies as types of sampling. The university administrators in the higher education institutions that have distinctive quality assurance performance were chosen to be the key informants of the interviews. These universities were, for example, those with intensity and critical quality assurance system, having a large number of students or student diversity, best practice in quality assurance, etc. However, in order to determine the dimensions of diversity in sampling, this study settled on the total of 10 selected case studies consisting of at least 2 interviewees from public universities, private higher education institutions, Rajabhat Universities, and Rajamangala Universities of Technology. This sampling decision was made to ensure that the samples cover a wide range of the higher education institutions. The selection of interview participants was made by the suggestion from the OHEC's quality assurance staffs.

The targeted interviewees (only one interviewee from each sampled institution) were sent a letter explaining the study and a brief questionnaire to return if they were interested in participating. An open-ended interview format was used to gather information. An interview guide consisting of a set of questions that are to be explored and suggested probes on key topics was prepared. The interview data were recorded, with the permission of the interviewees, and transcribed. The information obtained were content analyzed to answer the research questions posed earlier. Besides, while conducting the in-depth interviews, several potential pitfalls or problems regarding cooperation, validity and research ethics were taken into consideration. The individuals were asked to respond to questions focused specifically on their current implementation of national quality assurance policies at the institutions, the problems and difficulties in the QA performance that they have experienced, as well as their perspectives on QA administration from the government and national QA agencies. The questions range from micro-level details of university administrator's daily works to detailed questions about ways in which the quality assurance in higher education institutions are operated or macro level policies.

4.3 **POPULATION**

This study was conducted at all higher education institutions in Thailand, which are under the supervision of OHEC. The research population is the public and private institutes that are applicable and available for teaching and learning at bachelor's and master's degree levels. Community Colleges which aim to provide vocational and professional training according to the needs of the local community and do not offer bachelor degree program were not included in this study. Therefore, the survey population consists of 153 institutions (31 public universities, 73 private universities and colleges, 40 Rajabhat Universities, and 9 Rajamangala Universities of Technology). The list of all higher education institutions under the supervision of OHEC that offer academic programs at bachelor's and master's degrees classified by types and regions is shown in Appendix A (Table A.1).

In order to explore the perception of university administrators concerning the national quality assurance policies, the university personnel who are in charge of quality assurance administration or those who are working and having expertise on the implementation of quality assurance policies were an interested informants of this study. Thus, the target informants of the

study are namely quality assurance staffs at the office of educational quality development⁹ in the 153 public and private universities mentioned above. At least one quality assurance staff from each higher education institution was asked to report on her/his experiences and opinions. The list and contact information of these university administrators including official addresses, e-mail addresses, and telephone numbers were obtained from the OHEC.

4.4 RESEARCH INSTRUMENT

Two separate research instruments were developed for this study. The first instrument is a predeveloped questionnaire targeting the administrators in all target higher education institutions, at least one for each institution. The questionnaire surveys were distributed both by mails and online via electronic mails. The questionnaire was developed and converted to an online survey through Qualtrics Survey Services as required by the University of Pittsburgh Institutional Review Board (IRB). The questionnaire and link to the online survey were sent to the target administrators in which each participant has options to complete the attached questionnaire or the online survey. The questionnaire consists of a series of close-ended and open-ended questions which are guided by the conceptual framework (see Appendix B).

The latter research instrument is guided interview questions for the telephone interviews (see Appendix C). The interview guide was designed to be flexible in order to allow the researcher to generate her own questions to develop interesting areas of inquiry during the

⁹ Quality assurance divisions or departments with individuals mandated to do everything related to quality assurance matters.

interviews. The linkage between research questions, data collection, and research instrument is shown in Table 4.1.

Research Questions	Data Collection Method	Survey Questions	Responses
1. How do Thai higher education administrators at higher education institutions perceive the current practices of national quality assurance policies?	Interviews [N=10]	 How quality assurance is managed in your institution? What are the purposes of your institution in implementing quality assurance policies? What are the QA personnel' thoughts about the QA policies' implementation? What have been the experiences of implementing national QA policies at your institution? 	• Open- ended
	Questionnaire [<i>N</i> =153]	 Implementation of the national quality assurance policies Reasons for implementing quality assurance policies Perceptions about current practices of national QA policies What are strengths and weaknesses of the national QA policies? What major problems did your institution encounter in implementing QA policies? 	 Nominal categories Likert 5 point scale items Openended
2. What are the major components of institutional quality assurance for Thai higher education?	Interviews [N=10]	 What do you think are the important component in the institutional QA for higher education institutions in Thailand? What aspects of quality assurance have you found to be most important? What are the similarities and differences between QA model from elsewhere and quality assurance model in Thailand? What are your organization's future plans for organizing QA practice and improving institutional quality? 	• Open- ended
	Questionnaire [<i>N</i> =153]	 Important components of the institutional quality assurance Statements about the components of institutional quality assurance What aspects of quality assurance have you found to be most important? 	 Likert 5 point scale items Open- ended

Table 4.1. The linkage between research questions, data collection, and research instrument

Research Questions	Data Collection Method	Survey Questions	Responses
3. How do Thai higher education institutions define the roles of state governments and national quality assurance agencies in	Interviews [N=10]	 What are your thoughts about the OHEC/ ONESQA's roles and responsibilities with regard to QA at the moment? What are higher education institutions' expectations concerning the roles of OHEC/ ONESQA in QA? 	• Open- ended
assuring quality performance of the higher education	Questionnaire [<i>N</i> =153]	• The perceived responsibilities of state governments (OHEC) and national QA agencies (ONESQA)	• Nominal categories
institutions?		 Statements about the roles of OHEC and ONESQA in assuring quality performance of the higher education institutions What are your thoughts about the roles and responsibilities of OHEC and ONESQA at the moment? 	 Likert 5 point scale items Open- ended
4. How can the national quality assurance policies be effectively organized and respond to the higher education institutions and the society appropriately?	Interviews [N=10]	 What are factors that affect the success of implementing national quality assurance policies? In what ways, if any, do you think the national quality assurance policies for Thai higher education institutions could be more effective? In what ways, if any, do you think the national quality assurance policies could be used to exploit added benefits for your institution? What else would you like to share relating to the national quality assurance policies not already covered in this interview? 	• Open- ended
	Questionnaire [<i>N</i> =153]	 Factors that affect the success of implementing national quality assurance policies In what ways, if any, do you think the national quality assurance policies for Thai higher education institutions could be more effective? What else would you like to share relating to the national QA policies not already covered in this survey? 	 Likert 5 point scale items Open- ended

4.5 DATA ANALYSIS

After the quantitative and qualitative data were systematically collected, such gathered data should be analyzed systematically and rigorously in ways that enable the researcher to accomplish the study's purposes. The data analysis technique for this study is mainly a descriptive statistic and exploratory data analysis. Therefore, before launching data analysis, the data were organized in such a way that they can be transferred into an applicable database for manipulation by computer.

In this study, the data gatherings from questionnaires are texts and numbers. The questionnaire survey contains four distinct types of data: 1) personal and organizational data about the respondents, 2) categorical data of the national quality assurance policies' implementation and the perceived responsibilities of state governments and national quality assurance agencies, 3) scaled rating attitude items, and 4) responses to open-ended questions. The data were analyzed by using an appropriate statistical analysis. First of all, they were tabulated using a Microsoft Excel spreadsheet. The items were listed in one column, and the data values for each of the returned surveys were entered in subsequent columns. Then the data were transformed for entry into a more powerful statistical software package, "the Statistical Package SPSS". The SPSS program is chosen for its ease of use, availability, and power.

In the process of data analysis, the first two sets of data, which are the personal and organizational data and the categorical data, were measured in terms of nominal categories. These data were investigated to describe the distributions of the population across a range of variables and the summary measures of the characteristics of such distributions. In this regard, preliminary descriptive statistics including mean values, standard deviations, minimum and maximum values and modes were calculated by using SPSS.

The third set of questions was built to ask each respondent about the individual perceptions toward criteria of quality assurance policies implementation and outcomes, the important components of institutional quality assurance, the roles of state governments and national quality assurance agencies, and factors that affect the success of implementing national quality assurance policies. Their responses were ranked in form of ordinal data measured on five attitude continuums of Likert scale (strongly disagree, disagree, uncertain, agree, and strongly agree). SPSS were used to produce descriptive statistics for attitude scaled ratings of individual questions and each of the perception categories by computing frequency counts, measures of central tendency (such as mean responses), and measures of the dispersion of the distribution (such as standard deviations).

Furthermore, the ordinal scaled items varied by personnel data categories were investigated. This procedure was included to provide an indication of whether there might be some differences between different personal characteristics such as age, gender, level of education, educational background, experience on work, type of institution (Public universities, Private universities, Rajabhat Universities, and Rajamangala Universities of Technology), and institute's location (Bangkok Metropolis, Northern region, Central region, North-eastern region, Eastern region, and Southern region). In this regard, correlational statistics which can "describe the strength and direction of a relationship between two or more variables" were applied (Mertens, 2010, p. 406).

Last of all, the responses to the open-ended questions in the questionnaires such as strengths and weaknesses of the national quality assurance policies and the policies' recommendation as well as the qualitative data collected from the interviews which are textual data were analyzed applying an inductive approach namely Grounded Theory Method. This approach was introduced by Glaser and Struss (1967) which begins with an examination of data to discover patterns and develop theories from the ground up with no preconceptions or elaborate on earlier grounded theories (Babbie, 2010). The constant comparative method, a component of the Grounded Theory Method, in which "observations are compared with one another and with the evolving inductive theory" was chosen as a qualitative data analysis method of this study (ibid, p. 396). According to Glaser & Struss (1967, pp. 105-113), the constant comparative method involved four stages: 1) comparing incidents applicable to each category, 2) integrating categories and their properties, 3) delimiting the theory, and 4) writing theory. Therefore, responses to the open-ended questions and transcripts from the interviews were coded in that way so that patterns, consistencies, inconsistencies and/or emergent themes can be illuminated and allow the researcher to hypothesize possible relationships and meanings. A spreadsheet program were used for processing and analyzing the qualitative data. Overall, the findings of the study were summarized and presented in the form of graphic, table, and descriptive data by using report document as analytic reporting formats.

Data Collection	Types of Data	Data Analysis	Results	
Questionnaire Survey	 Personal and organizational data about the respondents Categorical data of the QA policies' implementation and the perceived responsibilities of the government and the national QA agency 	 Descriptive statistics 	Graphics, Tables, and Descriptive data	
	 Scaled ratings attitude items (5 attitude continuums of Likert scale) 	 Descriptive statistics Correlational techniques (Chi-square Tests, Logistic regression analysis) 		
	 Responses to open-ended questions (qualitative data) 	 Constant comparative method 		
Telephone Interviews	Responses to guided interview questions (qualitative data)	Constant comparative method		

Figure 4.3. Data analysis of the study

5.0 DATA ANALYSIS AND RESULTS

This study examined the national quality assurance policies currently implemented in all Thai higher education institutions at the institutional level with a primary focus on the university administrators' perceptions. The data were collected from questionnaire surveys and interviews to investigate the quality assurance policy implementation from the perspective of the university administrators. Additionally, their perceptions on the quality assurance policy administration of the government and national quality assurance agencies as well as factors that were facilitating or impeding the implementation process were examined. The questionnaire included in Appendix B and the interview guide included in Appendix C were used to collect data for the study.

This chapter presents an analysis of the survey results and is summarized in three following sections. The first section contains a description of the survey instrument responses and participant demographic information. The second section provides an analysis of the findings about the national quality assurance policy implementation. Lastly, the third section provides an analysis of the participants' perceptions related to the research questions.

5.1 PARTICIPANT DEMOGRAPHIC INFORMATION

The population for this study included university administrators who were in charge of quality assurance administration or those who were working and having expertise on the implementation

of quality assurance policies at 153 higher education institutions under the supervision of the OHEC. At least one quality assurance staff from each higher education institution was asked to complete a questionnaire concerning the national quality assurance policy implementation in the institution. Of these, 98 surveys were returned by mail and online for an overall response rate of 64.1%. However, 18 surveys were incomplete and excluded from this study. The other 80 surveys were completed correctly. The response rate for the completed questionnaire surveys was 52.3%. Meanwhile, a total of 10 university administrators in different higher education institutions suggested by the OHEC's quality assurance staffs were recruited for the interviews. However, there were 6 targeted interviewees who agreed to participate in the study. Thus, the response rate for the interviews was 60%. The participant responses of this study are shown in Table 5.1.

 Table 5.1. Participant responses

Data Collection Method	Population (N)	Frequencies of participant responses	Percentage (%)
Questionnaire surveys	153		
- Total		93	64.1
- Complete		80	52.3
Interviews	10	6	60.0

This study examined the responses of 80 university administrators and 6 interviewees who were in charge of quality assurance policies' implementation in Thai higher education institutions. The demographic profile of the administrators was compiled from the participants' profile data requested in the questionnaire survey. These were age, gender, level of education, educational background, current work status, work experience on quality assurance policies, type of institution, and institute's location. Demographic information profile of the 80 participants who completed the questionnaire surveys is summarized in Figure 5.1.

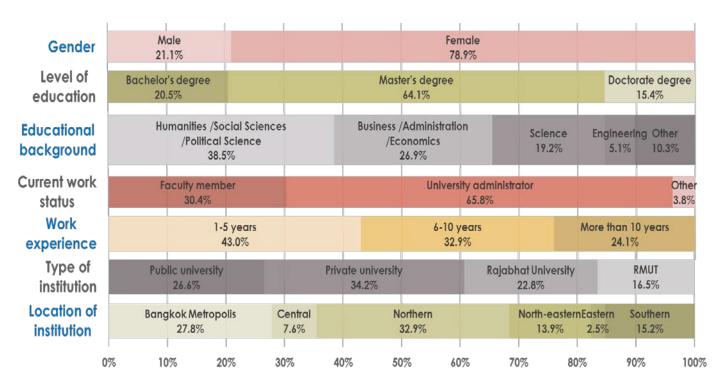


Figure 5.1. Demographic information of questionnaire survey participants

An overall profile of these data is presented in Appendix G (Table G.1). The data can be summarized as follows. Of the 80 survey participants, 21.1% were male and 78.9% were female. The large proportion of female participants indicated that the university administrators who were involving in the quality assurance policies' implementation appeared to be predominately female. Concerning the administrators' age, more than one-third (37.2%) of them were in the 30–39 years age range, followed by 50 years or older group (25.6%), 40–49 years group (19.2%), 20–29 years group (9%), and then the less than 20 years group (9%).

Over half of the administrators who completed the questionnaires reported they had Master's degrees (64.1%), the rest held Bachelor's degrees (20.5%) and Doctorate degrees (15.4%). Note that none of these administrators had lower than Bachelor's degree. Concerning the backgrounds of their educations, more than one-third of the participants (38.5%) had academic backgrounds in humanities, social sciences, and political science field, while 26.9%

were business, administration, and economics majors. In addition, 19.2% of the administrators had the degrees in science. Only 5.1% of the administrators had the degrees in engineering and the others (10.3%) had educational backgrounds in other fields such as nursing, educational research and development, agriculture, accounting, education, and liberal arts. These findings showed that most quality assurance administrators had strong administrative and social sciences background which might support their working expertise.

Most of the participants stated their current work status as the university administrators (65.8%) and about 30.4% were faculty members. The others (3.8%) were those working as both university administrator and faculty member. Almost half of the administrators had been working on quality assurance policies for 1–5 years (43%). Approximately one-third (32.9%) had 6 - 10 years working experience and also nearly one-fourth (24.1%) had been working in this area for more than 10 years. The minimum of work experience that were reported was 1 year, whereas the maximum was 19 years. These reveals that the participants in this study had considerable expertise and experience in the area.

The difference in the proportion of type and location of higher education institution in which the participants work was distributed according to the total number in the targeted population. The largest proportion of respondents was from private university (34.2%), followed by public university (26.6%), Rajabhat University (22.8%), and then Rajamangala University of Technology (16.5%). Almost one-half of the participants were from the universities located in northern region (32.9%) and north-eastern region (13.9%), while over one-third were from the universities in Bangkok Metropolis (27.8%) and central region areas (7.6%).

The profiles of 6 participants in the interviews are shown in Table 5.2. All of the interviewees had the high level of expertise and experiences in the quality assurance policy

implementation. Of these, there were 4 faculty members (2 vice-rector, 1 former vice-rector, and 1 Dean) and 2 university administrators (staffs of the quality assurance divisions). In addition, among 6 interview participants, there were two persons from different three types of higher education institutions which were the public university, private university, and Rajabhat University (see also Table F.1 in Appendix F).

Table 5.2. Profiles of interview participants

Interviewees' Profiles	Frequencies	Percentage (%)
Current work status [N=6]		
Faculty member	4	66.7
University administrator	2	33.3
Type of institution [<i>N</i> =6]		
Public university	2	33.3
Private university	2	33.3
Rajabhat University	2	33.3

5.2 THE ANALYSIS OF NATIONAL QUALITY ASSURANCE POLICY IMPLEMENTATION

The analysis of national quality assurance policy implementation in Thai higher education institutions according to the responses from the survey instrument is presented in Appendix G (Table G.2). Evidently, all universities had been implementing national quality assurance policies as there were 100% of the participants reported that their institutions had involved in both internal and external quality assurance. In addition, most universities (86.3%) had been implementing the policies for 10 years or more. The minimum year of the policy implementation was 1 year, and the maximum was 25 years. The survey responses indicated that the majority of Thai higher education institutions had organizationally structured their own quality assurance division or department (92.5%) and quality assurance committees (82.5%) to especially

implement the policies. Meanwhile, there were more than one-half (56.3%) of these that had specially appointed staffs for the quality assurance policy implementation. 39.7% of the participants revealed that their institutions had less than 5 staff members currently working on the quality assurance administration, followed by 5–10 staffs (30.9%), more than 20 staffs (17.6%), and 11–20 staffs (11.8%). Note that none of these universities had no quality assurance staff as the minimum reported number of the administrative staffs is one person.

Almost all universities (96.1%) had formulated a strategic plan for quality assurance practice in their institutions. The only 3 participants (3.9%) who informed that their institutions did not have a quality assurance strategic plan stated that they simply had institutional improvement plans. Regarding the current quality assurance practices, many universities were implementing more than one approach. The quality assurance approaches that were implemented in the participants' institutions is showed in Figure 5.2. The most frequently used quality assurance approaches that were indicated to be implemented in the participants' institutions were assessment (96.3%), audit (88.8%), and Thai Qualifications Framework for Higher Education (85%). Additionally, about one-half (52.5%) of the participants' institutions had implemented accreditation, followed by public provision of information such as survey researches on effective teaching and student learning (45%), Education Criteria for Performance Excellence (EdPEx) (37.5%), quality rankings (21.3%), and benchmarking (12.5%). The other QA approach was ISO9001:2000 which was implemented in only one institution.

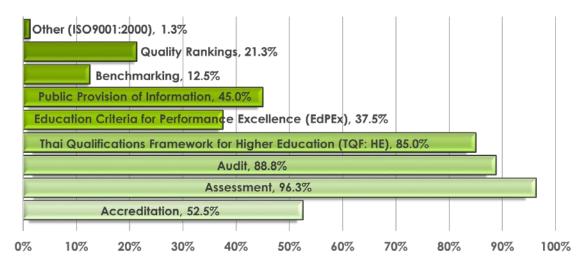


Figure 5.2. The implemented quality assurance approaches

Regarding the institutional quality assurance performance, most of the participants revealed that they received a good performance level in their institution's current internal quality assurance (IQA) and external quality assurance (EQA) results (71.3% and 78.2% respectively). Among 80 participants, 25% revealed their institutions had a very good or excellence IQA performance, and only 2.5% reported their institutional IQA results at a "fair performance" level. The very good or excellence performance in EQA results were reported by 15.4% of the participants while 5.1% of them selected fair performance as their institutions' current EQA results. Only one participant indicated to have performance which requires improvement in the institution's IQA and EQA results.

Findings from the interviews with the university administrators provided more details about the national quality assurance policy implementation in Thailand's higher education sector. According to the interviews, the quality assurance practices in many Thai higher education institutions were seen as a part of academic affairs. In general, the administration of quality assurance policies and practices were organizationally structured as a specific division or section under the supervision of Office of the President or Rector. Quality assurance management in most universities were responsible by a vice rector/president for academic affairs and administrated by an institutional quality assurance committee consisted of important members, for instance, deans, vice-deans, the director of quality assurance division, and representatives from relevant units. Meanwhile, the implementation of quality assurance policies were allocated to other faculties, departments, and other units. At the faculty level, the policy implementations were responsible by the deans, heads of the department, faculty members, faculty's quality assurance administrative staffs, and quality assurance committees.

At each university, the quality assurance division or department was structured to do everything related to quality assurance matters. In the interviews, the university administrators indicated that the primary responsibilities of the quality assurance division and quality assurance administrative staffs encompassed following functions:

- Developing institutional quality assurance system and performance;
- Formulating operating and budgeting plans for quality assurance practices;
- Administrating quality assurance practices e.g. to serve as committee members and secretariat to the Institutional Quality Assurance Committee, organizing meetings and seminars, conducting institutional quality assessments, monitoring quality assessments at the faculty and department level, developing quality assurance database, and reporting the quality assurance performance;
- Coordinating and communicating different activities related to quality assurance with outside organizations (such as OHEC, ONESQA, and Office of the Public Sector Development Commission) and with differing faculties and departments within the universities;

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- Interpreting and disseminating the information regarding the rules, indicators, and standards of differing quality assurance policies;
- Supporting quality assurance process and database at the faculty and department level e.g. facilitating data collection and interpretation, helping other units to prepare their Self-Assessment Reports, and guiding administrators and faculties to conduct quality assessment and improve their performance;
- Coaching university community to understand the importance and implementation of quality assurance policies and conducting training for academics and individuals who are interested in becoming quality assurance assessors;
- Publishing quality assurance materials such as manuals, self-assessment report templates, and newsletter to inform the most up-to-date details about rules, regulations, and activities related to quality assurance;

Regarding the implementation of national quality assurance policies, all interviewees acknowledged the compulsion of IQA and EQA imposed by OHEC and ONESQA and affirmed that their universities constantly followed the government's policies. Based on the interviews, not only had all universities implemented fundamental quality assurance approaches e.g. assessment, audit, and Thai Qualifications Framework for Higher Education (TQF: HE), many institutions had also embraced other quality assurance approaches. One interviewee indicated:

"The university also applied ISO 9001 Quality Management Systems. Every system and working unit in the university met the requirements of ISO 9001:2000 in 2001 and was upgraded to certified by ISO 9001:2008 standard in 2009" (Interview, May 1, 2015)

Another interviewee supported this point:

"Every working units are implementing quality assurance approaches suggested by OHEC and ONESQA. Besides, some units choose to implement Education Criteria for Performance Excellence (EdPEx) and some choose ASEAN University Network Quality Assurance (AUN-QA)" (Interview, June 9, 2015)

This interviewee further explained:

"The university supports the diversity of quality assurance processes. Each unit can choose its own approach, but the quality assurance performance must not be less than the university's specified level" (Interview, June 9, 2015)

Various methods were used to introduce the implementation of quality assurance policies

and encourage the academic community within the universities to accept and become a part of

the quality assurance process. As findings from the interviews revealed:

"The QA administrators organize meetings, training, and seminars regularly to promote and share information related to quality assurance process. The quality assurance performance is reported to the university committees. We also publish triannual QA newsletters to inform the university community our performance and knowledge about QA" (Interview, May 1, 2015)

"We increase organizational participation in quality assurance process by having quality assurance committees at all levels" (Interview, April 30, 2015)

"We report our quality assurance performance every 6, 9, and 12 months in the meetings and university website as well as utilize quality assurance results for the performance improvement" (Interview, June 9, 2015)

When asked about their institutions' future plans in organizing quality assurance practice

and improving institutional quality, all interview participants clearly mentioned that the

universities will continue to follow quality assurance policies from the government. However,

some universities did not simply follow the government's policies but had tried to develop or

improve their own quality assurance system. As stated by some university administrators:

"There are two plans for improving institutional quality. First is the quality improvement plan in consistent with recommendations from the quality assessment. Second is the strategic plan for institutional development which included quality assurance components and indicators. We develop our tourism curriculum in line with ASEAN economic integration and encourage ready faculties and curriculums to be quality assessed by international quality assurance organizations. In the near future, the university plans to implement The Council of the University Presidents of Thailand Quality Assurance (CUPT QA) developed by Council of the University Presidents of Thailand which is a QA system based on Education Criteria for Performance Excellence (EdPEx) and ASEAN University Network Quality Assurance (AUN-QA)" (Interview, April 20, 2015) "My university has implemented OHEC's quality assurance policies but also built-in other concerns such as the university identity, preparation for the ASEAN Economic Community, and focusing on community services" (Interview, May 12, 2015)

5.3 THE ANALYSIS OF PARTICIPANT PERCEPTIONS

The university administrators were asked to respond to the questions and statements based on their experiences and opinions in the implementation of national quality assurance policies. The results of their perceptions, derived from the two research instruments (a pre-developed questionnaire and guided interview questions), were categorized into four main sections in line with the conceptual framework of this study. The four sections were the current practices of national quality assurance policies, the major components of institutional quality assurance, the roles of state governments and national quality assurance agencies, and the policies' recommendations.

5.3.1 The current practices of national quality assurance policies

In this section, the university administrators' perceptions toward current practices of national quality assurance policies especially its purposes, processes, states, and problems were investigated. The participants' perceptions in this section were categorized into three parts: 1) reasons for implementing quality assurance policies in the higher education institutions, 2) current practices of national quality assurance policies, and 3) strengths and weaknesses of the national quality assurance policies. The empirical findings can be summarized as the following.

5.3.1.1 Reasons for implementing quality assurance policies in the higher education institutions

Firstly, the survey participants were asked about their institution's underlying rationales for implementing quality assurance policies and rated their level of agreement in a five-point ordered scale (not at all, slightly important, moderately important, very important, and extremely important) on each statement representing each underlying rationale. The participants' agreements on the importance of reasons for their higher education institutions to engage in quality assurance practices which were ranked by the mean are showed in Appendix G (Table G.3).

According to the survey results, all 10 statements about reasons for implementing quality assurance policies in the higher education institutions were rated at very important or extremely important levels by the majority of university administrators with the mean values ranked from 3.64 to 4.58. "The aim to improve the quality of institution" was the statement with the highest average of agreements (mean = 4.58) and was perceived as an extremely important reason by 61.3% of the participants. The other extremely important reasons that were perceived by the largest number of participants were the need to improve institutional performance (51.2%), university support and commitment (51.2%), the requirement and expectation of students and parents (47.5%), and requirement by Laws (47.5%). The very important reasons rated by the most university administrators were the need to respond to increased competition (56.3%), the requirement and expectation of public and stakeholders (47.5%), the aim to be international standardized institution (46.3%), the implementation in other higher education institutions (46.3%), and requirement by the government (43.8%).

Among this 10 statements, "the implementation in other higher education institutions" was the statement with the lowest average of agreements (mean = 3.64). Although almost one-half of the participants (46.3%) saw the implementation in other institutions as very important, there were about 35% who thought it was a moderately important reason for their institution to engage in quality assurance practices and more than 5% rated this as slightly important and not at all. Other reasons for the QA policy implementation pointed out by the survey participants (1.3%) were "for the quality of Thai people", "to develop the country's quality of education", and "to develop and improve work performance".

Additionally, the descriptive statistics were applied to investigate the entire statements about reasons for implementing quality assurance policies. The 10 statements were taken in this analysis, and the responses were ranked on five-point scales (1= not at all; 2= slightly important; 3= moderately important; 4= very important; and 5= extremely important). Accordingly, a total score of agreement for the individual participant would be ranged in between 10 to 50 score. For the 10 statements in this study, the researcher computed the minimum, maximum, median, mean, and standard deviation of the total 80 university administrators' level of agreement as shown in Appendix G (Table G.4). Overall, the results indicated that the lowest total score of agreements was 30 and the highest was 50. The median of total score was 43 which showed that most administrators rather agreed that all statements were very important reasons for their institution to engage in quality assurance practices.

Furthermore, in order to examine the differences between the respondents from different personal conditions about reasons for implementing quality assurance policies, bivariate analysis was conducted. A Chi-square test was chosen for this study to determine whether there were significant differences (at the .05 level of significance or p < 0.05) among the university administrators regarding the personal characteristics such as age, gender, level of education, educational background, current work status, quality assurance policies work experience, type of institution, and institute's location. In order to examine better associations between variables of this analysis, the five-point scales of the level of agreements were reorganized as a dichotomy (very important and less important) by dividing these 2 groups at percentiles 70 or upper quartile at score 45. Consequently, there were 27 responses (33.8%) as very important (score 45-50) and 53 responses (66.3%) as less important (score 10-44) (see Table G.5-6 in Appendix G).

According to the findings from the Chi-square Tests (see Table G.7 in Appendix G), the significant differences were found in the level of education variable (p-value=.02), current work status variable (p-value=.01), and type of institution variable (p-value=.03). These findings indicated that there were statistically significant differences between the participants' level of education, current work status, and type of institution and their agreements on the reasons for implementing quality assurance policies.

The researcher then conducted logistic regression analysis and controlling for confounding factors to predict probabilities of the relationships between responses (agreements on the reasons for implementing quality assurance policies) and the significant variables from the Chi-squared statistics. A legitimate research hypothesis posed to the analysis was that "the likelihood that the university administrators would rate higher importance of reasons for implementing quality assurance policies is related to their level of education, current work status, and type of institution". However, logistic regression results did not support this proposition. According to the statistical analysis (see Table G.8-9 in Appendix G), at the .05 level of significance and holding all other characteristics constant, all three variables were statistically insignificant predictors of the higher level of perceived importance of reasons for implementing

quality assurance policies (p > .05). These findings suggested that the participants' level of education, current work status, and type of institution were indeed not associated with the odds of rating higher important for the statements.

When asked about purposes of the institution in implementing quality assurance policies, all interview participants clearly stated that the quality assurance policy implementations in their institutions were carried out in response to the requirements of the laws and state government. Nevertheless, the interviewees from public universities agreed that, in addition to the policy obligations, universities' mission to produce quality higher education and the social accountability were other important reasons for their higher education institutions to engage in the implementation of quality assurance policies. While the private university administrators insisted that quality management would increase their universities' reputation. In addition, competitiveness was another important reason for the quality assurance policy implementation besides the obligation aspects of the policies.

5.3.1.2 Current practices of national quality assurance policies

Secondly, the university administrators' perceptions toward the current practices of national quality assurance policies in their higher education institutions were examined by asking the survey participants to rate their agreements on the 22 statements. Their responses were ranked in form of ordinal data measured on five attitude continuums of Likert scale (strongly disagree, disagree, uncertain, agree, and strongly agree). The participants' levels of agreement with the set of statements on the current practices of national quality assurance policies are presented in Appendix G (Table G.10). The results can be summarized as the following.

According to the survey results, almost all of the participants had strongly agreed (72.5%) or agreed (26.3%) that QA practitioners were required to keep up-to-date knowledge

regarding QA indicators and requirements. Another statement which was strongly agreed by the highest percentage of university administrators was that "the university should have opportunities to be involved in the process of policies' development" (46.3% agreed and 48.8% strongly agreed). The statements about the policy planning were supported by most university administrators as there were believed that the policies were appropriately planned for their institutions (58.7%), the policies' regulations were organized in such a way that can be easily followed (48.8%), and their universities had enough freedom to make a decision and act when implementing these policies (70%).

Regarding the QA policies' implementation in the universities, most participants agreed that the QA policies were effectively implemented at their university (66.2%), their QA staffs had enough information (66.3%) and received clear information to implement QA policies (60%), and the implementation were properly supported by the university's executives (87.5%) or by most faculty members and administrators in the university (73.8%). The largest number of participants also agreed that financial incentives (83.8%) and non-financial incentives (90.1%) are necessary for implementing QA in their universities.

Most participants agreed with the statements about the policies' contributions that these policies help to improve the institution's quality performance (90%), encourage the universities to be aware of quality improvement (87.5%), help to enhance the continuing quality improvement (84.8%), as well as the data created and collected for QA enabled the university to properly manage the institution and understand what the institutions need in order to improve (88.8%). However, some negative aspects of the policies were agreed by the majority of university administrators namely; these policies created workload burdens for the faculty members and university administrators (42.6%), QA was illustratively demanding and requiring

enormous paperwork (71.3%), these policies were creating a QA bureaucracy (66.3%), and these policies were considered an additional job and time-consuming (47.5%). Regardless of the majority's agreements on the negative of QA policies, most university administrators still disagreed that the policies' implementation were problematic (47.5%) or that these policies reduced the autonomy of university (41.3%).

Furthermore, the descriptive statistics were applied to investigate the entire statements about the current practices of national quality assurance policies. 79 respondents were analysed because one administrator did not respond to many statements in this section. The questionnaire contained overall 22 statements about the current practices of national quality assurance policies in which 6 statements were the negative statements. These were "The QA policies' implementation were problematic", "These policies reduced the autonomy of university", "These policies created workload burdens for the faculty members and university administrators", "QA was illustratively demanding and requiring enormous paperwork", "These policies were creating a QA bureaucracy", and "These policies were considered an additional job and time-consuming".

Responses to the 22 statements taken in this analysis were ranked on five-point scales (1=strongly disagree; 2=disagree; 3=uncertain; 4=agree; and 5=strongly agree). Accordingly, a total score of agreement for individual respondent would be ranged in between 22 to 110 score. Descriptive statistics of the 79 university administrators' level of agreement with the total 22 statements are presented in Appendix G (Table G.11). Overall, the results indicated that the lowest total score of agreements was 59 and the highest was 100. The median of total score was 79 which showed that most administrators rather agreed with all the statements about the current practices of national quality assurance policies.

The researcher then determined whether the participants from different personal conditions held the same or different level of agreement about these 22 statements by bivariate analysis using Chi-square test. To examine better associations between variables of this analysis, the five-point scales of the level of agreements were reorganized as the dichotomous variable (agree and disagree) by dividing these 2 groups at percentiles 70 or upper quartile at score 85. Consequently, there were 25 responses (31.6%) as agree (score 85-110) and 54 responses (68.4%) as disagree (score 22-84) (See Table G.12-13 in Appendix G).

Results of statistical test for the association between variables shown in Appendix G (Table G.14) indicated that, at the .05 level of significance, none of the mean differences across different personal characteristics such as age, gender, level of education, educational background, current work status, quality assurance policies work experience, type of institution, and institute's location was shown to have a statistically significant relationship with all statements about the current practices of national quality assurance policies. Therefore, it could be concluded that the university administrators answered questions in the same way, or they had similar perceptions about the current practices of national quality assurance policies regardless of their differences.

Findings from the interviews with the university administrators revealed that the university administrators had positive perceptions about the quality assurance policies. All of the interview participants agreed that quality assurance policies were beneficial both for higher education institutions and their stakeholders. Providing quality higher education, which was an underlying rationale of the quality assurance policies, was one of the universities' important missions. The policies encouraged their higher education institutions to have systematic,

standardized, and efficient performance. Consequently, most interviewees outwardly expressed their concerns on the implementation process of the policies rather than the policies' objectives.

5.3.1.3 Strengths and weaknesses of the national quality assurance policies

Lastly, the researcher gathered responses from the open-ended questions dealing with the strengths and weaknesses of the national quality assurance policies perceived by the university administrators. The figure below encapsulates the differing survey participants' perceptions about strengths and weaknesses of the internal quality assurance policies administrated by OHEC and the external quality assurance policies administrated by ONESQA (more detail is presented in Appendix G, Table G.15).

Figure 5.3. Strengths and weaknesses of the national quality assurance policies perceived by the

university administrators

The university administrators' perceptions			
Strengths and weaknesses of the national quality assurance policies	 Internal quality assurance policies Strengths An important supporters for quality management system in higher education institutions Clear and constant policies Building central QA facilities for Thai higher education sector Weaknesses Dissemination of IQA information Establishment of IQA measurements Financial support Many problems in the policy implementation and the IQA system (e.g. too much paperwork, inadequate or unqualified university staffs, bias IQA assessors, inactive IQA database system) 	 External quality assurance policies Strengths Objectives of EQA Establishment of national quality standards Weaknesses Dissemination of EQA information EQA measurements Duplication of work Problems in the policy implementation (e.g. insufficient and bias EQA assessors, too much paperwork, ineffective assessment system) Abuse of the process 	

As indicated in the Figure 5.3, the internal quality assurance policies administrated by OHEC were perceived to be the important supporters for quality management system in higher

education institutions, to be clear and constant policies, and to build central quality assurance facilities for Thai higher education sector. On the other hands, these policies were seen to have weaknesses in dissemination of IQA information, establishment of IQA measurements, financial support, and many problems in the policy implementation as well as in the IQA system. The external quality assurance policies administrated by ONESQA were perceived to have strong points in its objectives and establishment of national quality standards. However, the policies were criticized about its problems in the policy implementation, the dissemination of EQA information, the EQA measurements, the duplication of work, and the abuse of process.

Furthermore, findings from the open-ended section asking about major problems that the survey participants' higher education institutions encountered in implementing QA policies revealed that their universities faced many problems in the policy implementation. The main problems that were frequently mentioned included:

- 1. University individuals' attitudes about QA as workload burdens or useless
- 2. Cooperation and commitment from the university executives and community
- 3. Lack of motivation and knowledge about QA
- 4. Communications between higher education institutions and OHEC/ONESQA
- 5. Unclear and delay QA guidelines and measurements
- 6. QA measurements were not appropriate or did not reflect their institutions' missions
- 7. QA assessors did not have the same QA standards or were not qualified
- 8. Scarce resources (QA staffs, time, and budgets)
- 9. Involving the abundance of paperwork and reports required for both internal and external assessment

Findings from interviews with the university administrators strengthened similar issues about the implementation of the national QA policies. The convictions that QA policy implementation was requiring massive paperwork, the collaboration and support from university executives and community in QA works, and inappropriateness of using a pattern of standards and indicators as "one size fits all" in quality assessments of all higher education institutions were pertinent themes throughout the interviews. As said by some interviewees:

"In order to better implement the policies, it is important to build quality management to be an organizational culture. All university personnel should think of QA works as their routine and hold on to quality performance as their work culture." (Interview, April 20, 2015)

"QA policy implementation at the moment was focused on the documentation too much. Assessment process and QA agencies were also duplicated and specific. Therefore, the QA practitioners have to keep up with update information and attend many QA training or seminars. These create workload burdens and make it difficult to improve our QA works while implementing the policies." (Interview, May 12, 2015)

"Since organizational structure, missions, and administrative style of each university obviously differed, having a pattern of standards and indicators as "one size fits all" in quality assessments of all higher education institutions is not appropriate. The quality assessments should be in accordance with actual contexts of each higher education institution." (Interview, May 17, 2015)

5.3.2 The major components of institutional quality assurance

This section analyzes the university administrators' perceptions regarding the major components of institutional quality assurance for Thai higher education. The empirical findings can be summarized as the following.

The participants' perceptions (level of importance) toward each pre-developed statement representing each institutional quality assurance component were analyzed along with mean values for comparative purpose. The university administrators' rating agreements on the importance of institutional quality assurance components for Thai higher education institutions ranked by the mean values are presented in Appendix G (Table G.16).

The results revealed that each statement was perceived as very important or extremely important institutional quality assurance component by the majority of university administrators. The averages of agreements (mean) for all 10 statements about institutional quality assurance components were ranked from 4.18 to 4.55. Among these 10 statements, "External assessors" was a statement with the lowest mean (3.64). "QA tools and mechanisms" was a statement with the highest mean (4.58) and was perceived as an extremely important component by 57.5% of the participants, followed by "Quality Components, Indicators, and Scoring Criteria" (4.45) and "Self-assessment" (4.40). The latter two statements were respectively rated as extremely important components by 52.5% and 47.5% of the participants. The components which were perceived as very important by more than one half of the participants are QA committees (56.3%), peer review (57.5%), public reporting (53.8%), external review (56.3%), selfassessment report (SAR) (57.5%), and external assessors (56.3%). Nevertheless, while these components were regarded high levels of importance by most participants, there were about 10% of the participants that viewed internal assessment committees, public reporting, self-assessment report (SAR), and external assessors as moderately important components. Other important components for higher education institutional quality assurance which were specially pointed out by the survey participants were "basic data for reporting" (1.3%), "QA manuals or guideline" (1.3%), and "staff learn and realize what the quality is and know how an individual involves the QA" (1.3%).

In addition, the descriptive statistics and bivariate analysis were applied to investigate the entire statements about institutional quality assurance components. Responses from 80 participants to the 10 statements were taken in this analysis and the total score of agreement for individual respondent was ranged in between 10 to 50 score. Descriptive statistics of the participants' perceptions on these entire statements are shown in Appendix G (Table G.17). As findings revealed, the lowest total score of agreements was 32 and the highest was 50. The median of total score was 44 which showed that most administrators perceived that all statements were very important components of the institutional quality assurance for Thai higher education institutions.

The researcher then conducted the Chi-square test to examine significant differences among the university administrators. For this analysis, the five-point scales of the level of agreements were reorganized as the dichotomous variable (very important and less important) by dividing these 2 groups at percentiles 60 or upper quartile at score 44. Consequently, there were 41 responses (51.2%) as very important (score 44-50) and 39 responses (48.8%) as less important (score 10-43) (see Table G.18-19 in Appendix G).

Results of statistical test for the association between variables indicated that none of the mean differences across different personal characteristics such as age, gender, level of education, educational background, current work status, QA policies work experience, type of institution, and institute's location was shown to be significant at the .05 level of significance in all these statements (see Table G.20 in Appendix G). Therefore, it could be concluded that the administrators answered questions in the same way, or they had similar perceptions about the importance of institutional quality assurance components.

Next, the university administrators' perceptions toward the components of institutional quality assurance were examined by asking the survey participants to rate their agreements on the 34 statements. Their responses were ranked in form of ordinal data measured on five attitude

continuums of Likert scale (strongly disagree, disagree, uncertain, agree, and strongly agree). The participants' levels of agreement with these set of statements are presented in Appendix G (Table G.21). The results can be summarized as the following.

Among all statements, only two statements were disagreed by the largest proportion of participants which are QA was only an activity performed as required by the government (47.5%) and their universities tended to select generous assessors to gain a high quality score (30%). Additionally, most participants doubted that the quality criteria and indicators developed by ONESQA were appropriate for external quality assessment at their institution (37.5%) and the results of QA were linked to sanctions and incentives (26.3%). The other 30 statements were agreed or strongly agreed by most university administrators.

All participants revealed that their universities conducted self-assessment every year (30% agreed and 70% strongly agreed), reported their QA result to OHEC every year (28.7% agreed and 71.3% strongly agreed), and had QA committees both at the institutional level and faculty level (30% agreed and 70% strongly agreed). Nearly all participants agreed that the self-assessments were conducted not only at the institutional level but also at faculty and department levels (37.5% agreed and 61.3% strongly agreed) and their universities reported the QA result to the public every year (30% agreed and 66.3% strongly agreed). There were 87.6% of the participants revealed that their universities conducted the quality audit every year while 76% conducted quality audit more than one in every 3 years. In addition, most of the participants agreed (32.5%) and strongly agreed (37.5%) that quality auditing by internal assessment committees should be done annually.

The majority of university administrators agreed that organizing quality assurance practice and improving institutional quality were important missions in their university (91.3%)

and that their universities were interested in developing their own QA model (57.6%) and had developed their own QA standards and indicators (62.6%). Interestingly, while the findings indicated uncertain about the quality criteria and indicators developed by ONESQA, there were many participants agreed that the quality components, indicators, and scoring criteria developed by OHEC were appropriate for performing QA at their institution (62.5%).

Concerning the QA process components, the highest number of participants agreed that the creation of QA committees facilitated QA process and mitigated resistance within the university (85.1%) but felt that much of QA works were related to documentation and report writing (65.1%) and QA in Thai higher education institutions was generally about collecting necessary data to answer the required indicators (72.5%). Most university administrators agreed that the selection of internal assessment committees was transparent and credible (86.2%) and that self-assessment report was reliable and truly reflected the universities' performance (78.5%). Likewise, most university administrators accepted that evaluation from external assessors was transparent and credible (86.3%) and truly reflected their universities' performance (78.8%). Nonetheless, most of them also admitted that their universities used some strategies to pass the assessment process (49.4%).

Regarding the QA results, most participants agreed that their university executives were interested in the IQA result (90.1%) and the EQA result (92.5%). More than 80% of the participants accepted that the IQA and EQA results were reliable and useful. About two-third of the participants also admitted that getting a high score in the IQA and EQA results were very important for their universities. Concerning the institutions' QA result utilization, most participants revealed that their universities used the QA results for policy purposes (87.5%), to

improve institutional performance (85.1%), to promote institution's activities and services (83.8%), and for budget allocation (60.1%).

Furthermore, the descriptive statistics and bivariate analysis were applied to investigate these entire statements about the components of institutional quality assurance. The total of 76 respondents was analysed because 4 administrators did not respond to many statements in this section. The questionnaire contained overall 34 statements in which 3 statements were the negative statements. These were "Much of QA works were related to documentation and report writing", "Your university tended to select generous assessors to gain a high quality score", and "Your university used some strategies to pass the assessment process". Responses to the 34 statements were taken in this analysis and the total score of agreement for the individual participant was ranged in between 34 to 170 score. Descriptive statistics of the 76 university administrators' level of agreement on the total 34 statements are presented in Appendix G (Table G.22). Overall, the results indicated that the lowest total score of agreements was 106, and the highest was 152. The median of total score was 130 which showed that most administrators rather agreed with all the statements about the components of institutional quality assurance.

In addition, the Chi-square test was conducted to investigate significant differences among the university administrators. For this analysis, the five-point scales of the level of agreements were reorganized as the dichotomous variable (agree and disagree) by dividing these 2 groups at percentiles 70 or upper quartile at score 135. Consequently, there were 23 responses (30.3%) as agree (score 135-170) and 53 responses (69.7%) as disagree (score 34-134) (see Table G.23-24 in Appendix G).

According to the findings from the Chi-square Tests (see Table G.25 in Appendix G), at 5% level of significance (p < 0.05), p-value of the QA policies work experience variable was

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equal to .04 and p-value of the type of institution variable was equal to .03. The results indicated its statistical significant differences among groups from different work experience and type of institution. These findings suggested that the university administrators' agreements about the components of institutional quality assurance had the association with their work experience and type of institution.

The researcher then conducted logistic regression analysis and controlling for confounding factors to predict probabilities of the relationships between responses (agreements about the components of institutional quality assurance) and the significant variables from the Chi-squared statistics. A legitimate research hypothesis posed to the analysis was that "the likelihood that the university administrators would agree with the statements about components of institutional quality assurance is related to their work experience and type of institution". Correspondingly, results from the logistic regression analysis supported this proposition. According to the statistical analysis (see Table 5.3 and Table G.26-27 in Appendix G), at the .05 level of significance and holding constant the other variables in the regression model, the QA policies work experience variable and the type of institution variable were statistically significant predictors of the agreements with the statements about components of institutional quality assurance (p < .05). In other words, the findings suggested that the participants' work experience and type of institution were associated with the odds of being in agreement with the statements. The overall percentage of this model equals 72.6 indicated that the model can be 72.6% accurately predicted. The results were interpreted as followed.

Holding all other characteristics constant, the probability of participants from private universities to agree with the statements about components of institutional quality assurance was 3.6 times more than those from public universities (Public university, Rajabhat University, and Rajamangala University of Technology). It is 95% confident that the population parameter for "private university effect" is between 1.0 & 12.9. The numbers of years in working on the QA policies were also found to be associated with the participants' agreement to the statements about components of institutional quality assurance as it was indicated that participants who had more than 10 years in QA policies work experience were 10.5 times higher to agree with the statements than the participants who had less experience. Holding all else constant, it is 95 confident that the population parameter for "more than 10 years effect" is between 1.2 & 91.4.

Table 5.3. Results of the logistic regression analysis between the different personnel conditions

and the agreements about the components of institutional quality assurance

Variables	Adjusted Odd Ratio (95% C.I.)	p-value
Type of institution		
Public university/ Rajabhat University/ Rajamangala	Reference	
University of Technology		
Private university	3.6 [1.0, 12.9]	<mark>0.049*</mark>
QA policies work experience (years)		
1-5 years	Reference	
6-10 years	1.7 [0.6, 5.5]	0.34
More than 10 years	10.5 [1.2, 91.4]	<mark>0.03*</mark>

From the interviews, some university administrators remarked about the similarities and

differences between quality assurance models from elsewhere and the quality assurance model in

Thailand that:

"The Thai QA model is used to monitor the quality performance of higher education institutions as same as QA elsewhere, but the governments in some other countries also used QA for funding allocation purposes which did not occur in Thailand's system." (Interview, April 30, 2015)

"Our QA system emphasized good governance and quality assessments by the third party. I think QA in other countries are more flexible and encourage the diversity of QA approaches." (Interview, June 9, 2015)

When asked about what they think to be the important component in the institutional QA

for higher education institutions in Thailand, the interviewees indicated that there were four

important concerns that should be focused in the institutional QA for higher education institutions namely: students, curriculums, faculty, and organizational management. In an interview, one university executive argued that accountability in the higher education institutional management was imperative especially for public universities which received financial support from the government. The other aspects, for instance classrooms, innovation, and preservation of art and culture, were merely additions under the four concerns. Thus, assuring the quality of higher education institutions should put emphasis on these concerns and setting quality standards and indicators that are applicable for each differing institutions. Many interviewees also pointed out that the university executives, university community commitment, and financial support were important components in the quality assurance of higher education institutions.

The survey participants' answers to an open-ended question about the most important aspects of quality assurance revealed interesting viewpoints of university administrators. The most cited to be important aspects of quality assurance in the survey participants' perceptions can be summarized into 7 categories as showed in the following table.

Table 5.4. Summary of the important aspects of quality assurance in the survey participants'

Important Aspects of Quality Assurance		
1. Policy	Clear objectives, support from the government	
2. People	Attitudes about QA, knowledge and understanding about QA and indicators, quality commitment and participation from all individuals in the universities – university executives and university community	
3. Budget investment	Sufficient financial support	
4. Process	Continuing quality improvement, effective quality management	
5. Quality system and mechanisms	Quality tools and indicators that truly reflect quality of higher education institutions and are international standards, diverse QA approaches, QA database	
6. Assessors	Skilled assessors	
7. QA result utilization	Truly reflect the university's performance, link with Performance Based Budgeting Systems, use QA results to improve and develop institutions	

perceptions

5.3.3 The roles of state governments and national quality assurance agencies

The main focus of this section is the university administrators' attitudes toward the roles of Thai governments (OHEC) and national quality assurance agencies (ONESQA) in assuring quality performance of higher education institutions. The empirical findings can be summarized as the following.

In order to examine the perceived functions of OHEC and ONESQA concerning the quality assurance policies, the survey participants were asked to select which functions they think should be the responsibilities of OHEC and ONESQA from the pre-developed categorical items. The participants' opinions about functions that should be the responsibilities of OHEC and ONESQA ranked by percentages are presented in Table 5.5.

As indicated in the table, the functions that were perceived by the majority of university administrators to be the responsibilities of OHEC included training experts to perform QA (87.5%), notifying the higher education institutions (80%), organizing activities for the development of the QA framework (73.8), and accreditation (72.5%). More than one-half of the participants also felt that publishing the final QA outcome (70%), monitoring the major phases of QA (68.8%), developing the roster of experts (67.5%), helping institutions to prepare for self-assessment (66.3%), participating in assessment visits (62.5%), and upholding the credibility of QA agencies (61.3%) were the OHEC's responsibilities. The OHEC's function which was preferred by a lowest percentage of the participants was "taking a roles in quality assessment activities" (37.5%), followed by "making decisions about QA process" (43.8%). Additional functions that the survey participants pointed out to be the responsibilities of OHEC were building both national and international QA networks, organizing national and international QA

academic conferences, facilitating QA activities in higher education institutions, and cooperating

with higher education institutions and relevant QA organizations.

Functions of OHEC and ONESQA [N=80]	Frequencies	Percentage (%)
Functions that should be the responsibilities of OHEC	-	
Training experts to perform QA	70	87.5
Notifying the higher education institutions	64	80.0
Organizing activities for the development of the QA framework	59	73.8
Accreditation	58	72.5
Publishing the final QA outcome	56	70.0
Monitoring the major phases of QA	55	68.8
Developing the roster of experts	54	67.5
Helping institutions to prepare for self-assessment	53	66.3
Participating in assessment visits	50	62.5
Upholding the credibility of QA agencies	49	61.3
Making decisions about QA process	35	43.8
Taking a roles in quality assessment activities	30	37.5
Functions that should be the responsibilities of ONESQA		
Selection and training of external reviewers	60	75.0
Training experts to perform QA	53	66.3
Developing strategies and implementing activities to strengthen	51	63.7
QA capacity of the higher education institutions		
Determining the fundamental aspects of EQA process	50	62.5
Developing the roster of experts	44	55.0
Reporting and disseminating the outcome of QA	43	53.8
Accreditation	43	53.8
Managing the EQA process	42	52.5
Notifying the higher education institutions	40	50.0
Monitoring the major phases of QA	40	50.0
Constitution of the review team and conduct of the site visit	36	45.0
Preparation of QA methodology	32	40.0
Reception of the review team's recommendations	30	37.5
Making decisions about QA process	17	21.3

Table 5.5. Functions of OHEC and ONESQA

Regarding the ONESQA's responsibilities, the findings revealed that most university administrators perceived "selection and training of external reviewers" and "training experts to perform QA" as the ONESQA's functions in external quality assurance policy administration (75% and 66.3% respectively). In addition, the ONESQA's responsibilities which were preferred by about one-half of the participants or more were developing strategies and implementing activities to strengthen QA capacity of the higher education institutions (63.7%), determining the

fundamental aspects of EQA process (62.5%), developing the roster of experts (55%), reporting and disseminating the outcome of QA (53.8%), accreditation (53.8%), managing the EQA process (52.5%), notifying the higher education institutions (50%), and monitoring the major phases of QA (50%). There were over one-third of the participants felt that "constitution of the review team and conduct of the site visit" (45%), "preparation of QA methodology" (40%), and "reception of the review team's recommendations" (37.5%) should be the responsibilities of ONESQA. It should also be noted that the function chosen as the ONESQA's responsibilities by the smallest numbers of participants was making decisions about QA process (21.3%). Additional functions pointed out by the survey participants to be the responsibilities of ONESQA were publicizing the information about external quality assurance and making the ONESQA's external quality assurance system be recognized at the international level.

Next, the survey participants were asked to rate their agreements on the set of statements about the existing roles of OHEC and ONESQA (see Table G.28 in Appendix G). The Likert scale was used to rate the roles of OHEC and ONESQA (strongly disagree to strongly agree). The findings revealed that the largest numbers of participants felt uncertain that ONESQA has properly supported the implementation of EQA policies (37.5%) and that their university were satisfied with the administration of ONESQA regarding EQA policies (38%). Apart from these only two statements, the results showed that most university administrators agreed or strongly agreed with all statements. Interestingly, the total of 100% of participants agreed that oHEC should closely co-operate and communicate with ONESQA. It should also be noted that nearly all participants agreed that the functioning of ONESQA should be monitored by the government to ensure its transparency and credibility (97.5%) and that OHEC's and ONESQA's policies should be consistent (93.8%).

Furthermore, it can be concluded that most of the participants strongly agreed that OHEC should be responsible for the accountability of ONESQA (38.8% agreed and 40% strongly agreed) and the government should provide financial incentives for the QA policies' implementation (41.3% agreed and 42.5% strongly agreed). It can also be said that most participants believed that the government uses QA to increase universities' accountability (86.3%), to improve quality of higher education (86.3%), and to control higher education institutions (70.5%).

Regarding the policy governance, the majority of the participants agreed that QA in higher education is a responsibility of the government (78.2%) but maintained that the university should have more freedom to make a decision and implement QA (86.2%) as well as the university should have opportunities to be involved in the process of policies' decision-making at OHEC (82.5%). Meanwhile, most of them also supported ONESQA as a public organization (58.9%) and a national QA agency responsible for EQA in higher education (62.5%). Still, most university administrators held the similar perceptions that the university should have opportunities to be involved in the governing at ONESQA (80%) and agreed to have university representatives in the governing body of ONESQA (88.7%).

Concerning the OHEC's functioning, most participants agreed that OHEC had effectively promoted QA in their universities (62.5%) and had properly supported the QA implementation at their universities (61.3%). Additionally, a greatest number of the participants admitted that their universities were satisfied with the administration of OHEC regarding IQA policies (65%) and the IQA results from OHEC (82.6%) in addition to supported that the government should use the QA results for funding allocation purposes (80%). There were about one-half of the participants felt that OHEC should be more active in monitoring quality of higher education institutions (48.8%) and increasingly monitor QA outcome of the universities to ensure its reliability (53.8%). As for the ONESQA's functioning, there were less than one-half of the participants agreed that their universities were satisfied with ONESQA's performance in conducting EQA (42.6%) and approximately 57.5% said that their universities were satisfied with the EQA results from ONESQA.

The researcher then investigated the entire statements about the roles of OHEC and ONESQA using the descriptive statistics and the bivariate analysis. 75 respondents were analyzed because 5 university administrators did not respond to many statements in this section. 27 statements were taken in this analysis and the total score of agreement for the individual participant was ranged in between 27 to 135 score. Descriptive statistics of the 75 university administrators' level of agreement on the total 27 statements are presented in Appendix G (Table G.29). Overall, the results indicated that the lowest total score of agreements was 80 and the highest was 127. The median of total score was 104 which showed that most administrators rather agreed with all the statements.

Additionally, the Chi-square test was conducted to investigate significant differences (at the .05 level of significance or p < 0.05) among the university administrators. For this analysis, the five-point scales of the level of agreements were reorganized as the dichotomous variable (agree and disagree) by dividing these 2 groups at percentiles 65 or upper quartile at score 107. As a result, there were 29 responses (38.7%) as agree (score 85-110) and 46 responses (61.3%) as disagree (score 27-106) (see Table G.30-31 in Appendix G).

Findings from the Chi-square tests revealed that, at 5% level of significance, the p-value of the type of institution variable was equal to .02, thus indicated its statistical significance (see

Table G.32 in Appendix G). The findings showed that there were statistically significant associations between the participants' type of institution and their agreements about the roles of OHEC and ONESQA. In other words, the participants from public universities (Public university, Rajabhat University, and Rajamangala University of Technology) and private universities had different perceptions toward the roles of OHEC and ONESQA.

The researcher then conducted logistic regression analysis and controlling for confounding factors to predict probabilities of the relationships between responses (about the roles of OHEC and ONESQA) and the significant variables from the Chi-squared statistics. A legitimate research hypothesis posed to the analysis was that "the likelihood that the university administrators would agree with the statements about the roles of OHEC and ONESQA is related to their type of institution". Correspondingly, results from the logistic regression analysis supported this proposition. According to the statistical analysis (see Table 5.6 and Table G.33-34 in Appendix G), at the .05 level of significance and holding constant the other variables in the regression model, the type of institution variable was statistically significant predictor of the agreements with the statements about the roles of OHEC and ONESQA (p = .02). In other words, the findings suggested that type of institution was associated with the odds of being in agreement with the statements. The overall percentage of this model equals 60.8 indicated that the model can be 60.8% accurately predicted. The results were interpreted as followed.

Holding all other characteristics constant, the probability of participants from private universities to agree with the statements about the roles of OHEC and ONESQA was 3.8 times more than those from public universities (Public university, Rajabhat University, and Rajamangala University of Technology). It is 95% confident that the population parameter for "private university effect" is between 1.2 & 11.9.

Table 5.6. Results of the logistic regression analysis between the different personnel

Variables	Adjusted Odd Ratio (95% C.I.)	p-value
Type of institution Public university/ Rajabhat University/ Rajamangala	Reference	
University of Technology Private university	3.8 [1.2, 11.9]	<mark>0.02*</mark>

conditions and the agreements about the roles of OHEC and ONESQA

The research participants were also asked to express their attitudes toward the existing roles and responsibilities of OHEC and ONESQA in assuring quality performance of Thai higher education institutions. Responses from survey participants to the open-ended question in this section revealed that the university administrators' perceptions toward the functioning of OHEC were divided into two groups. The first group held positive views toward OHEC's roles and responsibilities notwithstanding problems in the QA policy administrations. Participants in this group were satisfied with the OHEC's administration and explained that OHEC had clear role and policies about QA, had paid attention to feedbacks from higher education institutions and tried to provide them a freedom in policy implementation as well as its administration was rather well-organized. Another group consisted of participants who were unsatisfied with the functioning of OHEC and viewed that the OHEC's policy administration was not appropriate because there were many problems such as delaying QA information dissemination, deficient communication with higher education institutions, and overlapping with ONESQA.

The university administrators' perceptions toward the functioning of ONESQA were somewhat negative. Apart from not being fond of ONESQA's role as the external QA agency, the explanations repeatedly cited by survey participants were that the functions of ONESQA were vague and overlapped with OHEC as well as lacks of understanding about higher education and collaboration with OHEC. Nevertheless, many survey participants argued that OHEC and ONESQA should play a role of quality assurance facilitators rather than quality monitors or assessors by motivating quality management, encouraging the development of various QA approaches, assisting higher education institutions to increase QA skills and develop their own appropriate QA measurements, and promoting application of international quality standards and practices. Furthermore, most survey participants were asking for collaboration between OHEC and ONESQA. They argued that QA policies and measurements developed by OHEC and ONESQA should be consistent in order to decrease duplicated works and increase positive attitudes about OA works.

Interviews with the university administrators revealed that most of them also held positive attitudes about the OHEC's roles and responsibilities regarding QA at the moment. Their main argument in supporting the functioning of OHEC was that assuring quality performances of all higher education institutions was very important responsibility of the state government, and OHEC had continued to develop the QA system and policies for Thai higher education institutions. As stated by the university administrator:

"OHEC had significant roles in monitoring quality standards of higher education sector especially steering the assessments of higher education programs and curriculums (Thai Qualifications Framework for Higher Education – TQF: HE) in addition to promoting quality assurance applications in higher education institutions." (Interview, April 20, 2015)

Regarding the higher education institutions' expectations about the OHEC's roles in QA,

the interview participants mentioned that:

"I expect OHEC to practically support individual universities to develop their own QA systems and mechanisms." (Interview, April 20, 2015)

"OHEC should simplify QA process and allow universities to independently implement the QA policies." (Interview, May 12, 2015) "OHEC should make uses of the QA outcomes for instance effectively analyze selfassessment reports, use the QA results for budget allocation, and seriously take actions with institutions which have poor performances." (Interview, April 30, 2015)

"At present, there are a lot of IQA assessors but many of them are not skillful and unbiased. Therefore, I expect OHEC to pay attention to this issue and train skilled assessors that have experiences in managing higher education organizations" (Interview, June 9, 2015)

Discontent toward the functioning of ONESQA was outwardly and frequently expressed

by the survey participants and interviewees alike. Some interviewees perceived that ONESQA

played an important role in the higher education system by acting as a watchdog of quality

education. Therefore, they supported ONESQA to seriously reinforce their roles and

responsibilities as an external QA agency. For example:

"They should develop challenging EQA measurements that help universities to compete at the international level" (Interview, June 9, 2015)

"Firstly, ONESQA needs to reinforce QA a routine rather than additional works" (Interview, May 17, 2015)

"After performing external quality assessments, instead of merely scoring the higher education institutions' performances, ONESQA should provide beneficial recommendations to the universities and practically utilize the EQA results." (Interview, April 20, 2015)

On the other hand, there were some interviewees who advocated the collaboration

between OHEC and ONESQA. These university administrators argued that;

"Although functions of OHEC and ONESQA were corresponding to the Laws, there should be only one organization who is responsible for the quality assessments of higher education institutions" (Interview, May 1, 2015)

"Quality audits and external quality assessments should be combined, or OHEC and ONESQA should cooperatively create a QA system that is not only assessing the quality performance of higher education institutions but also encouraging quality developments." (Interview, May 12, 2015)

5.3.4 The policies' recommendation

In this section, the perceptions of university administrators toward factors that affect success and effectiveness of the implementation of the national quality assurance policies in Thai higher education institutions were analyzed. The empirical findings can be summarized as the following.

In order to investigate which factors university administrators considered to be influential for the success of the national quality assurance policy implementation, the survey participants were asked to judge the perceived importance of 33 statements representing various factors in the policy implementation. The Likert scale was used to rate the importance of the factors (not at all to extremely important). The university administrators' rating agreements on the importance of factors that affect the success of national quality assurance policy implementation ranked by mean are presented in Appendix G (Table G.35).

The findings revealed that each statement was perceived to be of relatively high importance (at a very important or an extremely important level) for the success of national quality assurance policy implementation by the majority of university administrators. The averages of agreements (mean) for all 33 statements were ranked from 3.72 to 4.70. Among these statements, "The support and commitment of university community" was a statement with the highest mean value (4.70). The second most important factor for the policy implementation, with the mean value of 4.69, was the support and commitment of the university executives. The third most important factor was efficient database and information systems in the university with the mean value of 4.65. Significantly, "the use of rewards and sanctions" and "legal enforcement" were statements with the lowest mean values (3.72 and 3.88 respectively).

Factors that perceived by most participants as extremely important for the success of QA policy implementation included the support and commitment of university community (72.5%), the support and commitment of the university executives (72.5%), efficient database and information systems in the university (70%), efficient QA national database and information systems (CHE QA Online) (69.6%), the attitudes of faculty members and administrators involved in the QA process (67.5%), efficient QA tools and mechanisms (63.7%), appropriate quality components, indicators, and scoring criteria (63.7%), the attitudes of QA staffs toward the QA policies' implementation (62.5%), the utilization of QA results (62.5%), the expertise of external assessors (62.5%), appropriate QA system and organizational structure at the university (60%), the effectiveness and efficiency of IQA committees (58.8%), and communication and collaboration within the university (58.8%). Likewise, there were some statements that were seen to be extremely important factors in implementing the QA policies by about one-half of the university administrators. These factors were the effectiveness and efficiency of QA staffs at the university (56.3%), the development of implementation plan (55%), the effectiveness and efficiency of EQA committees (55%), the establishment of institution's QA policy and objectives (53.8%), appropriate QA system, organizational structure, administration of OHEC (52.5%), the cooperation between the university and OHEC (50%), the cooperation between the university and ONESQA (50%), the involvement of universities in the policies' decision-making process (50%), appropriate QA system, organizational structure, and administration of ONESQA (50%), staffs training in the QA process (48.8%), diversity of QA tools and mechanisms (47.5%), institutional autonomy (43.8%), and diversity of quality components, indicators, and scoring criteria (43%).

Factors that perceived by most participants as very important for the success of QA policy implementation consisted of the experience of QA staffs (47.5%), support from the government (51.2%), the additional funding support from the parent institution (52.5%), national and regional networks among higher education institutions (47.5%), funding support from the university (50%), legal enforcement (52.5%), and the use of rewards and sanctions (31.6%). It should also be noted that although "the use of rewards and sanctions" was agreed to be very important and extremely important for the success of QA policy implementation by 31.6% and 27.8% of the university administrators respectively, it was rated as not or slightly important by approximately 10% of the participants.

Next, the entire statements about factors that affect the success of national quality assurance policy implementation were investigated. The descriptive statistics were introduced first, and then the bivariate analysis results were reported. Responses from 76 participants to the total of 33 statements about the importance of factors which have influence on the success of national assurance policy implementation were taken in this analysis because 4 university administrators did not respond to many statements in this section. The responses were ranked on five-point scales, and the total score of agreement for the individual respondent was ranged in between 33 to 165 score. Descriptive statistics of the 76 university administrators' levels of agreement on the total 33 statements were presented in Appendix G (Table G.36). Overall, the results indicated that the lowest total score of agreements was 99 and the highest was 165. The median of total score was 148 which indicated that these factors were perceived by most administrators to be of relatively high importance for the success of national QA policy implementation.

In addition, the Chi-square test was conducted to investigate significant differences (at the .05 level of significance or p < 0.05) among the university administrators. For this analysis, the five-point scales of the level of agreements were reorganized as the dichotomous variable (very important and less important) by dividing these 2 groups at percentiles 65 or upper quartile at score 152. Consequently, there were 30 responses (39.5%) as very important (score 152-165) and 46 responses (60.5%) as less important (score 33-151) (see Table G.37-38 in Appendix G).

Results of the bivariate analysis (see Table G.39 in Appendix G) indicated that the university administrators from different age, gender, level of education, educational background, current work status, work experience, type of institution, and institution's location did not have significantly different perceptions about the statements. In other words, the participants had similar perceptions toward the important factors for the success of national quality assurance policy implementation regardless of their differences in the personal conditions.

Each survey participant was also asked to recommend how the national QA policies for Thai higher education institutions could be more effective. The QA policy recommendations based on the findings from this open-ended question can be summarized as follows:

1. Planning

Many participants suggested that the QA policies should be well planned, clear, and easy to implement. The implementation guidelines should be provided, and its dissemination must not be delayed. The universities should have opportunities to be involved in the process of policies' development. Policymakers of OHEC and ONESQA should pay more attention to feedbacks from higher education institutions.

2. Building positive attitude about QA

In order to successfully implement QA policies, not only QA practitioners but also all individuals in the universities must have positive attitudes about QA. University executives and university community should know and understand the importance of QA policies.

3. QA human resource development

The QA practitioners should be well-informed and constantly trained to have knowledge and skills about QA policies and measurements. Likewise, the QA policymakers and administrators must understand higher education organizational management and differing contexts of higher education institutions.

4. Developing appropriate QA system and measurements

In many participants' opinions, effective national QA policies were expected to be the policies that lead to quality improvement of higher education. Therefore, QA standards and indicators should be able to truly reflect the quality of higher education institutions and bring about useful recommendations for institutional development. The QA measurements must be developed to suitably assess different contexts and missions of each university. The quality assessment should not be focused too much on documentation. Some participants suggested that OHEC and ONESQA should establish a working group to reform current QA system and develop an integrated system of IQA and EQA.

5. Sufficient financial support

Some university administrators cited that the policy implementation would be more effective if they had sufficient financial support. In addition, the budget investments were necessary for quality improvement at every unit.

6. Accountability of QA agencies

Accountability of OHEC and ONESQA as the quality assessment agencies was another concern mentioned by the participants. They claimed that higher education institutions which were subjected to the quality assessments should be secured about the performances of OHEC and ONESQA as well.

7. Application of QA outcomes

Many participants argued that current quality assessments were merely for the sake of scoring, or a means to an end. The QA outcomes were not applicable or did not have any impacts on the university performances. Application of QA outcomes such as using QA results for policy purposes and institutional development, linkage between QA results and budget allocation (e.g. operating expenditure, personal payments, and financial supports), and practical provision of rewards and sanctions would make the QA policy implementation become more effective.

According to the findings from interviews with university administrators, the interviewees indicated that factors which they considered to be influential for the success of the national quality assurance policy implementation included understanding university executives, QA database, collaboration from everybody, QA knowledge and skills, financial support, qualified assessors, link QA results with budget allocation, and continue process. In their own words:

"University executives must understand QA works. Quality awareness, QA knowledge, collaboration, and clear assignments were very important." (Interview, April 30, 2015)

"University executives who responsible for the policies must have expertise in QA management and build connections with external persons to mutually learn about QA. Authorized deans and vice-deans need to form the link between QA policy implementations at the institution level and the faculty level. Effective and up-to-date QA database system will make QA works easier." (Interview, April 20, 2015)

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"Sufficient supports from relevant organizations both knowledge about QA measurements and financial support are influential for the policy implementation. The QA assessors must also be trained to have same QA standards." (Interview, May 1, 2015)

"The QA policies must be constant but continuingly increase the quality level of performance. Results of QA should be used as a part of budget allocation and personal payment evaluation" (Interview, June 9, 2015)

Similarly, the national QA policy recommendations proposed by the interview

participants were in line with the aforementioned recommendations from the survey participants.

As said by the interviewees:

"The application of QA outcomes should be seriously put into practice in order to make universities aware of the importance of QA" (Interview, April 30, 2015)

"The QA system should be integrated by merging IQA and EQA. The universities should also participate in the development of QA policies and measurements at OHEC and ONESQA." (Interview, May 1, 2015)

"The government should provide freedom for universities to formulate their own QA objectives and measurements." (Interview, May 12, 2015)

Furthermore, when asked about how the national QA policies could be used to exploit

added benefits for their institution, the interviewees pointed out that the policies provided

systematic institutional development. They indicated that the policy implementation can assist

the universities to be aware of quality management and to have greater efficiency. Publishing the

good QA results would also increase the universities' reputation.

6.0 DISCUSSIONS AND CONCLUSIONS

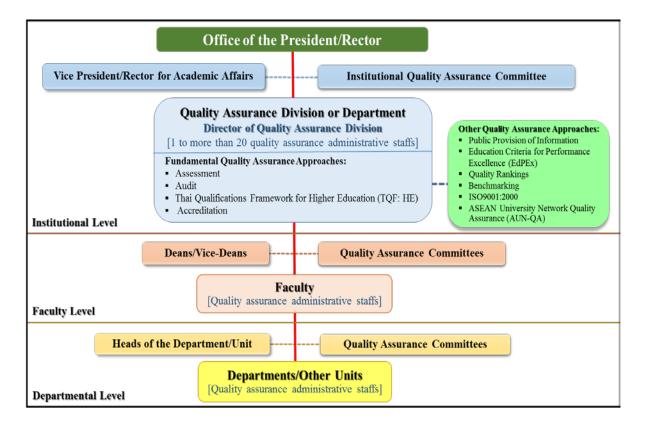
This chapter discusses the results of the data analysis and answers the original four research questions that guided this study and were answered according to the perceptions of university administrators. These four research questions are discussed separately and the research study is summarized. Recommendations for further research were provided.

6.1 HOW DO THAI HIGHER EDUCATION ADMINISTRATORS AT HIGHER EDUCATION INSTITUTIONS PERCEIVE THE CURRENT PRACTICES OF NATIONAL QUALITY ASSURANCE POLICIES?

The first research question of this study was "How do Thai higher education administrators at higher education institutions perceive the current practices of national quality assurance policies?"

Evidently, it can be said that the national quality assurance policies both internal quality assurance policies administrated by OHEC and the external quality assurance policies administrated by ONESQA play an imperative role in Thailand's higher education system as the policies were implemented in all higher education institutions. To specially implement these policies, nearly all higher education institutions had organizationally structured their own quality assurance division or department and quality assurance committees as well as formulated a strategic plan for QA practice in their institutions. In every university, at least 1 to more than 20 staff were currently working on the quality assurance administration depending on the size of the institutions. Generally, the administration of quality assurance policies and practices are under the supervision of Office of the President or Rector and responsible by a vice rector/president for academic affairs, an institutional quality assurance committee, and the director of quality assurance division. Meanwhile, the implementation of quality assurance policies are allocated to faculties, departments, and other units which were responsible by the deans, heads of the department, faculty members, faculty's quality assurance administrative staffs, and quality assurance committees. The current state of quality assurance policy implementation in Thai higher education institutions is illustrated in Figure 6.1.

Figure 6.1. Quality assurance policy implementation in Thai higher education institutions



Findings from the data analysis indicated that the university administrators who were responsible for the implementation of quality assurance policies in Thai higher education institutions were positive about the presence of national quality assurance policies. It is revealed that most higher education institutions had acknowledged the compulsion of IQA and EQA imposed by OHEC and ONESQA and constantly followed the government's policies. Nevertheless, some higher education institutions did not only simply implement the policies as requested by the laws and state government, but also actively implemented other QA approaches or developed their own QA system. According to the university administrators, the most important reasons for their higher education institutions to engage in QA practices and implement the national QA policies (the highest mean values) were universities' concerns and commitment to quality improvement. Although there were many underlying rationales for implementation of the national QA policies, the awareness of universities' mission to produce quality higher education and the social accountability seemed to be main purposes for most higher education institutions to actively implement the policies. These findings shows that the QA policy implementations in Thai higher education institutions were driven by both internal and external forces. Therefore, the implementations of QA policies in Thai higher education institutions mutually served two major purposes as frequently discussed in the literature; accountability and improvement (Kis, 2005; Perellon, 2007; Sarrico et al., 2010).

Regardless of their differences, most university administrators seemingly realized the importance of the national QA policies and how the policies impacted today's higher education sector. Apparently, the policies' objectives were accepted, and the current practices of national QA policies were perceived as beneficial not only for higher educational stakeholders but also for the higher education institutions. As findings revealed, most university administrators

noticeably believed that the benefits of the policies also contributed to the function of higher education institutions, for instance, improving the institutions' quality performance, encouraging the universities to be aware of quality improvement, and enhancing the continuing quality improvement. Moreover, the IQA administrated by OHEC were perceived to be the important supporters for quality management system in higher education institutions and to build central QA facilities (e.g. IQA networking, IQA standards and measurements, IQA database, and roster of IQA assessors) for Thai higher education sector. Likewise, the EQA policies administrated by ONESQA were perceived to have strong points in its objectives and establishment of national quality standards for Thai higher education institutions. Consequently, the survey results revealed that the QA policies were effectively implemented at many universities and the policy implementations were properly supported by the executives or most faculty members and administrators in the universities.

While the university administrators were somewhat positive about the presence of current practices of national QA policies particularly its objectives, their responses from both survey and interviews indicated that the administrators were rather concerned about the implementation process of the policies. The administrators' first concern was the university participation in the QA policies. Even though there were agreements that the QA policies were appropriately planned for higher education institutions and its regulations were organized in such a way that can be easily followed as well as the universities were somewhat provided enough clear information and freedom to make a decision and act when implementing these policies, responses from most university administrators indicated that the universities preferred to participate in the process of policies' development. The request for policy participation resulted from the universities' awareness of the importance and impact of the policies and that almost all

university administrators were aware that QA practitioners were required to keep up-to-date knowledge regarding QA indicators and requirements. In addition, it reflected a political dimension of the concept of quality in higher education as pointed out by Skolnik (2010). The university administrators' attempting to fight for their voices to be heard and taken into account when assessments of quality are undertaken was described as a "power struggle" of different stakeholders in higher education by Barnett (1994).

The next concern was about some negative aspects of the QA policy implementation. Although many of university administrators did not think that the QA policy implementation was problematic or reducing the autonomy of the university, the administrators showed a consensus about some negative aspects of the policy implementation that it was time-consuming, requiring enormous paperwork, and creating a QA bureaucracy. Studies by Newton (2000; 2002) suggested that the quality bureaucratization could lead to unjustified workload burdens. Accordingly, many survey participants admitted that QA works were considered an additional job and created workload burdens for the faculty members and university administrators.

The university administrators' concern about focusing too much on documentation in the QA policy implementation is corresponding to the effect of quality assessment practices argued by Dill (2007) that increasing centralized control of academic quality by external assessors and/or state authorities could encourage a culture of compliance and the institution may invest time and effort to develop policy documents and quality infrastructures rather than to actively improve academic standards. The fact that current QA policy implementation was requiring massive paperwork and negative attitude about QA as workload burdens or useless had been perceived as important obstacles that troubled the policy implementation in most higher education institutions. Therefore, the university administrators' perceptions about the importance

of collaboration and support from university executives and community in QA works and the necessity of financial and non-financial incentives for implementing QA is logical and can be seen as their best resolution to this concern about QA policy implementation.

The last university administrators' concern about the QA policy implementation was the weaknesses of both IQA policies administrated by OHEC and EQA policies administrated by ONESQA. The IQA policies were seen to have weaknesses in dissemination of its information, establishment of IQA measurements, financial support, and many problems in the policy implementation as well as in the IQA system (e.g. too much paperwork, inadequate or unqualified university staffs, bias IQA assessors, inactive IQA database system). The EQA policies were criticized about its problems in the policy implementation (e.g. insufficient and bias EQA assessors, too much paperwork, ineffective assessment system), the dissemination of EQA information, the EQA measurements, the duplication of work, and the abuse of process.

In addition, the findings revealed that the universities faced many problems in the implementation of both IQA and EQA policies. The perceived problems included:

- 1. University individuals' attitudes about QA as workload burdens or useless
- 2. Cooperation and commitment from the university executives and community
- 3. Lack of motivation and knowledge about QA
- 4. Communications between higher education institutions and OHEC/ONESQA
- 5. Unclear and delay QA guidelines and measurements
- 6. QA measurements were not appropriate or did not reflect their institutions' missions
- 7. QA assessors did not have the same QA standards or were not qualified
- 8. Scarce resources (QA staffs, time, and budgets)

9. Involving the abundance of paperwork and reports required for both internal and external assessment

Among these problems, the inappropriateness of using a pattern of standards and indicators as "one size fits all" in quality assessments of all higher education institutions was perceived as a very important problem by most university administrators. Similarly, the conviction that using a single pattern of quality measurement to assess all higher education institutions was inappropriate had been supported by many higher education scholars (Tan, 1992; Stark & Lowther, 1980; Dew, 2009). According to the literature, a single QA approach has been criticized for being not applicable for diverse and complex organizations as institutions of higher education (Tan, 1992). The difficulties of defining and measuring quality in higher education as mentioned in the literature review were also noticeably recognized in the Thai higher education system. Arguably, the university administrators' perceptions about current practices of national QA policies reflect three notions of QA in the higher education system that were widely discussed in the literature. Firstly, there were differences in defining of quality in higher education which have led to employing different methods in quality measurement (Dew, 2009; Tam, 2001). Secondly, quality of higher education is a multidimensional concept that relates to the contextual settings of the institutions (Vlasceanu, Grünberg, & Pârlea, 2004; Sarrico et al., 2010). Lastly, quality assurance efforts need to be more flexible and sensitive to the particular missions of the given institutions (Dill, 2007).

6.2 WHAT ARE THE MAJOR COMPONENTS OF INSTITUTIONAL QUALITY ASSURANCE FOR THAI HIGHER EDUCATION?

The second research question was "What are the major components of institutional quality assurance for Thai higher education?"

According to the literature, there were three basic elements of quality assurance model which can be found in all differing higher education systems; a self-assessment, an external review, and a public report of findings (Dill, 2007; Kis, 2005; Martin & Stella, 2007; Sarrico et al., 2010; van Vught & Westerheijden, 1993). Likewise, these elements were found to be major components of institutional quality assurance for Thailand's higher education system. Findings from the data analysis indicated that the three most important institutional QA components for Thai higher education institutions in the university administrators' perceptions (with the highest mean values) were 1) self-assessment, 2) quality measurements (e.g. QA tools and mechanisms, quality standards, QA indicators, and scoring criteria), and 3) QA committees (e.g. the institutional QA committee, faculty and departmental QA committees, and internal assessment committees).

As discussed in the literature review, self-assessment has distinctive features such as being a collective institutional reflection (Vlãsceanu et al., 2004), allowing the institution to supply appropriate information about itself to internal and external stakeholders (Sarrico et al., 2010), and helping the higher education institution to check how far it is achieving its strategic mission and goals as well as allowing it to prepare an action plan for further development (Thune, 1998). These features make self-assessment to be highly regarded as a central component in QA procedures especially in the context of higher education institutions which see themselves as a self-critical academic community (Tan, 1992). Institutional self-assessment was perceived to be preferred quality assurance component for most Thai higher education institutions. Evidently, the findings revealed that all higher education institutions conducted self-assessment and reported their results (self-assessment report – SAR) to OHEC every year. Moreover, almost all higher education institutions conducted self-assessments not only at the institutional level but also at faculty and department levels. The institutional self-assessment reports were believed to be reliable and truly reflected the universities' performance.

Interestingly, the quality assurance committees seem to play an important role in institutional QA of the Thai higher education system. The findings found that every university had QA committees both at the institutional level and faculty level. Most university administrators agreed that the creation of QA committees facilitated QA process and mitigated resistance within the university.

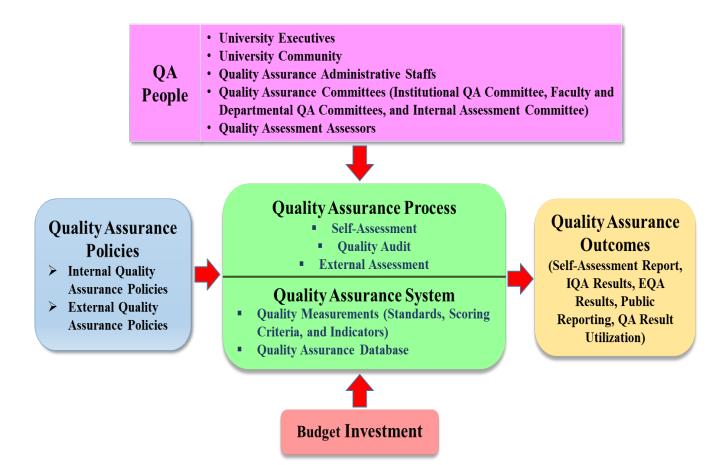
The quality measurement was perceived by most participations of the study to be both major component and issue in the higher education institutional quality assurance. In the Thai higher education system, ONESQA is responsible for establishing and developing the external quality assurance measurement. The internal quality assurance measurement was established by OHEC but all higher education institutions were also allowed to develop their own measurement. The findings showed that many university administrators agreed that the quality components, indicators, and scoring criteria developed by OHEC were appropriate for performing QA at their institution but doubted about the quality criteria and indicators developed by ONESQA. Additionally, the results of the study showed a consensus of university administrators about the quality measurement that assuring the quality performance of higher education institutions should be different and the quality standards and indicators should be set to be applicable for each differing institutions. According to the university administrators, many higher education institutions realized that organizing quality assurance practice and improving institutional quality were their institutional important missions and were actively interested in developing their own QA model or QA standards and indicators.

Aside from those three components, other QA elements for example peer review, external review, and external assessors were perceived by the administrators as very important in the higher education institutional quality assurance. The peer review in the Thai higher education system was often referred to a quality audit by internal assessment committee. The quality audit was a part of internal QA policy practices imposed by OHEC while external review and external assessors were parts of external QA policy practices imposed by ONESQA. External review was argued by higher education scholars to be a critical component of quality assurance in the higher education organizations (IIEP, 2006; Vlasceanu et al., 2004; Mishra, 2007; Vroeijenstijn, 1995a; Martin & Stella, 2007). According to Martin and Stella (2007), the external review provides an outsider perspective and professional judgment for the institutional quality assurance. Nonetheless, external assessment in The Thai higher education system was rather to ensure threshold quality based on established standards and indicators than making comparative judgments between institutions. The findings indicated that most universities conducted the quality audit every year or more than one in every three years. Moreover, many university administrators agreed that the quality auditing was an important QA process and should be done annually. Likewise, most university administrators accepted that evaluations from external assessors were transparent and credible and truly reflected the performance of their universities.

In analyzing participant perspectives on institutional QA components, it is also found that the university administrators considered QA outcomes as one of the important components. According to the literature, the quality assurance system produces information on academic quality and communicates the outcomes and activities of the institution to the management, personnel, students and external stakeholders (Kettunen, 2012, p. 519). Results of the quality assurance practices in the Thai higher education institutions were reported to be utilized for various purposes, for instance, for policy purposes, to improve institutional performance, to promote institution's activities and services, and for budget allocation. As suggested in the literature that there was a tendency towards public disclosure of more information to the relevant stakeholders (IIEP, 2006), the study found that almost all higher education institutions reported their QA results to the public every year. The findings also revealed that university executives in most higher education institutions were interested in both IQA and EQA results. Although it was unclear that the results of QA were linked to sanctions and incentives, many university administrators admitted that getting a high score in the IQA and EQA results were very important for their universities. The findings also showed that many universities used some strategies to pass the assessment process. These findings are consistent with the discussions in the literature that expecting higher education institutions to carry out a truly critical analysis is very unrealistic especially when the stakes are high (IIEP, 2006).

Furthermore, findings from the qualitative analysis pointed out that the university executives, university community commitment, and financial support were other major components of the institutional quality assurance for Thai higher education institutions. There were agreements that financial support, as well as quality commitment and participation from all individuals in the universities including university executives and university community, were imperative for the implementation of QA policy practices. The major components of institutional quality assurance for Thai higher education derived from analysis of the university administrators' perceptions are summarized and illustrated in Figure 6.2.

Figure 6.2. The major components of institutional quality assurance for Thai higher education



Another interesting finding about the major components of institutional quality assurance for Thailand's higher education is that there were differences among university administrators from the different type of institution and work experience. It was revealed that the university administrators from private universities were 3.6 times more likely to agree with the statements about components of institutional quality assurance than those from public universities (Public university, Rajabhat University, and Rajamangala University of Technology). The numbers of years in working on the QA policies were also found to have an influence on the university administrators' perceptions. The findings suggested that private universities and public universities in Thailand may view the major components of institutional quality assurance differently. These findings were anticipated since the quality assurance in higher education system was considered to be multi-dimensional and highly related to the contextual settings of the higher education institutions (Vlãsceanu, Grünberg, & Pârlea, 2004; Sarrico et al., 2010).

6.3 HOW DO THAI HIGHER EDUCATION INSTITUTIONS DEFINE THE ROLES OF STATE GOVERNMENTS AND NATIONAL QUALITY ASSURANCE AGENCIES IN ASSURING QUALITY PERFORMANCE OF THE HIGHER EDUCATION INSTITUTIONS?

The third research question was "How do Thai higher education institutions define the roles of state governments and national quality assurance agencies in assuring quality performance of the higher education institutions?"

The Office of Higher Education Commission (OHEC) is part of the Ministry of Education; hence it represents the official position of the state government in Thailand's higher education system. As aforementioned in the literature, government bodies often play a significant role in the quality assurance of higher education everywhere (Kis, 2005; Eaton, 2004; Thune, 1996; Kimura, Yonezawa, & Ohmori, 2004). The Thai higher education system was not an exception. An imperative role of the government in assuring quality performance of the Thai higher education institutions was supported by the university administrators as the majority of them agreed that QA in higher education is clearly a responsibility of OHEC. Most university administrators acknowledged that the Thai government used quality assurance policies to serve both accountability and improvement purposes (Kis, 2005; Perellon, 2007; Sarrico et al., 2010). The findings revealed that most university administrators held positive views toward the existing role and functions of OHEC in the quality assurance of higher education. They admitted that

OHEC had effectively promoted QA and properly supported the QA implementation at their universities as well as their universities were satisfied with the OHEC's administration regarding IQA policies and the IQA results from OHEC. Although there were many problems in the QA policy administrations (e.g. delayed QA information dissemination, deficient communication with higher education institutions, and overlapping with ONESQA), OHEC was perceived to have clear role and policies about QA, pay attention to feedbacks from higher education institutions and try to provide them a freedom in policy implementation, and have relatively well-organized administration.

Despite their positive attitudes, reinforcement of the OHEC's role in the QA of higher education was not fully supported by the university administrators. As findings revealed, the university administrators were hesitating to have OHEC play more active role in monitoring the quality of higher education institutions and increasingly monitor QA outcome of the universities to ensure its reliability. In addition, the study showed a consensus of university administrators that the universities should have more freedom to make a decision and implement QA policies or have opportunities to be involved in the process of policies' decision-making at OHEC. These perceptions reflect the higher education institutions' concern of being subjected to the quality assessments in which in align with the literature that external monitoring is very often considered as an invasion on the autonomy and academic freedom of the higher education institutions (Mishra, 2007). Accordingly, the higher education institutions' expectations about the OHEC's role in QA were focused on being a quality management supporter and increasing the effectiveness of the QA policy administration.

According to the literature, the quality assurance agencies in most countries were established to support the development of the quality of higher education institutions and had

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been recognized by public authorities as agencies with responsibilities for external quality assurance (Costes et al., 2008). Brennan and Shah (2000, p. 28) pointed out that the national QA agencies exist within a more complex set of relationships between higher education and the state. In general, the national QA agencies play an important role in the higher education systems as an external body to measure quality performance of the higher education institutions and the results of national QA agencies' exercises usually contribute to the governments' decision-making on their direct control over funding, curriculum, or licensing of the higher education institutions (ibid). In case of Thailand, the Office for National Education Standards, and Quality Assessment (ONESQA), a public organization that receives public funding without necessarily being subjected to a string of state regulations like formal and official state agencies, was established as the national QA agency to regularly perform external quality assurance as a core function. Undoubtedly, ONESQA was evidently acknowledged by most university administrators as a public organization and a national QA agency responsible for EQA in Thai higher education.

The university administrators' perceptions toward the role and functioning of ONESQA were somewhat negative. The findings revealed that there were not many university administrators satisfied with the ONESQA's EQA policies, its performance in conducting EQA, and the EQA results from ONESQA. Many of them were uncertain that ONESQA had properly supported the implementation of EQA policies and perceived that the functions of ONESQA were vague and overlapped with OHEC as well as ONESQA were lacks of understanding about higher education institutions and collaboration with OHEC. Since ONESQA was expected to play an important role in higher education system by acting as a watchdog of quality education, many university administrators supported ONESQA to seriously reinforce their roles and responsibilities as an external QA agency, for example, developing challenging EQA

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measurements that help universities to compete at the international level, reinforcing QA as a routine rather than additional works, and providing beneficial recommendations to the universities and practically utilizing the EQA results. However, most university administrators maintained that the universities should have opportunities to be involved in the process of policies' decision-making at ONESQA and demanded to have the university and OHEC representatives in the governing body of ONESQA.

The following two main issues probably caused by the higher education institutions' discontent toward the existing role and functioning of ONESQA are notable. Firstly, all university administrators agreed that OHEC should closely co-operate and communicate with ONESQA and their QA policies should be consistent. The importance of co-operation and communication between the government and the QA agency had been emphasized by many higher education scholars (Kis, 2005; World Bank, 2003; Brennan & Shah, 2000; Martin & Stella, 2007). Based upon the perceptions of the university administrators, it was argued that the collaboration between OHEC and ONESQA as well as consistent QA policies and measurements would decrease duplicated works and increase positive attitudes about QA works. The second issue to be noted is that there were agreements that the functioning of ONESQA should be monitored by the government to ensure its transparency and credibility. As previously discussed in the literature review, accountability of the QA agencies had constituted an important aspect of quality assurance policy (Perellon, 2007). Martin and Stella (2007) emphasized that the quality assurance agencies are expected to be "accountable to many stakeholders to prove the credibility of the process and to ensure the objectivity and transparency of their decisions or recommendations" (p. 91). The findings of this study obviously indicated that OHEC should be responsible for the accountability of ONESQA.

Furthermore, the findings showed that there were statistically significant associations between the administrators' type of institution and their agreements about the existing roles of OHEC and ONESQA. Holding all other characteristics constant, the probability of the administrators from private universities to agree with the statements about the roles of OHEC and ONESQA was 3.8 times more than those from public universities (Public university, Rajabhat University, and Rajamangala University of Technology). These findings suggested that private universities and public universities in Thailand may have different perceptions toward the roles of OHEC and ONESQA in assuring quality performance of the higher education institutions. Differing university affiliations with the governmental authority were perhaps one of the reasons that can explain the different perceptions among administrators from public and private universities.

In applying the study from IIEP (IIEP, 2006, p. 14) about roles of the governmental authorities and national quality assurance agencies in the QA processes which were grouped into three overlapping functions namely administration, co-ordination and decision-making to investigate the Thai university administrators' perceptions toward the OHEC's functions, the findings indicated that the perceived functions of OHEC were an integration of administrative functions and co-ordination functions. The administrative functions such as developing the roster of experts, notifying the higher education institutions, and publishing the final QA outcome were perceived by most university administrators to be the responsibilities of OHEC concerning the quality assurance policies. Likewise, the co-ordination functions including organizing activities for the development of the QA framework (for example monitoring the major phases of QA, helping institutions to prepare for self-assessment, training experts to perform QA organizing national and international QA

networks, facilitating QA activities in higher education institutions, and cooperating with higher education institutions and relevant QA organizations) and upholding the credibility of QA agencies were perceived to be the OHEC's responsibilities. Although participating in assessment visits was accepted by many university administrators to be another function of OHEC, the findings showed that higher education institutions were not supportive of OHEC to play a role in the decision-making functions (e.g. taking a roles in quality assessment activities and making decisions about QA process). These results reflected the contested nature and political dimensions of quality assurance in higher education as discussed in the literature (Weert, 1990; Seymour, 1991; Sarrico et al., 2010; Skolnik, 2010; Barnett, 1994; Vlãsceanu, Grünberg, & Pârlea, 2004). Perceptions of the university administrators revealed that they were not convinced of the government's definition of "quality in higher education" and the OHEC's decision about the quality measurement.

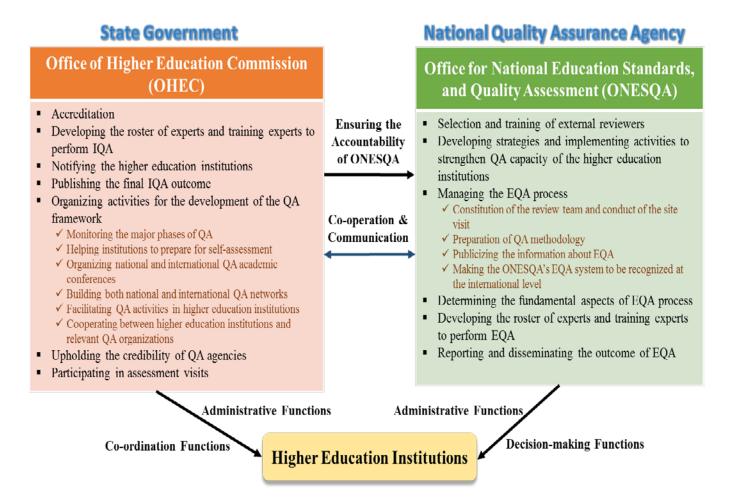
Regarding the ONESQA's role and responsibilities, its perceived functions seemed to be influenced by somewhat negative attitudes about its functioning as previously discussed. Results from the study showed that even though the university administrators acknowledged the EQA policy administration to be the ONESQA's responsibilities, most of them did not think ONESQA should make decisions about QA process. The study from IIEP suggested that there were five basic functions a quality assurance agency may perform including 1) determining the range, scope and general orientation of the quality assurance scheme to be applied, 2) preparation of methodology, 3) managing the processes, 4) decision-making and reporting on the outcome, and 5) capacity building (ibid, p. 15). As findings revealed, all these functions were also perceived to be the responsibilities of ONESQA. The functions of ONESQA perceived by most university administrators were selection and training of external reviewers, training experts to perform

EQA, developing strategies and implementing activities to strengthen QA capacity of the higher education institutions, determining the fundamental aspects of EQA process, developing the roster of experts, reporting and disseminating the outcome of QA, and managing the EQA process (e.g. constitution of the review team and conduct of the site visit, preparation of QA methodology, publicizing the information about EQA, and making the ONESQA's EQA system to be recognized at the international level). These perceived responsibilities of ONESQA were apparently a combination of administrative functions and decision-making functions in the IIEP's study (ibid, p. 14). It should also be noted here that, according to the university administrators' perceptions, accreditation was considered to be responsible by OHEC more than ONESQA. In conclusion, roles and functions of state government (OHEC) and national quality assurance agency (ONESQA) in assuring quality performance of higher education institutions defined by the Thai university administrators are illustrated in Figure 6.3.

However, it should be taken into consideration that these roles of OHEC and ONESQA were subjectively defined from higher education institutional viewpoints. In order to preserve the higher education institutional autonomy and academic freedom, the state government and national quality assurance in this model were consequently defined to play a role of quality assurance facilitators rather than quality monitors or assessors. The findings indicated that the Thai higher education institutions expected both the government and the national QA agency to effectively perform supportive functions by motivating quality management, encouraging the development of various QA approaches, assisting higher education institutions to increase QA skills and develop their own appropriate QA measurements, and promoting application of international quality standards and practices.

Figure 6.3. The higher education institutions' preferred roles of state government and national

quality assurance agency and their relationship in the Thai quality assurance system



Additionally, it was argued in the literature that another highly controversial issue in the relationships between governments and higher education institutions in the process of QA is whether the allocation of public funding to institutions should wholly or partially be based on the results of evaluation procedures (Thune, 1998). Linking quality to funding was seen as important for accountability and an incentive to quality improvement (Ewell, 1999). Results of this study suggested that most university administrators would like the Thai government to provide financial incentives for the QA policies' implementation and were very supportive of the use of QA results for funding allocation purposes.

6.4 HOW CAN THE NATIONAL QUALITY ASSURANCE POLICIES BE EFFECTIVELY ORGANIZED AND RESPOND TO THE HIGHER EDUCATION INSTITUTIONS AND THE SOCIETY APPROPRIATELY?

The last research question to be answered was "*How can the national quality assurance policies* be effectively organized and respond to the higher education institutions and the society appropriately?"

Apparently, the study found that the university administrators had similar perceptions toward the important factors for the success of national QA policy implementation regardless of their differences in the personal conditions. According to the university administrators, the three most important factors that affect the success of national quality assurance policy implementation (the highest mean values) were 1) the support and commitment of university community, 2) the support and commitment of university executives, and 3) efficient database and information systems in the university. Findings from the interviews and open-ended question in this section correspondingly confirmed that quality awareness and collaboration from everybody in the higher education institutions including university executives and university community were very important to the success of QA policy implementation. Meanwhile, there were believed that the effective and up-to-date QA database system would make QA works much easier. According to the literature, an internal concern of the institutions with its own improvement was considered to be an imperative factor in the quality assurance process (Sarrico et al., 2010). It was recommended that even though quality assurance exists and has legitimacy because stakeholders are interested in the quality of higher education institutions and programs, it should not be merely developed as an answer to performance assessment exercises. Likewise, the study by Skolnik (2010), which considered QA in higher education as a political process,

recommended that the collaborative efforts of all higher education stakeholders could make quality assurance more effective in improving educational quality.

It should also be noted that although legal enforcement and the use of rewards and sanctions were perceived by about one-half of the university administrators to be very important for the success of QA policy implementation, these factors were statements with the lowest mean values among others. While there were many university administrators still strongly believed that the legal requirement was essential for successful QA policy implementation, it was evident that most Thai higher education institutions had engaged in QA practices and implemented the national QA policies due to their concerns and commitment to quality improvement. Furthermore, it was pointed out by the university administrators that the national QA policy implementation contributed added benefits for the higher education institutions by providing systematic institutional development, increasing institutional awareness of quality management and efficiency. Publishing the good QA results would also increase the universities' reputation.

The use of rewards and sanctions was a controversial issue in the literature. It was argued that the use of rewards and sanctions to ensure implementation and overly bureaucratic procedures reflected its underlying intention of management control and a shift of power that impinges on academic freedom agencies (Martin, 2007. p. 52). Additionally, Woodhouse (1995) stated that funding rewards generate a compliance culture and skew the system to follow the money. Therefore, although there were believed that practical provision of rewards and sanctions would make the QA policy implementation become more effective, it is undoubted that some university administrators felt caution about this factor.

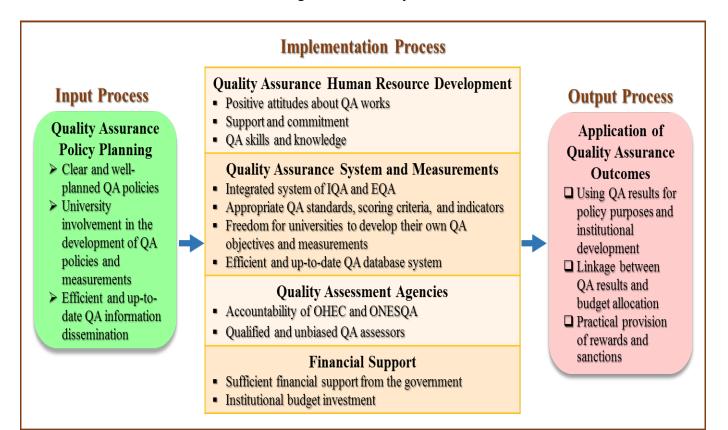
As discussed in the literature that every higher education institution is a dynamic system, encompassing an environment that inputs some form of energy to the system which undergoes

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transformative process to give some outputs into the environment, and must be seen in its own uniqueness and totality for quality management (Mishra, 2007; Mukhopadhyay, 2005). Based on the findings of the study, in order to increase effectiveness and responsiveness of the national QA policies to the higher education institutions and the society, it was proposed that quality assurance in higher education could also be viewed as a system which consists of three processes; input process, implementation process, and output process. The model for effective national QA policy implementation in the Thai higher education system derived from analysis of the university administrators' perceptions was summarized and illustrated in Figure 6.4.

Figure 6.4. Model for effective national quality assurance policy implementation in the Thai

higher education system



In the input process, QA policy planning was perceived to be a first step and very important for the success of national quality assurance policy implementation. Many university administrators suggested that the QA policies should be well planned, clear, and easy to implement. The QA policymakers and administrators should have well understanding about distinctive higher education organizational management and differing contexts of higher education institutions. The implementation guidelines should be efficiently provided, and its dissemination must not be delayed. Policymakers of OHEC and ONESQA should pay more attention to feedbacks from higher education institutions. The universities should have opportunities to be involved in the development of QA policies and measurements at OHEC and ONESQA.

According to the university administrators, the implementation process of the effective QA in the Thai higher education system included four main factors; 1) quality assurance human resource development, 2) quality assurance system and measurements, 3) quality assessment agencies, and 4) financial support. As emphasized by Martin & Stella (2007, p. 105), one of the points of caution in quality assurance was that it has a cost both financial and human. It was recommended by many university administrators that the policy implementation would be more effective if they had sufficient financial support. The institutional budget investment was also deemed necessary for quality improvement at every unit.

Quality awareness and collaboration from everybody in the higher education institutions were previously perceived by most administrators to be extremely important in the implementation of QA policies. Consequently, QA human resource development was considered to be a crucial factor in the implementation process of effective quality assurance system. Evaluation systems were argued by numerous higher education scholars to create a considerable workload for academic staff (Harvey, 2002; Stephenson, 2004). Likewise, the findings revealed that the QA works were often seen as an additional job and time-consuming for both academic and administrative staffs in the higher education institutions. In addition, Watty (2006) argued that when quality led initiatives were implemented, academics were found to either portray a lack of engagement in the process, or effectively participate if the systems were designed to ensure the attributes of quality they deem important. Newton (2000; 2002) suggested that the outcomes of the implementation process and success of quality assurance strategies are to some extent influenced by factors such as the situated perceptions of the frontline staff, the loss of frontline academics' autonomy, the quality bureaucratization that led to unjustified workload burdens, and the situational factors and context.

Viewing quality assurance practices as a workload burden and its negative attitudes could become a great obstacle to the policy implementation. Therefore, to successfully implement QA policies, it was suggested that not only QA practitioners but also all individuals in the universities must have positive attitudes about QA works. University executives and university community should know and understand the importance of QA policies. The positive attitudes about QA works especially among those involved in the policy process, and university executives would bring about their support and commitment which are very important for the effective QA policy implementation. Furthermore, the QA practitioners should be well-informed and constantly trained to have appropriate knowledge and skills about QA policies and measurements.

The next important factor in the implementation process of the effective QA system was quality assurance system and measurements. The Thai university administrators' ideal QA system and measurements emphasized four major features; 1) integrated system of IQA and

EQA, 2) appropriate QA standards, scoring criteria, and indicators, 3) freedom for universities to develop their own QA objectives and measurements, and 4) efficient and up-to-date QA database system. As aforementioned, most university administrators believed that the effective and up-to-date QA database system would make QA works much easier. The efficient QA database system thus was an important QA system feature included in the implementation process of this model. One of the main QA policy implementation problems repeatedly mentioned by the Thai university administrators was the lack of collaboration and communication between OHEC and ONESQA. As a result, the IQA policies imposed by OHEC and EQA policies imposed by ONESQA were not consistent and generated duplication of work for the higher education institutions. It was recommended by many university administrators that effective and responsive QA system for Thai higher education institutions should be an integrated system of IQA and EQA. A dynamic link between internal and external processes was indicated to be a significant feature of effective QA systems in the study by Kis (2005).

Another major problem that most administrators encountered in the implementation of QA policies was inappropriateness of using a pattern of standards, scoring criteria, and indicators as "one size fits all" in the quality assessments. The recommendation from many university administrators was that the QA measurements must be developed to suitably assess different contexts and missions of each university. Concerning this issue, the Thai university administrators perceived that a flexible QA system which allow the higher education institutions to develop their own QA objectives and measurements would be the effective and responsive QA system. Correspondingly, the study by Weber et al. (2010) recognized the importance of institutional variation in the QA system for higher education institutions. They found that the "best practice" QA system was the system which examined the strategies followed by a higher education institution in the light of the institution's intended purposes, was an institution-driven

as much as agency-driven, was adapted to the types of higher education institutions, focused on quality assurance processes more than on pre-defined criteria, and pushed the concerned higher education institution to do a great part of the work. Dill (2013) also suggested that the selforganization of internal governance arrangements and the active collective monitoring of valid measures of performance are the critical design principles for assisting higher education institutions to voluntarily address collective action dilemmas in assuring academic standards. Therefore, appropriate QA measurements and freedom for universities to develop their own QA systems were considered to be important factors in the effective QA system.

Quality assessment agencies were perceived to be another important factor in the implementation process of the effective QA system. Many university administrators mentioned the issue of accountability of OHEC and ONESQA as the quality assessment agencies. They claimed that higher education institutions which were subjected to the quality assessments should be secured about the performances of OHEC and ONESQA as well. Many university administrators experienced that the institutions got problems about unqualified and biased QA assessors in their quality assessment process. The influence of quality assessment agencies on the effectiveness of the QA system were identified in the literature (Kis, 2005). Study by Sabiote and Gutierrez (as cited in Kis, 2005, p. 25) reported that the lack mechanisms of analysis of the information gathered during the quality review, inadequacies of the selection process of and the training offered to evaluators, and the lack of effectiveness of evaluation committees were some of the major reasons for the weakness of the QA system in Spain.

The output process of effective QA policy implementation in the Thai higher education system was concentrated on an application of QA outcomes. Many university administrators criticized that the current quality assessments were merely for the sake of scoring, or a means to an end. The QA outcomes were not applicable or did not have any impacts on the university performances. Application of QA outcomes such as using QA results for policy purposes and institutional development, linkage between QA results and budget allocation (e.g. operating expenditure, personal payments, and financial supports), and practical provision of rewards and sanctions would make the QA policy implementation become more effective. Additionally, the literature suggested that there is a wide gap between academic and governmental approaches to quality in which government has a more summative approach, while the approach of the universities tends to be more formative (Kis, 2005; Vroeijenstijn, 1995a). Quality from a government standpoint is achieved when a proper balance between quality, opportunity, and cost is maintained, while higher education institutions' main objectives in QA policy implementation were toward an analysis of institutional strengths and weaknesses and the formulation of recommendations for further quality improvement (Kis, 2005). In many Thai university administrators' opinions, effective QA system was expected to be the system that lead to quality improvement of higher education. Hence, QA outcomes both from IQA and EQA results were also expected to be able to truly reflect the quality of higher education institutions and bring about useful recommendations for institutional improvement.

6.5 CONCLUSIONS

The main purpose of this study was to examine the perceptions of university administrators related to the national quality assurance policies in the Thai higher education system. These policies consisted of internal quality assurance policies administrated by OHEC and the external quality assurance policies administrated by ONESQA. The university administrators' perceptions

toward four aspects of the policy implementation including the current practices of national quality assurance policies, the major components of institutional quality assurance, the roles of state governments and national quality assurance agencies, and the policies' recommendations were investigated.

Two survey instruments, namely the pre-developed questionnaire targeting the policy administrators in all target higher education institutions in Thailand and the guided interview questions for the telephone interviews, were developed and administered in order to systematically collect both quantitative and qualitative data. The 80 completed questionnaire surveys of overall surveys distributed to the university administrators at 153 higher education institutions under the supervision of OHEC were returned for an overall response rate of 52.3% in addition to 6 university administrators of the 10 targeted interviewees participated in the study. The analysis and interpretation undertaken to this point allow the researcher to generate conclusions and recommendations about the policy implementation and its particular aspects.

The findings in this study revealed a consensus exists among the university administrators about the current practices of national QA policies. In general, the analysis of the perceptions of university administrators showed positive perceptions on the presence and objectives of the policies and desire for improvement on the policies' administration. The current practices of national QA policies were perceived as beneficial not only for higher educational stakeholders but also for the higher education institutions. The IQA policies administrated by OHEC were perceived to be the important supporters for quality management system in higher education institutions and to build central QA facilities for Thai higher education sector, while the EQA policies administrated by ONESQA were perceived to have strong points in its objectives and establishment of national quality standards for Thai higher education institutions. However, based on the findings, most university administrators revealed their major concerns about the implementation process of the policies. Their concerns involved the issues about university participation in the process of national QA policies' development, some negative aspects of the QA policy implementation, and weaknesses of both IQA and EQA policies. The university administrators' similar concerns were exposed both in the survey responses and the interviews.

The major components of institutional quality assurance for Thai higher education derived from analysis of the university administrators' perceptions encompassed QA process (self-assessment, quality audit, and external assessment), QA system (QA measurements and database), QA people (university executives and community, QA administrative staffs, QA committees, quality assessment assessors), budget investment, and QA outcomes. The findings revealed that most university administrators held positive views toward the existing role and functions of OHEC in the quality assurance of higher education and expected OHEC to focus on being a quality management supporter and increasing the effectiveness of the national QA policy administration. On the other hand, the university administrators' perceptions toward the role and functioning of ONESQA were somewhat negative, and many of them supported ONESQA to seriously reinforce their roles and responsibilities as an external QA agency. The very crucial finding that needs to be carefully reviewed by the policymakers, administrators, and government officials were the university administrators' agreements that OHEC should closely co-operate and communicate with ONESQA, and the functioning of ONESQA should be monitored by the government to ensure its transparency and credibility. Interestingly, this study also found statistically significant associations between the university administrators' type of institution and their agreements which suggested that private universities and public universities in Thailand may

view the major components of institutional quality assurance and the existing roles of OHEC and ONESQA differently.

In sum, the findings from university administrators' perceptions confirmed that quality awareness and collaboration in the higher education institutions including university executives and university community were very important to the success of QA policy implementation. Based on the analysis of the university administrators' perceptions, the model for effective national QA policy implementation in the Thai higher education system which viewed quality assurance in the higher education institutions as a system consists of input, implementation, and output process was proposed.

The results of this study should be useful for the leaders and policymakers of the national quality assurance policies in Thailand to better understand the current states and problems of the policies from the policy implementers in higher education institutions. The study was also contributed to the body of knowledge related to the quality assurance policy and its implementation in the Thailand's context especially to the attempt to develop quality assurance practices in the Thai higher education system.

6.6 RECOMMENDATIONS FOR FURTHER RESEARCH

This dissertation looked at university administrator perspectives on the national QA policies in Thai higher education system and generated findings that can be useful to both higher education policy and literature. The results of this dissertation was expected to serve as an initial step to bring to the attention of policymakers at both the national level higher education bodies and higher education institutional level in Thailand about the national QA policies and its implementation at the higher education institutions. It was also expected to create some ground for future research, as well as offer some rich, research-based insights that can be taken advantage of by both researchers and professionals in the higher education sector. The following suggestions were recommended for future research.

This study did not represent the entirety of Thai university administrators due to its sampling. The targeted population of this study was limited to focusing on at least one university administrators who were in charge of QA policies' implementation in the 153 targeted higher education institutions. More detailed study with the larger representative group of university administrators is recommended for future research in order to make generalizations. Further study on the larger targeted population of university administrators may provide a different and accurate insight into the presence of national QA policies in Thai higher education system.

Since this research was focused on information provided by university administrators, the attitudes and perceptions presented in the study were from an administrative point of view. There are, however, other participants in higher education that need to be heard, for example, higher education policymakers, higher education institutions' executives, faculties, students and parents, and other related employees. These groups of people may perceive an importance, strengths and weaknesses, and have preferences about the policies and the roles of Thai governments and the national QA agency that are different from administrative personnel. In addition, this dissertation proposed the model of major components in higher education institutional quality assurance, the preferred roles of state government and national QA agency and their relationship with higher education institutions in the QA system, and the model for effective QA policy implementation specifically designed for Thailand's higher education systems that can be useful for other systems. It is suggested here that these models will be significant in providing a general

framework for the QA policy implementation in the higher education sector. Since this framework was developed based only on perceptions of QA policy practitioners in higher education institutions, integration of the other higher education stakeholders will be another direction for future research.

Comparative studies of the perceptions of university administrative staffs and academic staffs to determine the response to the policies would be an interesting study. This study did not actually examine the university administrators' perception about the concept of quality in higher education. Thus, comparative studies between the government and universities about definition of quality and the operational definition of quality assurance are recommended. Besides, a study to examine administrative roles and characteristics of university executives, who were indicated to play an important role in QA policy implementation and success in each institution, would be added to the growing body of knowledge related to the QA policies in higher educational system.

Although this dissertation applied mixed methods which integrated both qualitative and qualitative data analysis, the qualitative section was limited and not specific. The study could also be replicated by applying a qualitative approach (e.g. an in-depth case study) to further inquiry in this domain in order to in-depth explore and better understand the perceptions of university administrators in the specific areas of the quality assurance system.

Several issues in this study also require further discussion. Specifically, future research should include analysis of the application of each quality assurance approach. For instance accreditation, quality audit, external quality assessment, Qualifications Framework for Higher Education, Education Criteria for Performance Excellence (EdPEx), ASEAN University Network Quality Assurance (AUN-QA), and ISO 9001:2000. Cost-benefit and cost-effectiveness studies such as transections costs and information costs regarding QA implementation at national

and institutional levels should also be conducted to investigate how much the government and higher education institutions invested and how many benefits they perceived.

APPENDIX A

THE TARGET HIGHER EDUCATION INSTITUTIONS IN THAILAND

Types Regions		blic Universities	Private Universities	Rajabhat Universities	Rajamangala Universities of Technology
Bangkok	1.	Chulalongkorn	1. Bangkok University	1. Suan Sunandha	1. Rajamangala
Metropolis		University	2. Dhurakij Pundit	Rajabhat Universit	University
	2.	Kasetsart	University	2. Suan Dusit	of
		University	3. Mahanakorn	Rajabhat	Technology
	3.	King Mongkut's	University of	University	Krung Thep
		University of	Technology	3. Chandrakasem	2. Rajamangala
		Technology	4. Krirk University	Rajabhat	University
		Thonburi	5. Kasem Bundit	University	of
	4.	Thammasat	University	4. Phranakhon	Technology
		University	6. Saint John's	Rajabhat	Phra
	5.	Ramkhamhaeng	University	University	Nakhon
		University	7. Sripatum	5. Dhonburi Rajabhat	
	6.	Srinakharinwirot	University	University	
		University	8. Siam University	6. Bansomdejchaopra	
	7.	Silpakorn	9. University of the	ya Rajabhat	
		University	Thai Chamber of	University	
	8.	King Mongkut's	Commerce		
		Institute of	10. South-East Asia		
		Technology	University		
		Ladkrabang	11. Assumption		
	9.	King Mongkut's	University		
		Institute of	12. Rattana Bundit		
		Technology	University		
		North Bangkok	13. Thonburi		
	10.	Pathumwan	University		
		Institute of	14. Saint Louis		
		Technology	College		

Table A.1. List of the target higher education institutions in Thailand by types and regions

Types	Public Universities	Private Universities	Rajabhat Universities	Rajamangala Universities of
Regions			Universities	Technology
Bangkok Metropolis	 Mahamakut Buddhist University Mahachulalongk ornrajavidyalaya University National Institute of Development Administration Princess Galyani Vadhana Institute of Music 	 Thongsuk College Siam Technology College Bangkok Thonburi College Southeast Bangkok College Dusit Thani College Dusit Thani College North Bangkok University Rajapark College North Bangkok Suvarnabhumi College Chulabhorn Graduate Institute Thai-Nichi Institute of Technology Arsom Silp Institute of the Art Chitralada Technology College 		
Central	 15. Mahidol University 16. Sukhothai Thammathirat Open University 	 27. Saengtham College 28. Christian University 29. Rajapruk University 30. Panyapiwat Institute of Technology 31. Shinawatra University 32. Rangsit University 33. Eastern Asia University 34. Pathumthani University 35. Institute of Technology Ayothaya 	 Nakhon Pathom Rajabhat University Valaya-Alongkorn Rajabhat University Phranakhon Si Ayuthaya Rajabhat University Thepsatri Rajabhat University Nakhon Sawan Rajabhat University Phetchaburi Rajabhat University 	 Rajamangala University of Technology Rattanakosin Rajamangala University of Technology Suvarnabhu mi Rajamangala University of Technology Thanyaburi

Table A.1. (continued)

Types Regions	Public Universities	Private Universities	Rajabhat Universities	Rajamangala Universities of Technology
Central	 17. Chiang Mai University 18. Maejo University 19. Mae Fah Luang 	 36. St Theresa International College 37. Chaopraya University 38. Huachiew Chalermprakiet University 39. Stamford International University 40. Webster University 41. Western University 42. The University of Central Thailand 43. Asia-Pacific International University 44. Kantana Institute For Everyone 45. Learning Institute For Everyone 46. Mahachai Institute of Automotive Technology 47. North-Chiang Mai University 48. Payap University 49. Far Eastern College 	 13.Kanchanaburi Rajabhat University 14.Muban Chom Bung Rajabhat University 15. Chiang Mai Rajabhat University 16. Chiang Rai Rajabhat 	6. Rajamangala University of Technology Lanna
	University 20. Naresuan University 21. University of Phayao	 50. Chiangrai College 51. Nation University 52. Lampang Inter- Tech College 53. Phitsanulok University 54. Lumnamping College 55. Pacific Institute of Management Science 	University 17. Lampang Rajabhat University 18. Pibulsongkram Rajabhat University 19. Uttaradit Rajabhat University 20. Kamphaeng Phet Rajabhat University 21. Phetchabun Rajabhat University	

Table A.1. (continued)

Types Regions	Public Universities	Private Universities	Rajabhat Universities	Rajamangala Universities of Technology
North- eastern	 22. Khon Kaen University 23. Suranaree University of Technology 24. Mahasarakham University 25. Ubon Ratchathani University 26. Nakhonphanom University 	 56. Northeastern University 57. College of Asian Scholars 58. Vongchavalitkul University 59. Nakhonratchasima College 60. Phanomwan College of Technology 61. Ratchathani University 62. Santapol College 63. Chalermkarn- chana University 64. The Eastern University of Management and Technology 65. Pitchayabundit College 	 22. Nakhon Ratchasima Rajabhat University 23. Maha Sarakham Rajabhat University 24. Ubon Ratchathani Rajabhat University 25. Udon Thani Rajabhat University 26. Loei Rajabhat University 26. Loei Rajabhat University 27. Sakon Nakhon Rajabhat University 28. Buri Ram Rajabhat University 29. Surindra Rajabhat University 30. Kalasin Rajabhat University 31. Chaiyaphum Rajabhat University 32. Roiet Rajabhat University 33. Sisaket Rajabhat University 	7. Rajamangala University of Technology Isan
Eastern	27. Burapha University	66. Asian University67. Chalermkanchana Rayong College	34. Rambhaibarni Rajabhat University 35. Rajanagarindra Rajabhat University	8. Rajamangala University of Technology Tawan-ok
Southern	 28. Thaksin University 29. Prince of Songkla University 30. Walailak University 	68. Hatyai University69. Southern College of Technology70. Srisophon College71. Tapee University72. Fatoni University	 36. Songkhla Rajabhat University 37. Nakhon Si Thammarat Rajabhat University 	9. Rajamangala University of Technology Srivijaya

Types Regions	Public Universities	Private Universities	Rajabhat Universities	Rajamangala Universities of Technology
Southern	31. Princess of	73. International	38. Surat Thani	
	Naradhiwas	Buddhist College	Rajabhat	
	University		University	
			39. Phuket	
			Rajabhat	
			University	
			40. Yala Rajabhat	
			University	

Source: Office of the Higher Education Commission, 2014a, 2014d.

APPENDIX B

RESEARCH INSTRUMENT I: QUESTIONNAIRE

Thai Quality Assurance Administrators' Perceptions toward National Quality Assurance Policies

This questionnaire is part of a doctoral research study designed to explore the perceptions of university administrators concerning the present status and problems of national quality assurance policies implemented in Thai higher education institutions.

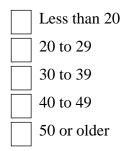
All respondents will be kept completely anonymous.

Your answers are critical to the study, and your suggestions will be included in the recommendations section of the final report. Please be so kind and help me by filling out all sections in this questionnaire.

1. Optional contact information

a.	Title:	
b.	Name:	
c.	Institution's Name:	
d.	Job title	
e.	Email address:	

2. How old are you?



3. What is your gender?



- 4. What is your level of education?
 - Lower than Bachelor's degree
 Bachelor's degree
 Master's degree
 Doctorate degree
- 5. What is your educational background?
- 6. What is your current work status?



7. In which type of institution do you work?



8. Where is your institute?



- 9. How long have you been working on quality assurance policies? (List actual number of years)_____
- 10. How long has your institution been implementing the national quality assurance policies?(List actual number of years)
- 11. How is your institution organizationally structured to implement quality assurance policies? (Please select all that apply)

A Quality Assurance Division or Department
Quality Assurance Committees
Special Appointed Staffs
Other (Please specify)

12. How many staffs currently working on the quality assurance administration? (List actual number of staffs)_____

13. Does your institution has a strategic plan for quality assurance practice?

Yes	
No, please indicate why?	

14. Which of the following quality assurance approaches have been implemented in your institution? (Please select all that apply)

Accreditation
Assessment
Audit
Thai Qualifications Framework for Higher Education (TQF: HE)
Education Criteria for Performance Excellence (EdPEx)
Public Provision of Information (e.g. survey researches on effective teaching and student learning)
Benchmarking
Quality Rankings
Other (Please specify)

15. Have your institution been involved in internal quality assurance (IQA)?

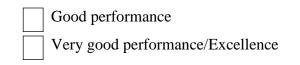
Yes	
No, please indicate why?_	

15.1. If yes, what is your institution's current IQA result?

Performance which requires urgent improvement

Performance which requires improvement

Fair performance



16. Have your institution been involved in external quality assurance (EQA)?

Yes
No, please indicate why?

16.1 If yes, what is your institution's current EQA result?

- Performance which requires urgent improvement
- Performance which requires improvement
- Fair performance

Good performance

- Very good performance/Excellence
- 17. Please rate the importance for each reason why your institution engages in quality assurance practices (Mark one for each item)

Reasons for Implementing Quality Assurance Policies	Not at all	Slightly Important	Moderately Important	Very Important	Extremely Important
17.1. Requirement by Laws					
17.2. Requirement by the government					
17.3. University support and commitment					
17.4. The implementation in other higher education institutions					
17.5. The requirement and expectation of students and parents					
17.6. The requirement and expectation of public and stakeholders					
17.7. The need to respond to increased competition					
17.8. The need to improve institutional performance					
17.9. The aim to improve the quality of institution					
17.10. The aim to be international standardized					

Reasons for Implementing Quality Assurance Policies		Moderately Important	Extremely Important
institution			
17.11. Other, please specify			

18. Please indicate how much do you agree or disagree with the following statements about the current practices of national QA policies (Mark one for each item)

Current Practices of National QA Policies	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
18.1. The policies are appropriately planed for our					
institutions					
18.2. The policies' regulations are organized in such a					
way that can be easily followed					
18.3. The university should have opportunities to be					
involved in the process of policies'					
development					
18.4. The university has enough freedom to make a					
decision and act when implementing these					
policies					
18.5. Our QA staffs have enough information to					
implement QA policies					
18.6. Our QA staffs receive clear information to					
implement QA policies					
18.7. The QA policies' implementation are properly					
supported by the university's executives					
18.8. The QA policies' implementation are properly					
supported by most faculty members and					
administrators in the university					
18.9. The QA policies' implementation are					
problematic					
18.10. The QA policies are effectively implemented at					
your university					
18.11. Financial incentives are necessary for					
implementing QA in your university					
18.12. Non-Financial incentives are necessary for					
implementing QA in your university					
18.13. These policies reduce the autonomy of					
university					
18.14. These policies encourage the university to be					
aware of quality improvement					

	Current Practices of National QA Policies	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
18.15.	These policies help to improve the institution's quality performance					
18.16.	These policies help to enhance the continuing quality improvement					
18.17.	The data created and collected for QA enable the university to properly manage the institution and understand what the institutions need in order to improve.					
18.18.	These policies create workload burdens for the faculty members and university administrators					
18.19.	QA is illustratively demanding and requiring enormous paperwork					
18.20.	These policies are creating a QA bureaucracy					
18.21.	These policies are considered an additional job and time-consuming					
18.22.	QA practitioners are required to keep up-to- date knowledge regarding QA indicators and requirements					

19. In your opinion, what are strengths and weaknesses of the internal quality assurance policy administrated by Office of the Higher Education Commission (OHEC)?

19.1. Strengths

19.2. Weaknesses

20. In your opinion, what are strengths and weaknesses of the external quality assurance policy administrated by Office for National Education Standards, and Quality Assessment (ONESQA)?

21. Please rate how important are the following components in the institutional quality assurance for Thai higher education institutions? (Mark one for each item)

Institutional QA Components	Not at all	Moderately Important	Extremely Important
21.1. Self-assessment			
21.2. External review			
21.3. Peer review			
21.4. Public reporting			
21.5. QA committees			
21.6. QA tools and mechanisms			
21.7. Quality Components, Indicators, and Scoring Criteria			
21.8. Self-assessment report (SAR)			
21.9. Internal assessment committees			
21.10. External assessors			
21.11. Other, please specify			

Institutional QA Components	Not at all	Slightly Important	Moderately Important	Very Important	Extremely Important

22. Please indicate how much do you agree or disagree with the following statements about the components of institutional quality assurance (Mark one for each item)

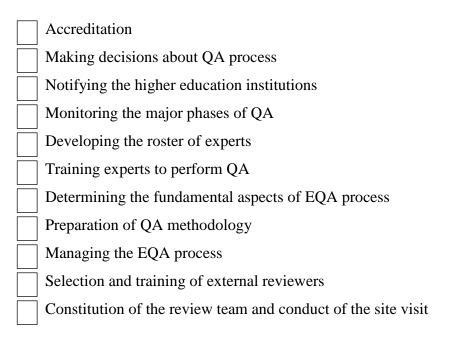
The Components of Institutional Quality Assurance	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
22.1. QA is only an activity performed as required					
by the government					
22.2. Much of QA works are related to					
documentation and report writing					
22.3. QA in Thai higher education institutions is					
generally about collecting necessary data to					
answer the required indicators					
22.4. Organizing quality assurance practice and					
improving institutional quality are important					
missions in your university					
22.5. Your university is interested in developing its					
own QA model					
22.6. The quality components, indicators, and					
scoring criteria developed by OHEC are					
appropriate for performing QA at your					
institution					
22.7. The quality criteria and indicators developed					
by ONESQA are appropriate for external					
quality assessment at your institution					
22.8. Your university has developed its own QA					
standards and indicators					
22.9. Your university conducts self-assessment					
every year					
22.10. Self-assessments are conducted not only at					
the institutional level but also at faculty and					
department levels					
22.11. Your university conducts quality audit every					
year					
22.12. Your university conducts quality audit more					
than one in every 3 years					
22.13. Quality auditing by internal assessment					
committees should be done annually					
22.14. Your university reports its QA result to					
OHEC every year					

The Components of Institutional Quality Assurance	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
22.15. Your university reports its QA result to the					
public every year					
22.16. There are QA committees both at the					
institutional level and faculty level in your					
university					
22.17. The creation of QA committees facilitates QA					
process and mitigate resistance within the					
university					
22.18. The selection of internal assessment					
committees is transparent and credible					
22.19. Your university tends to select generous					
assessors to gain a high quality score					
22.20. Your university uses some strategies to pass					
the assessment process					
22.21. The results of QA are linked to sanctions and					
incentives					
22.22. Your university uses the QA results for policy					
purposes					
22.23. Your university uses the QA results for					
budget allocation					
22.24. Your university uses the QA results to					
promote institution's activities and services					
22.25. Your university uses the QA results to					
improve institutional performance					
22.26. Self-assessment report is reliable and truly					
reflect the university's performance					
22.27. Evaluation from external assessors is					
transparent and credible					
22.28. Evaluation from external assessors is truly					
reflect the university's performance					
22.29. Your university executives are interested in					
the IQA result					
22.30. Your university executives are interested in					
the EQA result					
22.31. The IQA result is reliable and useful					
22.32. The EQA result is reliable and useful					
22.33. Getting a high score in the IQA result is very					
important for your university					
22.34. Getting a high score in the EQA result is very					
important for your university					

23. In your opinion, which of the following functions should be the responsibilities of state governments (OHEC)? (Please select all that apply)

Accreditation
Making decisions about QA process
Notifying the higher education institutions
Organizing activities for the development of the QA framework
Taking a roles in quality assessment activities
Monitoring the major phases of QA
Developing the roster of experts
Training experts to perform QA
Participating in assessment visits
Helping institutions to prepare for self-assessment
Upholding the credibility of QA agencies
Publishing the final QA outcome
Other (Please specify)

24. In your opinion, which of the following functions should be the responsibilities of national QA agencies (ONESQA)? (Please select all that apply)



25. Please indicate how much do you agree or disagree with the following statements about the roles of state governments (OHEC) and national QA agencies (ONESQA) in assuring quality performance of Thai higher education institutions (Mark one for each item)

Roles of OHEC and ONESQA	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
25.1. QA in higher education is a responsibility of the government					
25.2. The government uses QA to control higher education institutions					
25.3. The government uses QA to increase universities' accountability					
25.4. The government uses QA to improve quality of higher education					
25.5. OHEC has effectively promoted QA in your university					
25.6. The university is satisfied with the administration of OHEC regarding IQA policies					
25.7. The university should have opportunities to be involved in the process of policies' decision- making at OHEC					
25.8. The university is satisfied with the IQA results from OHEC					
25.9. OHEC has properly supported the QA implementation at the university					
25.10. OHEC should be more active in monitoring quality of higher education institutions					
25.11. The university should have more freedom to make a decision and implement QA					
25.12. OHEC should increasingly monitor QA outcome of the universities to ensure its reliability					
25.13. ONESQA as a public organization					
25.14. ONESQA as a national QA agency responsible for EQA in higher education					

Roles of OHEC and ONESQA	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
25.15. ONESQA has properly supported the					
implementation of EQA policies					
25.16. The university should have opportunities to be					
involved in the process of policies' decision-					
making at ONESQA					
25.17. Having university representatives in the					
governing body of ONESQA					
25.18. Having OHEC representatives in the governing					
body of ONESQA					
25.19. The university is satisfied with the					
administration of ONESQA regarding EQA					
policies					
25.20. The university is satisfied with ONESQA's					
performance in conducting EQA					
25.21. The university is satisfied with the EQA results					
from ONESQA					
25.22. OHEC should closely co-operate and					
communicate with ONESQA					
25.23. OHEC's and ONESQA's polices should be					
consistent					
25.24. The functioning of ONESQA should be					
monitored by the government to ensure its					
transparency and credibility					
25.25. OHEC should be responsible for the					
accountability of ONESQA					
25.26. The government should provide financial					
incentives for the QA policies' implementation					
25.27. The government should use the QA results for					
funding allocation purposes					

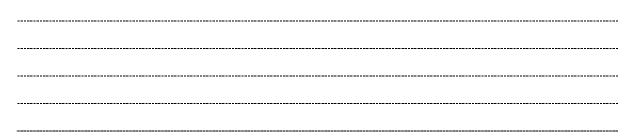
26. The following are factors that affect the success of implementing national quality assurance policies. Please indicate the level of importance for each factor (Mark one for each item)

Factors that Affect the Success of QA Implementation	Not at all	Moderately Important	Very Important	Extremely Important
26.1. Legal enforcement				
26.2. Funding support from the university				
26.3. The additional funding support from the parent institution				
26.4. Support from the government				
26.5. The support and commitment of the university executives				

Factors that Affect the Success of QA Implementation	Not at all	Moderately Important	Extremely Important
26.6. The support and commitment of university		 	 F ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
community			
26.7. The attitudes of QA staffs toward the QA			
policies' implementation 26.8. The attitudes of faculty members and			
administrators involved in the QA process			
26.9. The establishment of institution's QA policy			
and objectives			
26.10. The development of implementation plan			
26.11. Appropriate QA system and organizational			
structure at the university			
26.12. Appropriate QA system, organizational			
structure, administration of OHEC 26.13. Appropriate QA system, organizational			
structure, and administration of ONESQA			
26.14. Efficient QA tools and mechanisms			
26.15. Diversity of QA tools and mechanisms			
26.16. Appropriate quality components,			
indicators, and scoring criteria			
26.17. Diversity of quality components,			
indicators, and scoring criteria			
26.18. Communication and collaboration within the university			
26.19. Institutional autonomy			
26.20. Efficient database and information systems			
in the university			
26.21. Efficient QA national database and			
information systems (CHE QA Online)			
26.22. The involvement of universities in the			
policies' decision-making process 26.23. The cooperation between the university and			
OHEC			
26.24. The cooperation between the university and ONESQA			
26.25. The effectiveness and efficiency of IQA committees			
26.26. The effectiveness and efficiency of EQA committees			
26.27. The effectiveness and efficiency of QA staffs at the university			
26.28. Staffs training in the QA process			

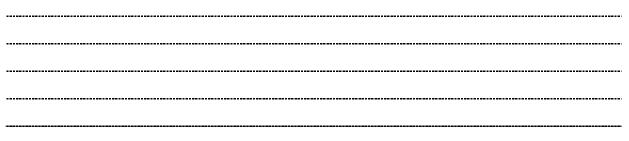
Factors that Affect the Success of QA Implementation	Not at all	U .	Moderately Important	•	Extremely Important
26.29. The experience of QA staffs					
26.30. The expertise of external assessors					
26.31. National and regional networks among higher education institutions					
26.32. The utilization of QA results					
26.33. The use of rewards and sanctions					
26.34. Other, please specify					
	•				

27. What major problems did your institution encounter in implementing QA policies?



28. What aspects of QA have you found to be most important?

29. What are your thoughts about the roles and responsibilities of OHEC and ONESQA at the moment?



30. In what ways, if any, do you think the national quality assurance policies for Thai higher education institutions could be more effective?

31. What else would you like to share relating to the national quality assurance policies not already covered in this survey?

Thank you for completing this survey, your effort is sincerely appreciated.

APPENDIX C

RESEARCH INSTRUMENT II: INTERVIEW GUIDE

Research question 1. The current practices of national QA policies in Thai higher education institutions

- 1. How QA is managed in your institution?
 - 1.1. How is your institution organizationally structured to implement QA policies?
 - 1.2. What are the primary responsibilities of the QA personnel?
- 2. What are the purposes of your institution in implementing QA policies?
- 3. What are the QA personnel' thoughts about the QA policies' implementation?
 - 3.1 What do you think of QA policies?
 - 3.2 What do you think are the objectives of the policies?
 - 3.3 How have you evaluated the success of the policies?
 - 3.4 Has QA in Thailand met the stated objectives? Why?
 - 3.5 What are the benefits and limitations of QA?
- 4. What have been the experiences of implementing national QA policies at your institution?
 - 4.1. Which QA approaches have been implemented in your university? (Describe and give reasons for each approach)

- 4.2. How did you try to introduce and implement QA in your university?
- 4.3. What were the academic responses to QA?
- 4.4. What are the potential challenges of QA administration?
- 4.5. What major problems did your institution encounter in implementing QA policies?

Research question 2. The major components of institutional QA for Thai higher education institutions

- 5 What do you think are the important component in the institutional quality assurance for higher education institutions in Thailand? (Describe and give reasons for each component)
- 6 What aspects of QA have you found to be most important?
- 7 What are the similarities and differences between QA model from elsewhere and QA model in Thailand? (Describe and give examples)
- 8 What are your organization's future plans for organizing quality assurance practice and improving institutional quality?

Research question 3. The roles of state governments (OHEC) and national QA agencies (ONESQA) in assuring quality performance of the higher education institutions

- 9 What are your thoughts about the OHEC's roles and responsibilities with regard to QA at the moment?
- 10 What are higher education institutions' expectations concerning the roles of OHEC in QA?
- 11 What are your thoughts about the ONESQA's roles and responsibilities with regard to QA at the moment?
- 12 What are higher education institutions' expectations concerning the roles of ONESQA in QA?

Research question 4. The policies' recommendation

- 13 What are factors that affect the success of implementing national QA policies? (Describe and give reasons for each factor)
- 14 In what ways, if any, do you think the national QA policies for Thai higher education institutions could be more effective?
- 15 In what ways, if any, do you think the national quality assurance policies could be used to exploit added benefits for your institution?
- 16 What else would you like to share relating to the national quality assurance policies not already covered in this interview?

APPENDIX D

IRB EXEMPT APPROVAL LETTER

Figure D.1. IRB exempt approval letter



University of Pittsburgh Institutional Review Board

3500 Fifth Avenue Pittsburgh, PA 15213 (412) 383-1480 (412) 383-1508 (fax) http://www.irb.pitt.edu

Memorandum

To:Malinee RattananuntapatFrom:IRB OfficeDate:3/31/2015IRB#:PRO15030354Subject:QUALITY ASSURANCE POLICIES IN THAI HIGHER EDUCATION

The above-referenced project has been reviewed by the Institutional Review Board. Based on the information provided, this project meets all the necessary criteria for an exemption, and is hereby designated as "exempt" under section 45 CFR 46.101(b)(2).

APPENDIX E

COVER LETTERS

E.1 COVER LETTER FOR THE QUESTIONNAIRE SURVEY

Dear President/Rector,

I am a doctoral candidate currently working on completing my Ed.D. dissertation in higher education management in the School of Education at the University of Pittsburgh, Pittsburgh, Pennsylvania, USA.

The purpose of this correspondence is to request your permission to collect data for a questionnaire dealing with the quality assurance policies in Thai higher education. There are no foreseeable risks associated with this research study, and all responses are confidential.

If the respondent has any questions regarding the survey itself or the intent of this research, please contact me at mar174@pitt.edu

Your assistance is greatly appreciated.

Yours sincerely,

Malinee Rattananuntapat

Educational Officer, Office of the Higher Education Commission

E.2 COVER LETTER FOR A TELEPHONE INTERVIEW

Dear Ms./Mr....,

My name is Malinee Rattananuntapat. I am a doctoral candidate currently working on completing my Ed.D. dissertation in higher education management in the School of Education at the University of Pittsburgh, Pittsburgh, Pennsylvania, USA. I am currently conducting a study entitled, "quality assurance policies in Thai higher education". The total of ten administrators in higher education institutions across the country will be asked to participate in this study.

You were selected to participate in this research study because of your involvement in the implementation of national quality assurance policies at your higher education institution. I would like to conduct a telephone interview with you that would last between 30-60 minutes and consist of several open-ended questions about quality assurance practices in your institutions. There are no foreseeable risks associated with this research study, and all responses are confidential. Your participation is voluntary, and you may withdraw from this research study at any time if you want to. The contribution of this participation will make a valuable research

study. It is anticipated that the result of the research will be of value to the governmental authorities and all higher education institutions in Thailand.

Would you be willing to participate in this research study via the telephone? What time and date would be best convenience with your schedule? If it is not possible to meet with by telephone, then may I conduct an email interview with you?

Thank you in advance for your contribution in this matter. I would be happy to answer any questions you might have and look forward to your response.

Yours sincerely,

Malinee Rattananuntapat

Educational Officer, Office of the Higher Education Commission

APPENDIX F

LIST OF INTERVIEWEES

Date of the Interviews	Institution/ Position of the interviewees
20 th of April 2015	Vice-Rector of Public University
30 th of April 2015	Former Vice-Rector of Rajabhat University
01 st of May 2015	University Administrator of Private University
12 th of May 2015	Vice-Rector of Rajabhat University
17 th of May 2015	University Administrator of Private University
09 th of June 2015	Dean, Public University

Table F.1. List of interviewees

APPENDIX G

SUPPORTING TABLES FOR DATA ANALYSIS

Participants' Demographics	Frequencies	Percentage (%)
Age (years) [N=78]		
Less than 20	7	9.0
20 to 29	7	9.0
30 to 39	29	37.2
40 to 49	15	19.2
50 or older	20	25.6
Gender [<i>N</i> =76]		
Male	16	21.1
Female	60	78.9
Level of education [N=78]		
Bachelor's degree	16	20.5
Master's degree	50	64.1
Doctorate degree	12	15.4
Educational background [N=78]		
Humanities /Social Sciences /Political Science	30	38.5
Business /Administration /Economics	21	26.9
Science	15	19.2
Engineering	4	5.1
Other	8	10.3
Current work status [N=79]		
Faculty member	24	30.4
University administrator	52	65.8
Other	3	3.8
Work experience on quality assurance policies (years) [N=79]		
1-5 years	34	43.0
6-10 years	26	32.9
More than 10 years	19	24.1

Table G.1. Demographic information of questionnaire survey participants

Participants' Demographics	Frequencies	Percentage (%)
Type of institution [N=79]		
Public university	21	26.6
Private university	27	34.2
Rajabhat University	18	22.8
Rajamangala University of Technology	13	16.5
Location of institution [N=79]		
Bangkok Metropolis	22	27.8
Central region	6	7.6
Northern region	26	32.9
North-eastern region	11	13.9
Eastern region	2	2.5
Southern region	12	15.2

Table G.1. (continued)

Table G.2. The implementation of national quality assurance policies in participants'

institutions

National Quality Assurance Policy Implementation	Frequencies	Percentage (%)
Implementation of national quality assurance policies (years) [N=73]		
Less than 10 years	10	13.7
10 – 15 years	50	68.5
16-20 years	11	15.1
More than 20 years	2	2.7
Organizational structure to implement QA policies [N=80]		
A Quality Assurance Division or Department	74	92.5
Quality Assurance Committees	66	82.5
Special Appointed Staffs	45	56.3
Staffs currently working on the QA administration (persons) [N=68]		
Less than 5	27	39.7
5 - 10	21	30.9
11 - 20	8	11.8
More than 20	12	17.6
Having a strategic plan for QA practice [N=77]		
Yes	74	96.1
No	3	3.9
Quality assurance approaches [N=80]		
Accreditation	42	52.5
Assessment	77	96.3
Audit	71	88.8
Thai Qualifications Framework for Higher Education (TQF: HE)	68	85.0
Education Criteria for Performance Excellence (EdPEx)	30	37.5
Public Provision of Information	36	45.0
Benchmarking	10	12.5
Quality Rankings	17	21.3
Other (ISO9001:2000)	1	1.3
Involvement in internal quality assurance [N=80]		
Yes	80	100

National Quality Assurance Policy Implementation	Frequencies	Percentage (%)
Institution's current IQA result [N=80]		
Performance which requires improvement	1	1.3
Fair performance	2	2.5
Good performance	57	71.3
Very good performance/Excellence	20	25.0
Involvement in external quality assurance [N=80]		
Yes	80	100
Institution's current EQA result [N=80]		
Performance which requires improvement	1	1.3
Fair performance	4	5.1
Good performance	61	78.2
Very good performance/Excellence	12	15.4

Table G.2. (continued)

Table G.3. Rating agreements on the importance of reasons for implementing quality

assurance policies

Reasons for Implementing Quality Assurance Policies [N=80]	Not at all	Slightly Important	Moderately Important	Very Important	Extremely Important	Mean	SD
The aim to improve the quality of institution	-	-	3 (3.8%)	28 (35.0%)	49 <mark>(61.3%)</mark>	4.58	.57
The need to improve institutional performance	-	-	4 (5.0%)	35 (43.8%)	41 (51.2%)	4.46	.60
University support and commitment	-	-	8 (10.0%)	31 (38.8%)	41 (51.2%)	4.41	.67
The requirement and expectation of students and parents	-	-	8 (10.0%)	34 (42.5%)	38 (47.5%)	4.38	.66
Requirement by Laws	-	-	11 (13.8%)	31 (38.8%)	38 (47.5%)	4.34	.71
The requirement and expectation of public and stakeholders	-	1 (1.3%)	6 (7.5%)	38 (47.5%)	35 (43.8%)	4.34	.67
The aim to be international standardized institution	-	1 (1.3%)	8 (10.0%)	37 (46.3%)	34 (42.5%)	4.30	.70
The need to respond to increased competition	-	-	6 (7.5%)	45 (56.3%)	29 (36.3%)	4.29	.60
Requirement by the government	_	1 (1.3%)	16 (20%)	35 (43.8%)	28 (35%)	4.13	.77
The implementation in other higher education institutions	1 (1.3%)	4 (5.0%)	28 (35.0%)	37 <mark>(46.3%)</mark>	10 (12.5%)	3.64	.82

Table G.4. Descriptive statistics of the participants' perceptions on the statements about

	Minimum	Maximum	Median	Mean	Standard Deviation
Level of agreement on the statements					
about reasons for implementing	30	50	43	42.85	3.76
quality assurance policies					

reasons for implementing quality assurance policies

Table G.5. Descriptive statistics of participants' perceptions on the total 10 statements about

Ν	Valid	80
	Missing	0
Mean	42.85	
Median	43.00	
Mode	41	
Std. Deviation	3.766	
Minimum	30	
Maximum	50	
Percentiles	70	45.00

reasons for implementing quality assurance policies

Table G.6. Total scores for the statements about reasons for implementing QA policies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	30	1	1.3	1.3	1.3
	35	1	1.3	1.3	2.5
	36	3	3.8	3.8	6.3
	37	2	2.5	2.5	8.8
	38	1	1.3	1.3	10.0
	39	4	5.0	5.0	15.0
	40	8	10.0	10.0	25.0
	41	11	13.8	13.8	38.8
	42	3	3.8	3.8	42.5
	43	9	11.3	11.3	53.8
	44	10	12.5	12.5	66.3
	45	7	8.8	8.8	75.0
	46	8	10.0	10.0	85.0
	47	3	3.8	3.8	88.8
	48	3	3.8	3.8	92.5
	49	5	6.3	6.3	98.8
	50	1	1.3	1.3	100.0
	Total	80	100.0	100.0	

Table G.7. Results of the Chi-square Tests between the different personnel conditions for the

		Agreements					
	Very Imp		Less Impo	ortant (53)	χ²	df	p-
	n	%	n	%	70		value
Age (years)							
Less than 30	8	30.8	6	11.5	4.40	2	.11
30 to 49	12	46.2	32	61.5	4.40	Ζ	.11
50 or older	6	23.1	14	26.9			
Gender							
Male	5	20.0	11	21.6	.03	1	.88
Female	20	80.0	40	78.4			
Level of education							
Bachelor's degree	10	38.5	6	11.5	8.27	2	.02*
Master's degree	14	53.8	36	69.2	0.27	2	.02**
Doctorate degree	2	7.7	10	19.2			
Educational background							
Humanities/ Social Sciences/	14	53.8	22	42.3			
Political Science/ Agriculture/ Education/							
Liberal Arts					1.15	2	.56
Business/ Administration/	7	26.9	15	28.8			
Economics/ Accounting							
Science/ Engineering	5	19.2	15	28.8			
Current work status							
Faculty member	4	14.8	22	42.3	6.08	1	.01*
University administrator	23	85.2	30	57.7			
QA policies work experience (years)							
1-5 years	12	44.4	21	41.2	.12	2	.94
6-10 years	9	33.3	17	33.3	.12	2	.94
More than 10 years	6	22.2	13	25.5			
Type of institution							
Public university/ Rajabhat	22	81.5	30	57.7			
University/ Rajamangala University of					4.47	1	.03*
Technology							
Private university	5	18.5	22	42.3			
Location of institution							
Bangkok Metropolis/ Central region	7	25.9	21	40.4			
Northern region	10	37.0	16	30.8	2.67	3	.45
North-eastern region/ Eastern region	4	14.8	9	17.3			
Southern region	6	22.2	6	11.5			

reasons for implementing quality assurance policies

Table G.8. Classification table for the logistic regression analysis between the different personnel conditions and the agreements on the importance of reasons for implementing QA

policies

				Predicted						
			q17_	_p70						
			Less Important	Important	Percentage Correct					
	Observed		(10-44)	(45-50)	Correct					
Step 1	q17_p70	Less Important (10-44)	48	4	92.3					
		Important (45-50)	16	10	38.5					
	Overall Perc	entage			74.4					

Classification Table^a

a. The cut value is .500

Table G.9. Results of the logistic regression analysis between the different personnel

conditions and the agreements on the importance of reasons for implementing QA policies

			-				-		
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Master's degree(1)	1.122	.634	3.129	1	.077	3.072	.886	10.649
	Doctorate degree(1)	1.438	1.007	2.037	1	.154	4.212	.585	30.342
	University administrator(1)	875	.669	1.714	1	.190	.417	.112	1.545
	Private university(1)	.673	.613	1.204	1	.272	1.960	.589	6.520
	Constant	-2.578	1.165	4.896	1	.027	.076		

Variables in the Equation

a. Variable(s) entered on step 1: Master's degree, Doctorate degree, University administrator, Private university.

Current Practices of National QA Policies [N=80]	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
The policies are appropriately planed for our institutions	1.3%	7.5%	32.5%	<mark>51.2%</mark>	7.5%
The policies' regulations are organized in such a way that can be easily followed	3.8%	13.8%	33.8%	<mark>38.8%</mark>	10.0%
The university should have opportunities to be involved in the process of policies' development	1.3%	-	3.8%	46.3%	<mark>48.8%</mark>
The university has enough freedom to make a decision and act when implementing these policies	1.3%	8.8%	20.0%	<mark>62.5%</mark>	7.5%
Our QA staffs have enough information to implement QA policies	-	10.0%	23.8%	<mark>58.8%</mark>	7.5%
Our QA staffs receive clear information to implement QA policies	-	10.0%	30.0%	<mark>51.2%</mark>	8.8%
The QA policies' implementation are properly supported by the university's executives	-	2.5%	10.0%	<mark>58.8%</mark>	28.7%
The QA policies' implementation are properly supported by most faculty members and administrators in the university	-	7.5%	18.8%	<mark>62.5%</mark>	11.3%
The QA policies' implementation are problematic	2.5%	<mark>45.0%</mark>	25.0%	25.0%	2.5%
The QA policies are effectively implemented at your university	1.3%	5.0%	27.5%	<mark>63.7%</mark>	2.5%
Financial incentives are necessary for implementing QA in your university	1.3%	2.5%	12.5%	<mark>53.8%</mark>	30.0%
Non-Financial incentives are necessary for implementing QA in your university	-	1.3%	8.8%	<mark>58.8%</mark>	31.3%
These policies reduce the autonomy of university	8.8%	<mark>32.5%</mark>	27.5%	27.5%	3.8%
These policies encourage the university to be aware of quality improvement	-	-	12.5%	<mark>52.5%</mark>	35%
These policies help to improve the institution's quality performance	1.3%	2.5%	6.3%	<mark>61.3%</mark>	28.7%
These policies help to enhance the continuing quality improvement	-	1.3%	13.9%	<mark>54.4%</mark>	30.4%
The data created and collected for QA enable the university to properly manage the institution and understand what the institutions need in order to improve.	-	1.3%	10.0%	<mark>58.8%</mark>	30.0%
These policies create workload burdens for the faculty members and university administrators	6.3%	27.5%	23.8%	<mark>33.8%</mark>	8.8%
QA is illustratively demanding and requiring enormous paperwork	5.0%	15.0%	8.8%	<mark>41.3%</mark>	30.0%
These policies are creating a QA bureaucracy	2.5%	5.0%	26.3%	<mark>53.8%</mark>	12.5%
These policies are considered an additional job and time- consuming	7.5%	20.0%	25.0%	<mark>32.5%</mark>	15.0%
QA practitioners are required to keep up-to-date knowledge regarding QA indicators and requirements	-	-	1.3%	26.3%	<mark>72.5%</mark>

Table G.10. Rating agreements on the current practices of national quality assurance policies

Table G.11. Descriptive statistics of the participants' perceptions on the statements about the

	Minimum	Maximum	Median	Mean	Standard Deviation
Level of agreement on the statements					
about the current practices of national	59	100	79	80.06	9.06
quality assurance policies					

current practices of national quality assurance policies

Table G.12. Descriptive statistics of participants' perceptions on the total 22 statements

about the current practices of national quality assurance policies

Ν	Valid	79	
	Missing	1	
Mean	-	80.06	
Median	Median		
Mode	Mode		
Std. Deviation		9.062	
Minimum		59	
Maximum		100	
Percentiles	70	85.00	

a. Multiple modes exist. The smallest value is shown

Table G.13. Total scores for the statements about the current practices of national quality

assurance policies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	59	1	1.3	1.3	1.3
	63	2	2.5	2.5	3.8
	64	1	1.3	1.3	5.1
	65	1	1.3	1.3	6.3
	66	1	1.3	1.3	7.6
	67	1 2	2.5	2.5	10.1
	69	2	2.5	2.5	12.7
	70	1	1.3	1.3	13.9
	71	1	1.3	1.3	15.2
	71 72 73	2	2.5	2.5	17.7
	73	5	6.3	6.3	24.1
	74	1	1.3	1.3	24.1 25.3
	75	5	6.3	6.3	31.6
	76	3	3.8	3.8	35.4
	77	5	6.3	6.3	41.8
	77 78	3	3.8	3.8	45.6
	79	5	6.3	6.3	51.9 54.4
	80	2	6.3 2.5	2.5	54.4
	81	1	1.3	1.3	55.7
	82	4	5.0	5.1	60.8
	83	3	3.8	3.8	64.6
	84	3	3.8	3.8	68.4
	85	3	3.8	3.8	72.2
	86	3	3.8	3.8	75.9
	87	1	1.3	1.3	77.2
	88	3	3.8	3.8	81.0
	89		2.5	2.5	83.5
	90	2	3.8	3.8	87.3
	90 91	2	2.5	2.5	89.9
	93	1	13	1.3	91.1
	94	1	1.3	1.3	92.4
	95	2	2.5	2.5	94.9
	96	1	1.3	1.3	96.2
	97	1	1.3	1.3	97.5
	97 98	1	1.3	1.3	98.7
	100	1	1.3	1.3	100.0
	Total	79	98.8	100.0	
Missing	System	1	1.3		
Total		80	100.0		

Table G.14. Results of the Chi-square Tests between the different personnel conditions for the

	Agreements						
	Agre	ee (25)	Disag	ree (54)	χ^2	df	p-
	п	%	п	%			value
Age (years)							
Less than 30	5	21.7	9	16.7	.35	2	.84
30 to 49	13	56.5	31	57.4	.55	2	.04
50 or older	5	21.7	14	25.9			
Gender							
Male	4	18.2	12	22.6	.18	1	.67
Female	18	81.8	41	77.4			
Level of education							
Bachelor's degree	6	26.1	10	18.5	.62	2	.73
Master's degree	14	60.9	35	64.8	.02	Z	.75
Doctorate degree	3	13.0	9	16.7			
Educational background							
Humanities/ Social Sciences/ Political Science/	12	52.2	23	42.6			
Agriculture/ Education/ Liberal Arts					1.29	2	.52
Business/ Administration/ Economics/ Accounting	7	30.4	15	27.8			
Science/ Engineering	4	17.4	16	29.6			
Current work status							
Faculty member	7	29.2	19	35.2	.27	1	.60
University administrator	17	70.8	35	64.8			
QA policies work experience (years)							
1-5 years	11	44.0	22	42.3	1.02	2	4.4
6-10 years	6	24.0	19	36.5	1.63	2	.44
More than 10 years	8	32.0	11	21.2			
Type of institution							
Public university/ Rajabhat University/	15	62.5	37	68.5	07	4	<i>c</i> 0
Rajamangala University of Technology					.27	1	.60
Private university	9	37.5	17	31.5			
Location of institution							
Bangkok Metropolis/ Central region	9	37.5	18	33.3			
Northern region	7	29.2	19	35.2	1.29	3	.73
North-eastern region/ Eastern region	3	12.5	10	18.5			
Southern region	5	20.8	7	13.0			

agreements about the current practices of national quality assurance policies

Table G.15. Strengths and weaknesses of the national quality assurance policies perceived by

National QA Policies	Strengths	Weaknesses
The internal quality assurance policies administrated by OHEC	 Quality management supporters The policies had reinforced QA application in HEIs and had continually improved QA system in Thai higher education sector. The policies encouraged universities to be aware of quality improvement and to continue improving their institutions' quality. Clear and constant policies The policies were well-defined and continuous developed. OHEC had been developing IQA standards and measurements which were minimum requirements for all universities. The policies were applicable. The policy implementations were regularly monitored by OHEC. Building central quality assurance facilities E.g. IQA networking, IQA standards and measurements, IQA database (CHE QA online), and the roster of IQA assessors. 	 Dissemination of IQA information IQA information were often changed, and its dissemination was somewhat delayed or not thoroughly. The policies' implementers needed to be constantly updated about IQA knowledge and understandings. IQA manuals were difficult to understand and implement. IQA measurements One-size-fits-all IQA measurements Same IQA measurements cannot be effectively used for all universities because universities have different missions and organizations. The IQA measurements did not truly reflect quality performances of HEIs IQA expenses The policy implementations were time-consuming and costly. The policy implementations were not financially supported from OHEC. IMperfect IQA system IQA assessors did not have the same QA standards or were not qualified. Problems in the policy implementation Too much paperwork The universities did not have adequate or qualified staffs to implement policies.

the university administrators

National QA Policies	Strengths	Weaknesses
-	 Strengths 1. Objectives of EQA The EQA policies reinforced higher education quality. Quality assessments by an external organization or third party increased accountability of HEIs and well-received by higher education stakeholders. The EQA policies stimulated quality competition among HEIs. D. The policies formed national quality standards for all HEIs. The policies were QA tools which enabled HEIs to evaluate their performance and recognize their positions at the national level. 	 Weaknesses 1. Dissemination of EQA information EQA information were often changed, and its dissemination was somewhat delayed. Disseminating EQA results without completed information or consideration affected HEIs' reputation and administration. 2. EQA measurements One-size-fits-all EQA measurements did not have well understanding about differing HEIs' missions and natures. The EQA measurements were unclear and not applicable for HEIs. The EQA measurements did not truly reflect quality performances of HEIs. Some EQA indicators were intangible or overlapped with the IQA indicators. 3. Duplication of work The policies duplicated with IQA policies. Lack of linkage between IQA and EQA policies. EQA assessors did not have the same QA standards or were not qualified. Too much paperwork Ineffective assessment system 5. Abuse of process The external quality assessments might cause some universities to use some strategies to be certified or receive good
		results rather than sincerely evaluate and improve their performances.

Table G.15. (continued)

Institutional QA Components [N=80]	Slightly Important	Moderately Important	Very Important	Extremely Important	Mean	SD
QA tools and mechanisms	-	2 (2.5%)	32 (40.0%)	46 (57.5%)	4.55	.55
Quality Components, Indicators, and Scoring Criteria	-	6 (7.5%)	32 (40.0%)	42 (52.5%)	4.45	.63
Self-assessment	-	6 (7.5%)	36 (45.0%)	38 (47.5%)	4.40	.63
QA committees	2 (2.5%)	2 (2.5%)	45 (56.3%)	31 (38.8%)	4.31	.65
Internal assessment committees	-	9 (11.3%)	39 (48.8%)	32 (40.0%)	4.29	.66
Peer review	-	6 (7.5%)	46 (57.5%)	28 (35.0%)	4.28	.60
Public reporting	-	8 (10.0%)	43 (53.8%)	(35.0%) 29 (36.3%)	4.26	.63
External review	1 (1.3%)	6 (7.5%)	45 (56.3%)	28 (35.0%)	4.25	.65
Self-assessment report (SAR)	-	9 (11.3%)	46 (57.5%)	(33.0%) 25 (31.3%)	4.20	.62
External assessors	1 (1.3%)	(11.3%) 9 (11.3%)	(57.5%) 45 (56.3%)	(31.3%) 25 (31.3%)	4.18	.67

Table G.16. Rating agreements on the importance of institutional quality assurance components

Table G.17. Descriptive statistics of the participants' perceptions on the statements about the

importance of institutional quality assurance components

	Minimum	Maximum	Median	Mean	Standard Deviation
Level of agreement on the statements					
about the importance of institutional	32	50	44	43.16	4.14
quality assurance components					

Table G.18. Descriptive statistics of participants' perceptions on the total 10 statements about

Ν	Valid	80
	Missing	0
Mean		43.16
Median		44.00
Mode		40
Std. Deviation		4.135
Minimum		32
Maximum		50
Percentiles	60	44.00

the importance of institutional quality assurance components

Table G.19. Total scores for the statements about the importance of institutional quality

assurance components

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	32	1	1.3	1.3	1.3
	34	1	1.3	1.3	2.5
	35	3	3.8	3.8	6.3
	36	1	1.3	1.3	7.5
	38	2	2.5	2.5	10.0
	39	3	3.8	3.8	13.8
	40	14	17.5	17.5	31.3
	41	5	6.3	6.3	37.5
	42	1	1.3	1.3	38.8
	43	8	10.0	10.0	48.8
	44	10	12.5	12.5	61.3
	45	9	11.3	11.3	72.5
	46	7	8.8	8.8	81.3
	47	2	2.5	2.5	83.8
	48	2	2.5	2.5	86.3
	49	5	6.3	6.3	92.5
	50	6	7.5	7.5	100.0
	Total	80	100.0	100.0	

Table G.20. Results of the Chi-square Tests between the different personnel conditions for the

		Agree					
	Very Imp	ortant (41)	Less Imp	ortant (39)	χ ²	df	р-
	n	%	n	%			value
Age (years)							
Less than 30	9	22.5	5	13.2	1.18	2	.55
30 to 49	21	52.5	23	60.5	1.18	2	.55
50 or older	10	25.0	10	26.3			
Gender							
Male	9	23.1	7	18.9	.20	1	.66
Female	30	76.9	30	81.1			
Level of education							
Bachelor's degree	10	25.0	6	15.8	1.03	2	.60
Master's degree	24	60.0	26	68.4	1.05	Z	.00
Doctorate degree	6	15.0	6	15.8			
Educational background							
Humanities/ Social Sciences/	17	42.5	19	50.0			
Political Science/ Agriculture/ Education/							
Liberal Arts					.79	2	.67
Business/ Administration/	13	32.5	9	23.7			
Economics/ Accounting							
Science/ Engineering	10	25.0	10	26.3			
Current work status							
Faculty member	12	29.3	14	36.8	.51	1	.47
University administrator	29	70.7	24	63.2			
QA policies work experience (years)							
1-5 years	19	46.3	14	37.8	1.18	2	.55
6-10 years	14	34.1	12	32.4	1.10	Z	.55
More than 10 years	8	19.5	11	29.7			
Type of institution							
Public university/ Rajabhat	29	70.7	23	60.5			
University/ Rajamangala University of					.91	1	.34
Technology							
Private university	12	29.3	15	39.5			
Location of institution							
Bangkok Metropolis/ Central region	14	34.1	14	36.8			
Northern region	14	34.1	12	31.6	.45	3	.93
North-eastern region/ Eastern region	6	14.6	7	18.4			
Southern region	7	17.1	5	13.2			

importance of institutional quality assurance components

The Components of Institutional Quality Assurance [N=80]	Strongly Disagree		Uncertain	Agree	Strongly Agree
QA is only an activity performed as required by the government	15.0%	<mark>47.5%</mark>	20.0%	11.3%	6.3%
Much of QA works are related to documentation and report writing	3.8%	21.3%	10.0%	<mark>43.8%</mark>	21.3%
QA in Thai higher education institutions is generally about collecting necessary data to answer the required indicators	3.8%	15.0%	8.8%	<mark>47.5%</mark>	25.0%
Organizing quality assurance practice and improving institutional quality are important missions in your university	1.3%	2.5%	5.0%	<mark>47.5%</mark>	43.8%
Your university is interested in developing its own QA model	3.8%	8.8%	30.0%	<mark>41.3%</mark>	16.3%
The quality components, indicators, and scoring criteria developed by OHEC are appropriate for performing QA at your institution	3.8%	6.3%	27.5%	<mark>60.0%</mark>	2.5%
The quality criteria and indicators developed by ONESQA are appropriate for external quality assessment at your institution	16.3%	25.0%	<mark>37.5%</mark>	20.0%	1.3%
Your university has developed its own QA standards and indicators	11.3%	11.3%	15.0%	<mark>46.3%</mark>	16.3%
Your university conducts self-assessment every year	-	-	-	30.0%	<mark>70.0%</mark>
Self-assessments are conducted not only at the institutional level but also at faculty and department levels	-	-	1.3%	37.5%	<mark>61.3%</mark>
Your university conducts quality audit every year	2.5%	3.8%	6.3%	38.8%	<mark>48.8%</mark>
Your university conducts quality audit more than one in every 3 years	6.3%	8.9%	8.9%	<mark>38.0%</mark>	<mark>38.0%</mark>
Quality auditing by internal assessment committees should be done annually	11.3%	6.3%	12.5%	32.5%	<mark>37.5%</mark>
Your university reports its QA result to OHEC every year	-	-	-	28.7%	<mark>71.3%</mark>
Your university reports its QA result to the public every year	-	-	3.8%	30.0%	<mark>66.3%</mark>
There are QA committees both at the institutional level and faculty level in your university	-	-	-	30.0%	<mark>70.0%</mark>
The creation of QA committees facilitates QA process and mitigate resistance within the university	-	2.5%	12.5%	<mark>46.3%</mark>	38.8%
The selection of internal assessment committees is transparent and credible	-	1.3%	12.5%	<mark>51.2%</mark>	35.0%
Your university tends to select generous assessors to gain a high quality score	20.0%	<mark>30.0%</mark>	20.0%	23.8%	6.3%
Your university uses some strategies to pass the assessment process	12.7%	22.8%	15.2%	<mark>40.5%</mark>	8.9%
The results of QA are linked to sanctions and incentives	22.5%	22.5%	<mark>26.3%</mark>	18.8%	10.0%
Your university uses the QA results for policy purposes	-	1.3%	11.3%	<mark>60.0%</mark>	27.5%
Your university uses the QA results for budget allocation	1.3%	5.0%	33.8%	<mark>46.3%</mark>	13.8%

Table G.21. Rating agreements on the components of institutional quality assurance

The Components of Institutional Quality Assurance [N=80]	Strongly Disagree	IJISAVI PP	Uncertain	Agree	Strongly Agree
Your university uses the QA results to promote institution's activities and services	-	1.3%	15.0%	<mark>65.0%</mark>	18.8%
Your university uses the QA results to improve institutional performance	-	1.3%	13.8%	<mark>48.8%</mark>	36.3%
Self-assessment report is reliable and truly reflect the university's performance	1.3%	5.1%	15.2%	<mark>55.7%</mark>	22.8%
Evaluation from external assessors is transparent and credible	1.3%	-	12.5%	<mark>61.3%</mark>	25.0%
Evaluation from external assessors is truly reflect the university's performance	2.5%	1.3%	17.5%	<mark>66.3%</mark>	12.5%
Your university executives are interested in the IQA result	-	2.5%	7.5%	<mark>53.8%</mark>	36.3%
Your university executives are interested in the EQA result	-	2.5%	5.0%	<mark>57.5%</mark>	35.0%
The IQA result is reliable and useful	1.3%	2.5%	10.0%	<mark>61.3%</mark>	25.0%
The EQA result is reliable and useful	1.3%	2.5%	13.9%	<mark>64.6%</mark>	17.7%
Getting a high score in the IQA result is very important for your university	1.3%	12.7%	20.3%	<mark>54.4%</mark>	11.4%
Getting a high score in the EQA result is very important for your university	1.3%	11.4%	20.3%	<mark>55.7%</mark>	11.4%

Table G.21. (continued)

Table G.22. Descriptive statistics of the participants' perceptions on the statements about the

components of institutional quality assurance

	Minimum	Maximum	Median	Mean	Standard Deviation
Level of agreement on the statements about the components of institutional	106	152	130	130.34	9.53
quality assurance					

Table G.23. Descriptive statistics of participants' perceptions on the total 34 statements

about the components of institutional quality assurance

Ν	Valid	76
	Missing	4
Mean	-	130.34
Median		130.00
Mode		134
Std. Deviation		9.527
Minimum		106
Maximum	152	
Percentiles	70	134.90

Table G.24. Total scores for the statements about the components of institutional quality

assurance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	106	1	1.3	1.3	1.3
	108	1	1.3	1.3	2.6
	112	1	1.3	1.3	3.9
	113	1	1.3	1.3	5.3
	117	2	2.5	2.6	7.9
	118	2 3 2	3.8	3.9	11.8
	119	2	2.5	2.6	14.5
	121	1	1.3	1.3	15.8
	122	1	1.3	1.3	17.1
	123	1	1.3	1.3	18.4
	124	4	5.0	5.3	23.7
	125	3	3.8	3.9	27.6
	126		6.3	6.6	34.2
	127	5	6.3	6.6	40.8
	128	4	5.0	5.3	46.1
	129	2	2.5	2.6	48.7
	130	2	2.5	2.6	51.3
	131	3	3.8	3.9	55.3
	132	3	3.8	3.9	59.2
	133	2	2.5	2.6	61.8
	134	6	7.5	7.9	69.7
	135	1	1.3	1.3	71.1
	136	3	3.8	3.9	75.0
	137	2	2.5	2.6	77.6
	139	4	5.0	5.3	82.9
	140	3	3.8	3.9	86.8
	141	1	1.3	1.3	88.2
	143	4	5.0	5.3	93.4
	145	1	1.3	1.3	94.7
	148	1	1.3	1.3	96.1
	149	1	1.3	1.3	97.4
	150	1	1.3	1.3	98.7
	152	1	1.3	1.3	100.0
	Total	76	95.0	100.0	
Missing	System	4	5.0		
Total		80	100.0		

Table G.25. Results of the Chi-square Tests between the different personnel conditions for the

	Agreements						
	Agre	ee (23)	Disag	ree (53)	χ^2	df	р-
	<u>n % n %</u>					value	
Age (years)							
Less than 30	7	30.4	7	13.7	3.12	2	.21
30 to 49	12	52.2	30	58.8	5.12	2	.21
50 or older	14	17.4	14	27.5			
Gender							
Male	6	26.1	9	18.4	.57	1	.45
Female	17	73.9	40	81.6			
Level of education							
Bachelor's degree	7	30.4	9	17.6	1.76	2	4.1
Master's degree	12	52.2	34	66.7	1.76	2	.41
Doctorate degree	4	17.4	8	15.7			
Educational background							
Humanities/ Social Sciences/ Political Science/	10	43.5	23	45.1			
Agriculture/ Education/ Liberal Arts					.45	2	.80
Business/ Administration/ Economics/ Accounting	6	26.1	16	31.4			
Science/ Engineering	7	30.4	12	23.5			
Current work status							
Faculty member	6	26.1	19	36.5	.78	1	.38
University administrator	17	73.9	33	63.5			
QA policies work experience (years)							
1-5 years	14	60.9	19	37.3	6.60	2	0.1*
6-10 years	8	34.8	17	33.3	0.00	2	.04*
More than 10 years	1	4.3	15	29.4			
Type of institution							
Public university/ Rajabhat University/	19	82.6	29	55.8	4.00	1	0.2*
Rajamangala University of Technology					4.99	1	.03*
Private university	4	17.4	23	44.2			
Location of institution							
Bangkok Metropolis/ Central region		17.4	23	44.2			
Northern region		47.8	14	26.9		3	.13
North-eastern region/ Eastern region	11 5	21.7	8	15.4			
Southern region	3	13.0	7	13.5			

agreements about the components of institutional quality assurance

Table G.26. Classification table for the logistic regression analysis between the different

 personnel conditions and the agreements about the components of institutional quality assurance

				Predicted						
			q22_	_p70						
			Disagree	Agree	Percentage					
	Observed		(34-134 score)	(135-170 score)	Percentage Correct					
Step 1	q22_p70	Disagree (34-134 score)	41	9	82.0					
		Agree (135-170 score)	11	12	52.2					
	Overall Per	centage			72.6					

Classification Table^a

a. The cut value is .500

Table G.27. Results of the logistic regression analysis between the different personnel

conditions and the agreements about the components of institutional quality assurance

Variables in the Equation

								95% C.I.	for EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Private university(1)	1.283	.650	3.888	1	.049	3.606	1.008	12.904
	Experience $6 - 10$ years(1)	.559	.582	.925	1	.336	1.750	.560	5.472
	Experience > 10 years(1)	2.350	1.105	4.523	1	.033	10.483	1.202	91.405
	Constant	-4.068	1.324	9.447	1	.002	.017		

a. Variable(s) entered on step 1: Private university, Experience 6 - 10 years, Experience > 10 years.

Roles of OHEC and ONESQA [N=80]	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
QA in higher education is a responsibility of the government	3.8%	7.7%	10.3%	<mark>55.1%</mark>	23.1%
The government uses QA to control higher education institutions	2.6%	11.5%	15.4%	<mark>47.4%</mark>	23.1%
The government uses QA to increase universities' accountability	1.3%	2.5%	10.0%	<mark>68.8%</mark>	17.5%
The government uses QA to improve quality of higher education	-	-	13.8%	<mark>58.8%</mark>	27.5%
OHEC has effectively promoted QA in your university	2.5%	3.8%	31.3%	<mark>50.0%</mark>	12.5%
The university is satisfied with the administration of OHEC regarding IQA policies	2.5%	7.5%	25.0%	<mark>60.0%</mark>	5.0%
The university should have opportunities to be involved in the process of policies' decision-making at OHEC	2.5%	2.5%	12.5%	<mark>55.0%</mark>	27.5%
The university is satisfied with the IQA results from OHEC	-	2.5%	15.0%	<mark>78.8%</mark>	3.8%
OHEC has properly supported the QA implementation at the university	2.5%	10.0%	26.3%	<mark>53.8%</mark>	7.5%
OHEC should be more active in monitoring quality of higher education institutions	8.8%	26.3%	16.3%	<mark>36.3%</mark>	12.5%
The university should have more freedom to make a decision and implement QA	-	3.8%	10.0%	<mark>57.5%</mark>	28.7%
OHEC should increasingly monitor QA outcome of the universities to ensure its reliability	7.5%	17.5%	21.3%	<mark>40.0%</mark>	13.8%
ONESQA as a public organization	2.6%	6.4%	32.1%	<mark>53.8%</mark>	5.1%
ONESQA as a national QA agency responsible for EQA in higher education	1.3%	3.8%	32.5%	<mark>55.0%</mark>	7.5%
ONESQA has properly supported the implementation of EQA policies	7.5%	16.3%	<mark>37.5%</mark>	33.8%	5.0%
The university should have opportunities to be involved in the process of policies' decision-making at ONESQA	3.8%	5.0%	11.3%	<mark>55.0%</mark>	25.0%
Having university representatives in the governing body of ONESQA	1.3%	1.3%	8.8%	<mark>66.3%</mark>	22.5%
Having OHEC representatives in the governing body of ONESQA	1.3%	1.3%	8.8%	<mark>63.7%</mark>	25.0%
The university is satisfied with the administration of ONESQA regarding EQA policies	6.3%	26.6%	<mark>38.0%</mark>	29.1%	-
The university is satisfied with ONESQA's performance in conducting EQA	5.0%	18.8%	33.8%	<mark>41.3%</mark>	1.3%
The university is satisfied with the EQA results from ONESQA	A 2.5%	10.0%	30.0%	<mark>55.0%</mark>	2.5%
OHEC should closely co-operate and communicate with ONESQA	-	-	-	35.0%	<mark>65.0%</mark>
OHEC's and ONESQA's polices should be consistent	1.3%	-	5.0%	20.0%	<mark>73.8%</mark>

Table G.28. Rating agreements on the roles of OHEC and ONESQA

Table G.28. (continued)

Roles of OHEC and ONESQA [N=80]	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
The functioning of ONESQA should be monitored by the government to ensure its transparency and credibility	-	-	2.5%	35.0%	<mark>62.5%</mark>
OHEC should be responsible for the accountability of ONESQA	1.3%	1.3%	18.8%	38.8%	<mark>40.0%</mark>
The government should provide financial incentives for the QA policies' implementation	-	3.8%	12.5%	41.3%	<mark>42.5%</mark>
The government should use the QA results for funding allocation purposes	-	6.3%	13.8%	<mark>45.0%</mark>	35.0%

Table G.29. Descriptive statistics of the participants' perceptions on the roles of OHEC and

ONESQA

	Minimum	Maximum	Median	Mean	Standard Deviation
Level of agreement on the statements about the roles of OHEC and ONESQA	80	127	104	103.51	9.32

Table G.30. Descriptive statistics of participants' perceptions on the total 27 statements

about the roles of state governments (OHEC) and national QA agencies (ONESQA)

Ν	Valid	75
	Missing	5
Mean		103.51
Median		104.00
Mode		101 ^a
Std. Deviation		9.315
Minimum		80
Maximum		127
Percentiles	65	107.00

a. Multiple modes exist. The smallest value is shown

Table G.31. Total scores for the statements about the roles of state governments (OHEC) and

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	80	1	1.3	1.3	1.3
	85	2	2.5	2.7	4.0
	86	1	1.3	1.3	5.3
	89	1	1.3	1.3	6.7
	90	1	1.3	1.3	8.0
	91	1	1.3	1.3	9.3
	92	2	2.5	2.7	12.0
	93	3	3.8	4.0	16.0
	94	2	2.5	2.7	18.7
	95	1	1.3	1.3	20.0
	96	2	2.5	2.7	22.7
	96 98	5	6.3	6.7	29.3
	100	3	3.8	4.0	33.3
	101	6	7.5 2.5 1.3	8.0	41.3
	102	2	2.5	8.0 2.7	44.(
	103	1	1.3	1.3	45.3
	104	4	5.0	5.3	50.7
	105	3	3.8	4.0	54.7
	106	5	6.3	6.7	61.3
	107	5	6.3	6.7	68.0
	108	6	7.5	8.0	76.0
	109	3	3.8	4.0	80.0
	110	1	1.3	1.3	81.3
	111	1	1.3	1.3	82.7
	112	1	1.3	1.3	84.0
	113	3	3.8	4.0	88.0
	114	2	2.5	2.7	90.7
	115	1	1.3	1.3	92.0 93.3
	118	1	1.3	1.3	93.3
	119	1	1.3	1.3	94.7
	121	1	1.3	1.3	96.0
	122	1	1.3	1.3	97.3
	123	1	1.3	1.3	98.7
	127	1	1.3	1.3	100.0
	Total	75	93.8	100.0	
Missing	System	5	6.3		
Total		80	100.0		

national QA agencies (ONESQA)

Table G.32. Results of the Chi-square Tests between the different personnel conditions for the

			ements				
	Agre	ee (29)	Disag	ree (46)	χ^2	df	р-
	n	%	n	%			value
Age (years)							
Less than 30	6	20.7	8	18.2	1.38	2	.50
30 to 49	14	48.3	27	61.4	1.30	2	.50
50 or older	9	31.0	9	20.5			
Gender							
Male	7	25.0	8	18.6	.42	1	.52
Female		75.0	35	81.4			
Level of education							
Bachelor's degree	7	24.1	9	20.5	.87	2	65
Master's degree	19	65.5	27	61.4	.87	2	.65
Doctorate degree	3	10.3	8	18.2			
Educational background							
Humanities/ Social Sciences/ Political Science/	17	58.6	17	38.6			
Agriculture/ Education/ Liberal Arts					2.82	2	.25
Business/ Administration/ Economics/ Accounting	6	20.7	14	31.8			
Science/ Engineering	6	20.7	13	29.5			
Current work status							
Faculty member	11	37.9	14	31.1	.37	1	.55
University administrator	18	62.1	31	68.9			
QA policies work experience (years)							
1-5 years	13	46.4	17	37.8	.57	2	.75
6-10 years	9	32.1	16	35.6	.57	Z	.75
More than 10 years	6	21.4	12	26.7			
Type of institution							
Public university/ Rajabhat University/	24	82.8	25	55.6	r 02	1	0.0*
Rajamangala University of Technology					5.83	1	.02*
Private university		17.2	20	44.4			
Location of institution							
Bangkok Metropolis/ Central region	10	34.5	16	35.6			
Northern region	7	24.1	17	37.8	2.89	3	.41
North-eastern region/ Eastern region	5	17.2	7	15.6			
Southern region	7	24.1	5	11.1			

agreements about the roles of OHEC and ONESQA

Table G.33. Classification table for the logistic regression analysis between the different

 personnel conditions and the agreements about the roles of OHEC and ONESQA

				Predicted	
			q25_	_p65	
			Disagree	Agree	Percentage
	Observed		(27-106 score)	(107-135 score)	Percentage Correct
Step 1	q25_p65	Disagree (27-106 score)	45	0	100.0
		Agree (107-135 score)	29	0	.0
	Overall Per	centage			60.8

Classification Table^a

a. The cut value is .500

Table G.34. Results of the logistic regression analysis between the different personnel

conditions and the agreements about the roles of OHEC and ONESQA

Variables in the Equation

								95% C.I.	for EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Private university(1)	1.345	.576	5.458	1	.019	3.840	1.242	11.873
_	Constant	-1.386	.500	7.687	1	.006	.250		

a. Variable(s) entered on step 1: Private university.

Table G.35. Rating agreements on the importance of factors that affect the success of

Factors that Affect the Success of QA Policy			Moderately		Extremely	Mean	SD
Implementation The support and commitment of university	all	Important	Important 2	20	58		
community	-	-	(2.5%)	(25.0%)	(72.5%)	4.70	.51
The support and commitment of the			3	(23.070)	58		
university executives	-	-	(3.8%)	(23.8%)	(72.5%)	4.69	.54
Efficient database and information systems			4	20	56	4	~0
in the university	-	-	(5.0%)	(25.0%)	(70.0%)	4.65	.58
Efficient QA national database and			5	19	55	1.62	60
information systems (CHE QA Online)	-	-	(6.3%)	(24.1%)	<mark>(69.6%)</mark>	4.63	.60
The attitudes of faculty members and	1	_	2	23	54	4.61	.67
administrators involved in the QA process	(1.3%)	-	(2.5%)	(28.7%)	<mark>(67.5%)</mark>	4.01	.07
Efficient QA tools and mechanisms	_	_	4	25	51	4.59	.59
			(5.0%)	(31.3%)	<mark>(63.7%)</mark>	1.57	,
Appropriate quality components,	-	1	4	24	51	4.56	.65
indicators, and scoring criteria	1	(1.3%)	(5.0%)	(30.0%)	<mark>(63.7%)</mark>		
The attitudes of QA staffs toward the QA	(1, 20())	-	(2.80)	26	50	4.55	.69
policies' implementation	(1.3%)		(3.8%)	(32.5%) 26	<mark>(62.5%)</mark> 50		
The utilization of QA results	(1.3%)	-	(3.8%)	(32.5%)	(62.5%)	4.55	.69
	(1.370)	1	(3.870)	(32.570)	50		
The expertise of external assessors	-	(1.3%)	(6.3%)	(30.0%)	(62.5%)	4.54	.67
Appropriate QA system and organizational		1	3	28	48		
structure at the university	-	(1.3%)	(3.8%)	(35.0%)	(60.0%)	4.54	.68
The effectiveness and efficiency of IQA		1	2	30	47	151	(0)
committees	-	(1.3%)	(2.5%)	(37.5%)	<mark>(58.8%)</mark>	4.54	.62
Communication and collaboration within		1	4	28	47	4.51	.66
the university	-	(1.3%)	(5.0%)	(35.0%)	<mark>(58.8%)</mark>	4.51	.00
The development of implementation plan	1	_	2	33	44	4.49	.68
	(1.3%)		(2.5%)	(41.3%)	<mark>(55.0%)</mark>		.00
The effectiveness and efficiency of QA	-	1	5	29	45	4.48	.68
staffs at the university		(1.3%)	(6.3%)	(36.3%)	<mark>(56.3%)</mark>		
The effectiveness and efficiency of EQA committees	-	(1, 20/)	4 (5.0%)	31	44 (55.0%)	4.48	.66
The establishment of institution's QA	1	(1.3%)	(5.0%) 2	(38.8%) 34	<mark>(55.0%)</mark> 43		
policy and objectives	(1.3%)	-	(2.5%)	(42.5%)	43 (53.8%)	4.47	.68
Appropriate QA system, organizational	(1.570)		(2.570)	33	42		
structure, administration of OHEC	-	-	(6.3%)	(41.3%)	(52.5%)	4.46	.64
The cooperation between the university			(0.570)	35	40		
and OHEC	-	-	(6.3%)	(43.8%)	40 (50.0%)	4.44	.61
The cooperation between the university			(0.370)	(43.870)	40		
and ONESQA	-	-	(7.5%)	(42.5%)	(50.0%)	4.43	.63
The involvement of universities in the			6	33	40	4.40	(2)
policies' decision-making process	-	-	(7.6%)	(41.8%)	(50.6%)	4.43	.63
		1	3	37	39	1 12	62
Staffs training in the QA process	-	(1.3%)	(3.8%)	(46.3%)	<mark>(48.8%)</mark>	4.43	.63

national quality assurance policy implementation

Factors that Affect the Success of QA Policy Implementation	Not at all		Moderately Important		Extremely Important	Mean	SD
Appropriate QA system, organizational structure, and administration of ONESQA	-	-	7 (8.8%)	33 (41.3%)	40 (50.0%)	4.41	.65
The experience of QA staffs	-	-	6 (7.5%)	38 <mark>(47.5%)</mark>	36 (45%)	4.38	.62
Support from the government	-	-	7 (8.8%)	41 (51.2%)	32 (40.0%)	4.31	.63
Institutional autonomy	-	1 (1.3%)	9 (11.3%)	35 <mark>(43.8%)</mark>	35 <mark>(43.8%)</mark>	4.30	.72
Diversity of QA tools and mechanisms	2 (2.5%)	1 (1.3%)	8 (10.0%)	31 (38.8%)	38 <mark>(47.5%)</mark>	4.28	.89
Diversity of quality components, indicators, and scoring criteria	1 (1.3%)	2 (2.5%)	9 (11.4%)	33 (41.8%)	34 (43.0%)	4.23	.85
The additional funding support from the parent institution	-	-	12 (15%)	42 (52.5%)	26 (32.5%)	4.18	.67
National and regional networks among higher education institutions	1 (1.3%)	-	14 (17.5%)	38 <mark>(47.5%)</mark>	27 (33.8%)	4.13	.79
Funding support from the university	1 (1.3%)	-	17 (21.3%)	40 (50.0%)	22 (27.5%)	4.03	.78
Legal enforcement	2 (2.5%)	2 (2.5%)	17 (21.3%)	42 (52.5%)	17 (21.3%)	3.88	.86
The use of rewards and sanctions	4 (5.1%)	4 (5.1%)	24 (30.4%)	25 <mark>(31.6%)</mark>	22 (27.8%)	3.72	1.09

Table G.35. (continued)

Table G.36. Descriptive statistics of the participants' perceptions on the statements about the

	Minimum	Maximum	Median	Mean	Standard Deviation
Level of agreement on the statements about the importance of factors that affect the success of national quality assurance policy implementation	99	165	148	145.97	13.20

importance of factors that affect the success of national QA policy implementation

Table G.37. Descriptive statistics of participants' perceptions on the total 33 statements about the importance of factors that affect the success of national quality assurance policy

implementation

Ν	Valid	76
	Missing	4
Mean		145.97
Median		148.00
Mode		130 ^a
Std. Deviation		13.200
Minimum		99
Maximum		165
Percentiles	65	152.05

a. Multiple modes exist. The smallest value is shown

Table G.38. Total scores for the statements about the importance of factors that affect the

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	99	2	2.5	2.6	2.6
	127	1	1.3	1.3	3.9
	130	4	5.0	5.3	9.2
	131	1	1.3	<u> </u>	10.5
	132	4	5.0	5.3	15.8
	133	2	2.5	2.6	18.4
	134	1	1.3	1.3	19.7
	135	1	1.3	1.3	21.1
	136	1	1.3	1.3	22.4
	137	3	3.8	3.9	26.3
	138	2	2.5	2.6	28.9
	139		1.3	1.3	30.3
	141	1 2	2.5	2.6	32.9
	142	4	5.0	5.3	38.2
	143	2	2.5	2.6	40.8
	144	1	1.3	1.3	42.1
	145	3	3.8	3.9	46.1
	147	2	2.5	2.6	48.7
	148	2	2.5 2.5	2.6 2.6	51.3
	149	2	2.5	2.6	53.9
	150	4	5.0	5.3	59.2
	151	1	1.3	1.3	60.5
	152	4	5.0	1.3 5.3	65.8
	153	3	3.8	3.9	69.7
	154	3	3.8 2.5	2.6	72.4
	155	2	2.5	2.6	75.0
	156		1.3	1.3	76.3
	157	1 2	2.5	1.3 2.6	78.9
	158	2	2.5 2.5	2.6	81.6
	159	4	5.0	2.6 5.3	86.8
	160	1	1.3	1.3	88.2
	161	1	1.3	1.3	89.5
	162	2	2.5	2.6	92.1
	163	1	1.3	1.3	93.4
	164	1	1.3	1.3	94.7
	165	4	1.3 5.0	5.3	100.0
	Total		95.0	100.0	100.0
Missing	System	4	5.0	13010	
Total	80	100.0	5.0		

success of national quality assurance policy implementation

Table G.39. Results of the Chi-square Tests between the different personnel conditions for the

	Agreements Very Important (30) Less Important (46)				χ ²	df	p-
	n	%	n	%			value
Age (years)							
Less than 30	6	20.7	7	15.6	3.53	2	.17
30 to 49	19	65.5	23	51.1	5.55	2	.17
50 or older	4	13.8	15	33.3			
Gender							
Male	5	17.2	10	23.3	.38	1	.54
Female	24	82.8	33	76.7			
Level of education							
Bachelor's degree	7	24.1	8	17.8	3.13	2	.21
Master's degree	20	69.0	27	60.0	5.15	2	.21
Doctorate degree	2	6.9	10	22.2			
Educational background							
Humanities/ Social Sciences/	14	48.3	20	44.4			
Political Science/ Agriculture/ Education/							
Liberal Arts					.21	2	.90
Business/ Administration/	7	24.1	13	28.9			
Economics/ Accounting							
Science/ Engineering	8	27.6	12	26.7			
Current work status							
Faculty member	8	26.7	17	37.8	1.00	1	.32
University administrator	22	73.3	28	62.2			
QA policies work experience (years)							
1-5 years	15	51.7	16	35.6	2.45	2	.29
6-10 years	9	31.0	15	33.3	2.43	2	.29
More than 10 years	5	17.2	14	31.1			
Type of institution							
Public university/ Rajabhat	20	66.7	30	66.7			
University/ Rajamangala University of					.00	1	1.00
Technology							
Private university	10	33.3	15	33.3			
Location of institution							
Bangkok Metropolis/ Central region	10	33.3	16	35.6			
Northern region	11	36.7	14	31.1	.43	3	.93
North-eastern region/ Eastern region	5	16.7	7	15.6			
Southern region	4	13.3	8	17.8			

importance of factors that affect the success of national QA policy implementation

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