

การบริหารคุณภาพการศึกษาระดับอุดมศึกษาไทย

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บทคัดย่อ

งานวิจัยฉบับนี้เป็นงานวิจัยที่ศึกษาความสัมพันธ์ระหว่างมาตรฐานคุณภาพการศึกษากับการบริหารคุณภาพการศึกษาระดับอุดมศึกษาไทย โดยใช้การวิจัยแบบสุ่มตัวอย่างผู้บริหารมหาวิทยาลัยรัฐและเอกชนที่เกี่ยวข้องกับการประเมินคุณภาพการศึกษาจากภายในและภายนอก จำนวน 70 แห่ง จากทั้งหมด 154 แห่งโดยใช้ผลการประเมินภายนอกที่ประกาศ ณ วันที่ 14 ตุลาคม 2548 เป็นข้อมูล ผลจากการวิจัยนำมาวิเคราะห์โดยใช้ค่าสถิติ Pearson Correlation และทำการทดสอบสมมุติฐานด้วยค่าสถิติ MANOVA

ผลจากการวิเคราะห์พบว่าการบริหารคุณภาพการศึกษาทั้ง 8 ด้านมีความสัมพันธ์ทางสถิติในทิศทางเดียวกับผลการประเมินมาตรฐานคุณภาพการศึกษาระดับอุดมศึกษาไทยนั้น คือ การเพิ่มระดับการบริหารคุณภาพการศึกษาทุกด้านย่อมจะส่งผลต่อผลการประเมิน โดยการบริหารคุณภาพการศึกษาด้านงบประมาณมีความสัมพันธ์สูงที่สุดกับผลการประเมินมาตรฐานคุณภาพการศึกษา รองลงมาเป็นด้านความโปร่งใสในการบริหาร ด้านกฎหมาย ด้านโครงสร้างองค์การและสภาพแวดล้อมของการบริหาร โดยค่าเฉลี่ยของระดับการบริหารคุณภาพการศึกษาของสถาบันอุดมศึกษาทั้ง 8 ด้านในกลุ่มที่ได้รับผลการประเมินมาตรฐานคุณภาพการศึกษาระดับอุดมศึกษาไทยในระดับ ACHIEVEMENT จะมีค่าเฉลี่ยระดับการบริหารคุณภาพการศึกษาสูงกว่ากลุ่มที่ได้รับผลการประเมินในระดับ ATTEMPT และ AWARENESS ส่วนกลุ่มที่ได้ผลการประเมินในระดับ ATTEMPT ระดับการบริหารคุณภาพการศึกษาด้านโครงสร้างองค์การและสภาพแวดล้อมของการบริหารการพัฒนา ด้านกฎหมาย ด้านหลักคุณภาพ และด้านการบริหารงานธุรการ มีค่าเฉลี่ยสูงกว่ากลุ่ม AWARENESS โดยภาพสรุปมหาวิทยาลัยที่ได้รับผลการประเมินในระดับ AWARENESS หรือ ATTEMPT จะพัฒนาไปสู่ระดับ ACHIEVEMENT นั้นจะต้องเพิ่มระดับการบริหารคุณภาพการศึกษาทุกด้านให้สูงขึ้นโดยเฉพาะด้านการวางแผนดำเนินงาน ด้านโครงสร้างองค์การและสภาพแวดล้อมของการบริหารการพัฒนา และด้านกฎหมาย ส่วนมหาวิทยาลัยที่ได้รับผลการประเมินในระดับ AWARENESS จะพัฒนาไปสู่ระดับ ATTEMPT นั้น จะต้องเพิ่มระดับการบริหารคุณภาพการศึกษาด้านกฎหมาย ด้านหลักคุณภาพและด้านการบริหารงานธุรการ

HIGHER EDUCATION QUALITY ADMINISTRATION IN THAILAND

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ABSTRACT

The research is aimed at studying relations between educational quality and higher educational administration in Thailand, gathering information through random sampling of 42 executives from 70 public and private universities involved in both internal and external educational quality assessment, under the announcement of external quality assessment results on October 14, 2006. The research finding was analyzed by means of Pearson Correlation and hypothesis testing with MANOVA.

The results of eight major factors of educational administration show consistent statistical relations with the higher educational quality assessment indicated that upgrading in all aspects of educational quality administration would bear some impacts on the assessment results. Budgeting administration showed the highest relation with educational quality assessment, as followed by transparency in management, legal issues, organizational structure and the surrounding of administration. Means of the higher educational quality assessment results in eight areas at the level of "Achievement" was higher than means of educational quality assessment at "Attempt" and "Awareness" levels. Among those with assessment results at "Awareness", means in educational quality administration in terms of organizational structure, surrounding of administration, legal issues, quality assurance and general administration was higher than that of the "Awareness" group. In summary, for the universities, holding educational quality assessment results at "Awareness" and "Attempt" levels, to emerge to the higher level of "Achievement", emphasis should be placed on upgrading of educational quality in all aspects, notably in the areas of planning, organizational structure, surrounding of administration and legal issues. For those universities rated at "Awareness" to emerge to "Attempt" level, emphasis should be placed on upgrading of educational quality in terms of legal issues, quality assurances, and general administration.

Background and Significance of Problems

In 1994, it was predicted that an economic crisis would break out in 1997, and the crisis actually occurred as predicted, due mainly to the fact that

Thai society was unable to catch up with changes. Specifically, the existing educational system was unable to promote timely adjustment in society (Ketutat, 2002, p.14). Nakornthap (1997, pp. 3-11), describes in his recent research findings that higher educational system and the number of students have

been growing very rapidly in every country all over the world, which would, in turn, require reallocation of resources for equitable social development. Eventually, most universities ended up with more enrolments of students, whereas resources remained intact or increased only slightly, not in proportion with the increasing number of students. This implied that investment budget for development of an individual student would drop.

Similarly, university education is a key mechanism for production of high-qualified human resources, research, development of knowledge and technology for national development and international competitiveness upgrading. It is of great necessary to enhance quality in graduate production, research, academic services, as well as arts and cultural promotion. These would enable higher educational system to serve as an efficient mechanism in national development (Office of the National Education Commission, 2002, pp. 28, 68-70).

Under the Uruguay Rounds of Trade Negotiations that led to the formation of the World Trade Organization (WTO) member countries agreed to liberalize service industry in 2002. As a WTO member, Thailand also has to follow suit, to liberalize its domestic service industry in time, and education, as part of service industry, has no exception to this rule. Thus, education at all levels in Thailand should be liberalized. It is expected that there would be greater competition among educational service providers from both inside and outside the Kingdom, implying that educational quality in Thailand must be

hastened accordingly (Office of the National Education Standards and Quality Assessment, 2004 kor., p.1).

Under free competition, both inside and outside the kingdom, while educational quality in Thailand remains unclear, it is likely that Thailand's educational system will be unable to remain viable in the market.

Relation between internal and external quality assessment :

In the education context, internal quality assurance refers to evaluating, monitoring and auditing quality and standard within an educational institution, by its respective personnel or an administrative unit responsible for supervising the educational institution. External quality assessment, on the other hand, refers to the assessment of quality in educational provision, and monitoring of audit of quality and standard of an educational institution, conducted by an external organization or assessor. Indeed, the external quality assessment would apply standard indicators in evaluating service deliveries by a university. This includes a site visit to the university in question. The assessment must take into consideration philosophy, mission and instructional methods adopted by each university. The university, in addition, should prepare an annual report, including documents and data involved, and indicators for external quality assessment by the Office of the National Education Standards and Quality Assessment (ONESQA). This would premise enhance educational quality and standard of a university. (ONESQA, 2004, kor., p.11)

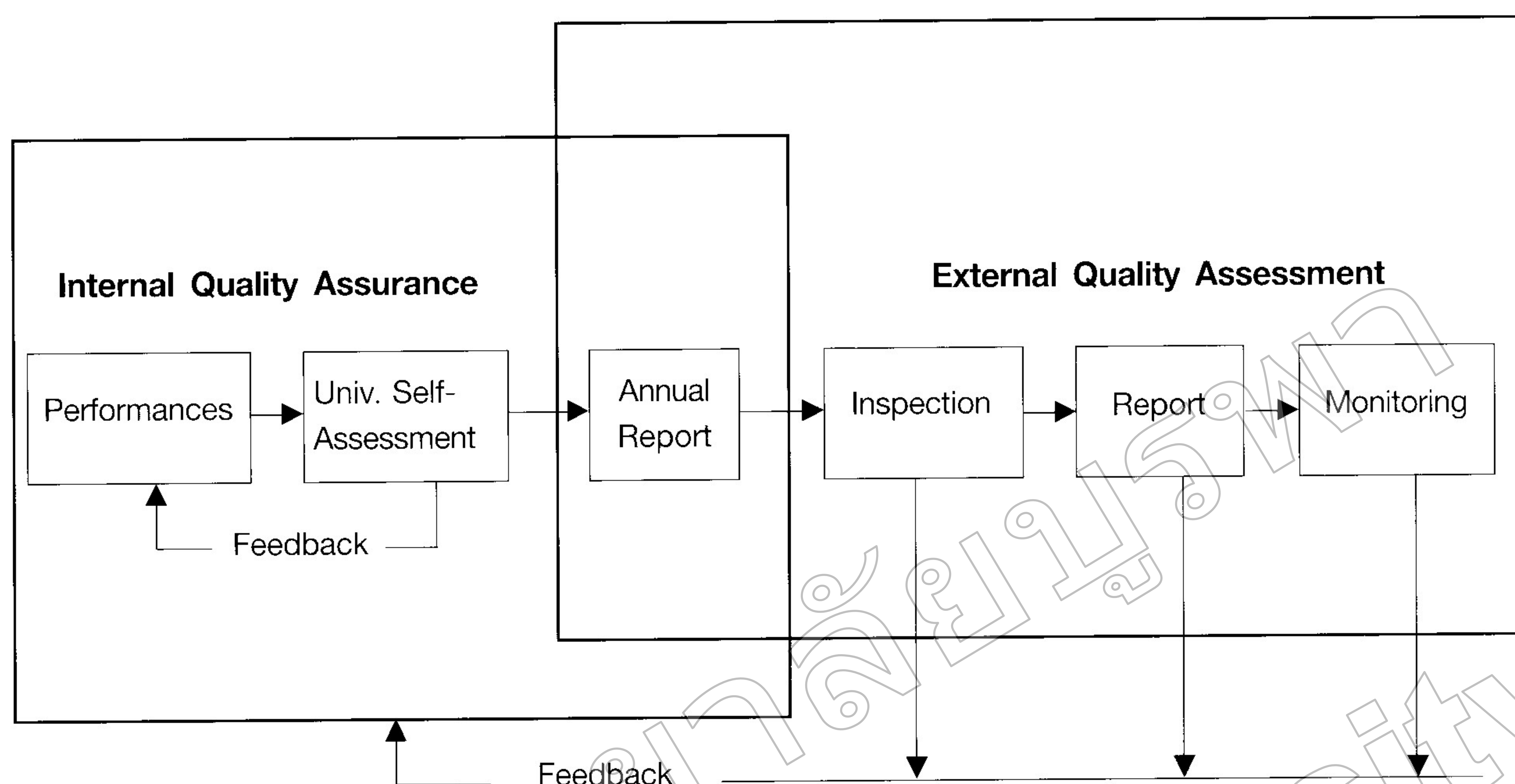


Figure 1 Relation between Internal and External Quality Assurance (ONESQA, 2004, kor., p.11)

Figure 1 shows that when a university adopts an internal quality assessment and prepare an annual report, considered as a self-assessment process on a yearly basis. The annual report can be submitted to ONESQA for external quality assessment.

The annual report of each university would enable an external quality assessor to map out a plan for collecting and analyzing data, and conduct quality assessment of the university in a relatively short period of time. Self-assessment, therefore, is seen as a key instrument for external quality assessment. Not only does it imply the collection of data of educational provision, research and social

services, but it also refers to all aspects of management, according to the actual situation facing each university.

Consequently, the external quality assessment would emphasize the actual data conditions, i.e., educational provision, management, and services. Although self-assessment criteria would cover all aspects of educational management of a university, the external quality assessment can be regarded as a continuing assessment from the internal quality assurance of each university. The assessment results by an external party would consequently guarantee the internal control system of each university.

External Quality Assessment

Internal Quality Assurance

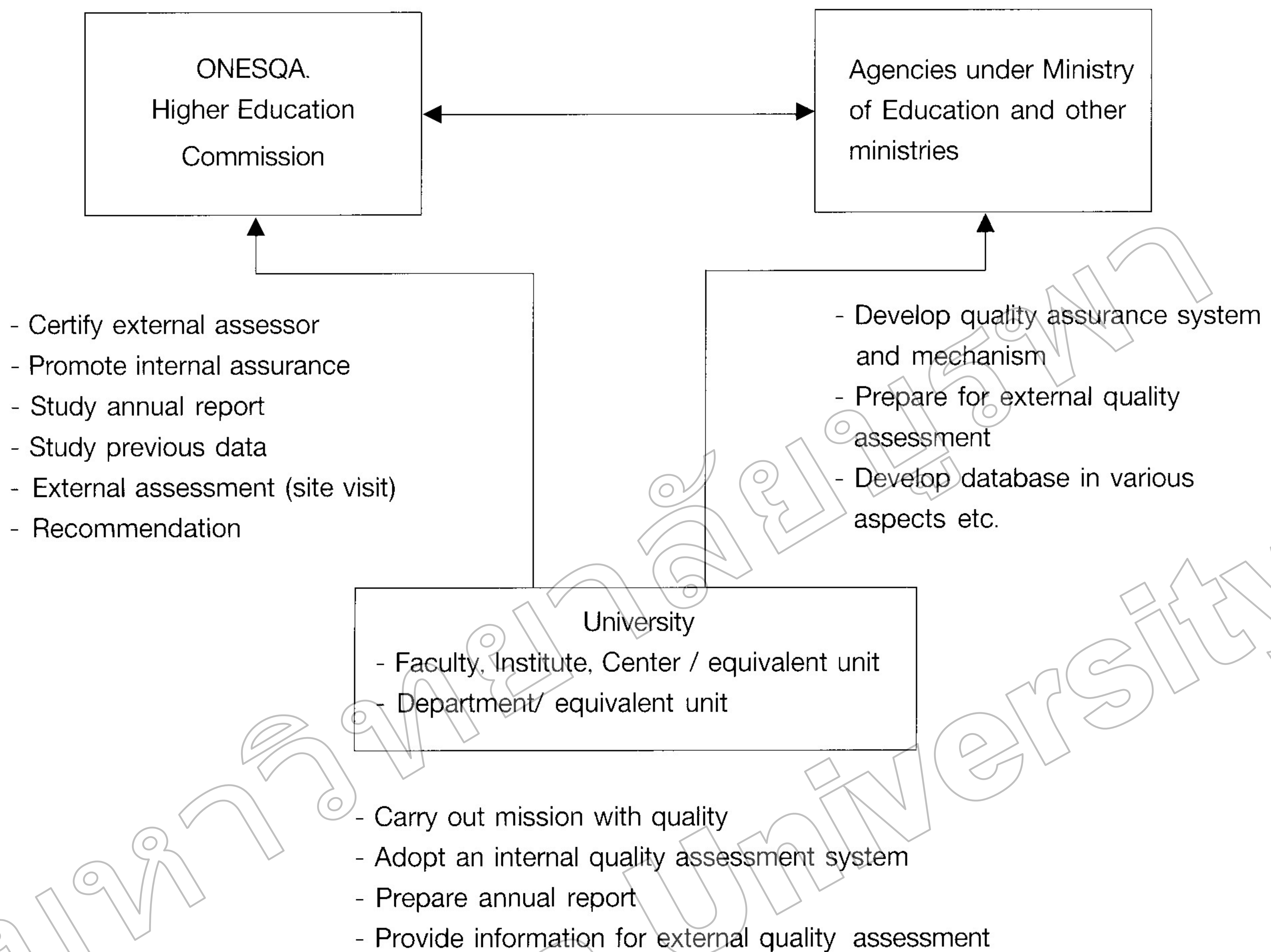


Figure 2 Relations of organizations responsible for internal and external quality assessment (ONESQA, 2004, kor. P.15)

Research Objectives

1. To study other factors to indicate the educational quality than the ones as set by ONESQA
2. To study a model for administration of educational quality in Thailand, in line

with the established standard, focusing on a model appropriate for the current situation

Literature Review

Concept and Research Concerning Higher Educational Quality Standard: Independent variable

1. ONESQA Concept and Standard

(Office of the ONESQA. 2003, pp.28-31). i.e.,

1. Variables of quality of graduates are :

- 1.1 Percentage of graduates getting employment within 1 year, including those in self-employed segment
- 1.2 Level of satisfaction of employer
- 1.3 The number of articles excerpted from doctoral program's dissertations
- 1.4 The proportion of articles excerpted from theses

2. Variables of instructional standard, are :

- 2.1 Student-centered approach
- 2.2 Effectiveness of instructors
- 2.3 Student's activities
- 2.4 Research for learning improvement

3. Variables of learning support are :

- 3.1 Number of regular instructors
- 3.2 Total expenses per total number of full-time students
- 3.3 Percentage of regular instructors holding Ph.D.
- 3.4 Number of computer sets
- 3.5 Total library expenses

4. Variables of research and creative work standard, are :

- 4.1 Number of published articles
- 4.2 Number of utilized research
- 4.3 External financial support for research
- 4.4 Internal research budget

5. Variables of academic service standard, are :

- 5.1 Number activities/ academic service projects
- 5.2 Number of committees

6. Variables of arts and cultural preservation standard, are :

- 6.1 Number of arts and cultural preservation activities
- 6.2 Development and creation of arts and cultural preservation activities

7. Variables of management standard, are :

- 7.1 Management of pay-roll of all kinds of personnel per total expenses
- 7.2 Management of pay-roll for administrative personnel per total expenses
- 7.3 Management of central administrative expenses per total expenses
- 7.4 Depreciation cost to total full-time students
- 7.5 Management of net expenses to actual income

8. Variables of internal quality assurance, are :

- 8.1 Ongoing internal educational quality assurance
- 8.2 Effectiveness of the internal quality assurance system

Apart from the educational quality standard required by ONESQA, the researcher would like to examine what additional standards the universities have formulated. Consequently, the researcher conducted a study and presented it for doing further research in a later stage:
Independent variable

9. Variables of use local wisdom, are

9.1 Standard for Use of Local Wisdom:

With regard to the use of local wisdom, Education Act B.E. 2542, Section 29, stipulates that local community shall be encouraged to participate in the provision of educational and training service, including the search for and selection of knowledge, information and local wisdom. The local wisdom, as supported by law, shall be applicable for teaching and learning for knowledge and preservation purposes. Section 57 states clearly that the local educational agencies shall promote participation by the local human resources in educational service provision, making use of the experience, knowledge, expertise and wisdom available in the local areas for the benefits of new knowledge creation among students (Ministry of Education, 1999, p.31). Baldrige National Quality Program: National Institute of Standards and Technology in the USA published a book, entitled "2004 Education Criteria for Performance Excellence", stipulating the 7-factor criteria for performance excellence in education. One of these major seven factors is the use of local wisdom to increase skill and develop education in a broad-based perspective.

9.2 Use of Local Wisdom : Participation by Local Scholars

: Section 57 of the Education Act stipulates clearly the standard of use of local wisdom, by encouraging education units to mobilize resources available in the local community in educational provision. They shall make use of knowledge, expertise and wisdom in the local areas for the benefit of education. Persons, promoting and supporting education, shall be acclaimed (Ministry of Education, 1999, p. 31). Baldrige National Quality Program: National Institute of Standards and

Technology (2004) in the USA published a book, entitled "2004 Education Criteria for Performance Excellence", stipulating the 7-factor criteria for performance excellence in education. One of these 7 factors is to encourage local scholars (experts) to teach students. The local knowledge and expertise will provide new knowledge to students, and the value of local wisdom will be realized, thoroughly.

10. Variables of curriculum, are

10.1, 10.2 and 10.3 : Curriculum Standard, Number of Curriculum, regular updating and aim for betterment in life

: Section 28 of Education Act stipulates that curricula at different levels of education, including curricula for persons, specified under Section 10, First, Second and Fourth Paragraphs, shall be variable. These curricula shall suit education at each level, aiming to develop quality of life of an individual suitable for age and potential. The content contained therein, both academic and professional issues, shall lead to balance in life in terms of knowledge, conceptual ability, skills, virtue and social responsibility (Ministry of Education, 1999, p.16).

11. Variables of instructional system, are

11.1 Educational standard in instructional system

The Ministry of University Affairs, as a public agency, supervising university education in Thailand, announced the University Educational Quality Control Policy on July 8, 2006. Instructors would have direct impact on quality of graduates. They are the most important elements in retaining quality in educational services. Each university shall set the clear missions and standards that each instructor shall prepare a

teaching plan for each subject, and multiple teaching methods shall be applied (Office of the Permanent Secretary of Ministry of University Affairs, 2003, pp.4-5).

12. Variables of financial donations by alumni students :

Financial assistance and donations by former students would be important for all categories of educational services, internal activities of the university, social activities and scholarships for present students, etc. This is congruent with the US News and World Report (2000), that financial donations by alumni students as one of the seven major factors for quality control in educational services.

13. Variables of creation of value-added for students :

of many domestic elements, with no exception to educational service provision, in order to equally connect and join in educational networks all over the world. International standards, as aforementioned, shall include comparable knowledge and quality of graduates with those developed nations. It is necessary to promote development of knowledge to reach international standards, which, in turn, should enhance value-added quality of the graduates on par with overseas students. US News and World Report emphasizes educational quality indicators as one of the seven factors that create value-added for students (US News and World Report, 2000).

14. Variables of concerning student application, are

14.1, 14.2, 14.3 and 14.4 : Standard educational quality in flexible enrollments, entrance examination by placement test, and entrance examination by interviews and entrance examination by both placement test

and interview : Selingo, J. (1997, pp. A45-A46) indicated that 1 out of 13 indicators for educational quality is consistency between the number of students and educational quality (placement system).

Concept and Research Concerning Higher Educational Quality Administration : Dependent variables

1. Variables of operational planning are

1.1 Educational quality administration in terms of planning, intentions and visions :

Every institution shall have an intent to accomplish its policy targets. Good intent should show things to do and possibility (Weick, 1979, p. 13), which can be shown as visions and missions, with specific end results as goals and objectives.

1.2 Educational Quality Administration : Policy and Planning Issues

Kast and Rozenweig (1970, pp. 435-436) propose that planning is a consideration process of different sets of data for advance decision making. What should be done, and how? Relevant parties should exercise individual discretion in setting objectives, policies, projects and operational procedures in order to achieve targets. The above idea, as proposed, is in line with a proposal by Rourke (1993, p.3), in his study on educational policy. Dye (1984, pp.19-24) defines decision for public policy making as decision of the government, concerning what to be done.

1.3 Educational Quality Administration : Objective

Donnelly (1984, pp.98-99) proposed that corporate planning comprises four major components. First is a decision to designate corporate objective or ends, and second is a decision for alternatives or means. Third is a decision for resource mobilization and fourth is a decision for implementation process. This implies that James places top priority to the setting of objective or ends in the planning process.

2. Variables of organizational structure and surrounding of development administration, are

2.1 Terms of structural pattern

Webber (1969, cited in Robbins and Coulter, 1999, pp.44-45), from Germany, studied some large organizations and discovered that, to ensure growth among large organizations, operational patterns or procedures should be designated properly for managers, as a bureaucratic pattern. It comprises (1) Respect of formal rules and authority, as designated by the top management, (2) Formal administrative lines, (3) Administrative policy in writing, (4) Regular training, (5) Encouragement for arm-length operations, regardless of gratitude, and (6) Respect of general administrative rules.

Khonkan (2004, pp. 55-56) conducted a study on the development of quality indicators for public university, to be used as a monitoring and evaluation of actions among higher educational institutions. He analyzed composition under Lisrel model, and discovered seven major components. One of these is an international character, comprising two factors, which are an institution with international fundamental structure, and cooperation between local and foreign

institutions in curriculum setting. This system focuses mainly on development of indicators.

2.2 Terms of administrators and officers

Webber (1969, cited in Robbins and Coulter, 1999, pp. 44-45) studied large organizations, and discovered that large organizations should designate operational pattern and procedures suitable for administrators. Besides, Mintzberg (1979, pp.13-19), specializing in organizational theories and structural arrangement, proposed that future organizations will consist of six major components. First is the core function, i.e., personnel. Second are core strategies, including senior managers, as the head and center of overall management. Third is middle manager, to handle operational functions. Fourth is academic structure, including analysts. Fifth is the supporting function, and sixth is ideology, i.e., belief or culture of an organization.

2.3 Terms of University Council

Webber (1969, cited in Robbins and Coulter, 1999, pp. 44-45) studied some large organizations and discovered that incumbents in an organization can be achieved by election and appointment. An election is the bottom-up exercise of power, by subordinates, and appointment is conducted top-down, by managers in charge. It is an internal selection of the University Council. This is consistent with a concept created by Senge (1990, p. 6), concerning Systems Thinking, implying ability to perceive the overall picture. There is a framework to realize internal relations, instead of sole rational structures, or ability to see fundamental changes, not only outer changes.

3. Variables of legal issues are

3.1 The Constitution

Chapter 3 of Thai Constitution B.E. 2540, concerning rights and freedom of Thai people, stipulates some Sections concerning the assurance of educational quality. Section 42 stipulates that people's freedom for education, training, research and distribution of some academic research shall be protected, all of which shall not contradict civilian duties and morality of people. Chapter 5 stipulates fundamental policy of the state, and Section 81 stipulates that the government shall provide educational and training services, and support the private sector in educational and training provision to promote knowledge and virtue. There shall be educational statutes, consistent with socio-economic changes. The right political knowledge and public awareness shall be created, concerning Constitutional Monarchy. The government shall support research in various fields, and expedite scientific and technology research for national development, including development of teaching profession, and promotion of local wisdom, arts and culture.

Evidently, Sections 42 and 81 of the Constitution are rather consistent in terms of requirement for educational statutes, aiming to promote qualified graduates, with proper knowledge and capability for national development.

3.2 Education Act

The Thai Constitution B.E. 2540 prescribes a requirement for National Education Act, which was officially promulgated on August 20, 1999. There are several Sections involving educational quality, notably Sections 6, 7, 9 (4) and (5), 22, 23 (5), 25 (2), (3) and

(5), 28, 29, 30, 36, 47, 48, 57 and 62. Most educational institutions have applied the principles, stated under Education Act to upgrade educational quality standard.

3.3 Regulations and Announcements

Regulations and announcements refer to regulations and announcements issued by the Ministry of University Affairs or Ministry of Education during 1999-2005. 38 of them were involved with curricula, 1 issue concerning evaluation, 8 issues concerning teachers, 3 issues concerning supporting factors, 1 issue concerning student development, 4 issues administration, 4 issues finance and budgeting, and 2 issues quality assurance. These are in line with Sections 42 and 81 of Thai Constitution B.E. 2540, and an announcement of the Ministry of University Affairs, concerning policy and procedure for quality assurance at higher educational levels, dated July 8, 1996. By virtue of Ministerial Regulations of University Affairs B.E. 2520, and the amendment, under Education Act (2nd edition) B.E. 2537, Sections 4(2) and (3), the Ministry of University Affairs prescribes an educational quality assurance policy as a guideline for operations (Office of the Permanent Secretary of Ministry of University Affairs, 2003, pp. 4-5).

3.4 Resolution of University Presidents' Meeting

Under Thai Constitution B.E. 2540, Sections 42 and 81, there are some legal issues to enforce external quality assurance of educational institutions by ONESQA. These are in line with a resolution of University Presidents' Meeting during October 28-29, 2004, proposing principles, guidelines and procedures for educational quality assurance for universities for the first time. Moreover, the World Trade Organization (WTO), in 2001, resolved to urge member countries

to liberalize trade in services, from 2005 onward. Education is considered part of service industry, so in 2005, Thailand would have to liberalize its education for any WTO members willing to set up an educational institution in Thailand. Both resolutions of WTO would be significant for future administration of educational quality in Thailand. This is consistent with a recent announcement of the Ministry of University Affairs, governing "Policy and Procedure for Higher Educational Quality Assurance", on July 8, 1996, and an announcement of policy under the Ministry of University Affairs, on July 8, 1999.

4. Variables of budgeting are

4.1 Budgeting and 4.2 Government Budget : Accountability

The Ministry of University Affairs established total budget for public universities under its administration at Baht 354,969.28 Million, classified as government subsidies, totaling Baht 254,114.74 Million, and budget from other sources, totaling Baht 100,854.55 Million. In 2003, the Ministry enforced a Royal Decree, governing the Criteria and Procedures for Public Good Governance B.E. 2546. Section 6 stipulates that each government agency formulates a 4-year plan, compatible with the Government Administrative Plan, and in each fiscal year, each government agency has to formulate an annual operational plan. Key issues include public service policy, achievement targets, as well as estimation of income, expenses and other resources, to be submitted to the Cabinet for approval. Then, the Bureau of the Budget will allocate budget for successful implementation of each plan. The above requirement will take effect from budget proposals in FY 2006 onward. There is some budget support for

educational quality assurance, enforced under an announcement of the Ministry of University Affairs, concerning Policy and Procedure for Higher Educational Quality Assurance B.E. 2539 (Office of the Permanent Secretary of Ministry of University Affairs, 2003, pp.4-5).

4.3 Sufficient Budget for Educational Quality Administration and 4.4 Accountable Revenue Budget

Some researchers have voiced their opinion involving the revenue budget for educational quality administration. Khonkan (2004, p. 55) conducted a study on Development of Indicators for Quality of Public Universities, and discovered that budget revenue enhanced the fourth principle, concerning efficiency in higher educational administration in budget allocation, considered appropriate, transparent and accountable. This is congruent with a research paper, conducted by Timket (2002, p. 59). She studied Development of Quality Indicators of Libraries of Universities under the Ministry of University Affairs, and discovered that the most weighted indicator in budget category is an audit system for budget utilization and revenue.

5. Variables of administrative process, are

5.1, 5.2, 5.3 and 5.4 Process, i.e., Plan (P), Do (D), Check (C), and Action (A)

Any work should start with planning and action. Then, it should be evaluated, if action has been carried out, as planned. If it deviates from the plan, it should be corrected and improved. Then, it would enter another planning process, until success prevails. It is operating as a dynamic cycle (Phakham, 2005, p.17). This is a process initiated by Ishikawa in 1946

(Chamchusri, 2005, p.18). There are some other Thai and foreign researchers recognizing the significance of educational quality administration. In terms of administration (P D C A), many of them have made some conclusions, as follows: Hewton, Polley and Sildrez together conducted a study on Quality Control for Online Graduate Course Delivery: A Case Study. They discovered that an online educational system requires quality control in various aspects, such as survey of students, evaluation, assessment of schools, subjects and subject-based improvement process. These implied that the PDCA administrative approach is significant for quality control

6. Variables of quality are

6.1 Quality under ISO System

In 2000, higher educational institutions adopted the Eight Quality Management Principles under ISO 9001 criteria. First is Customer-Focused Organization, urging all parties involved to understand both present and future demand of customers in order to produce/deliver services as demanded. The whole organization would develop to a meaningful way for customers. Second is Leadership, meaning managers will have to set targets and direction for a united organization with full involvement of people within an organization. Third is Involvement of People, meaning all people at all levels in an organization must participate in the development of service quality for utmost benefits to the organization. Fourth is Process Approach, implying resources should be allocated in the same harmony with activities. Fifth is System Approach to Management, aiming to create common understanding and managing the wholly related processes. Sixth is Continual Improvement, for sustainable benefits of the organization. Seventh is Factual Approach to

Decision Making, ensuring effective decision making based on analysis of information and facts. And, eighth is Mutually Beneficial Supplier Relationship (Tiawatthanarattikan, 2001, pp.147-148).

6.2 Total Quality Management (TQM)

Frise, (2004) in addition, studied "Quality Management as a Systematic Management Philosophy for Use in Non-Profit Organizations. He discovered that these non-profit organizations encountered mismanagement problems, and lacked sufficient accountability for adverse consequences. They should adopt two approaches for quality management. i.e., traditional management approach and TQM-based management

6.3 Six Sigma

Smith is the founder of "Six Sigma" principle. During mid-1980-1990, Motorola Chairman (Galvin) adopted the Six Sigma principle for total quality control for the first time (Lamjuan, 2005, p. 8). There are two parts under the principle. Sigma represents a standard deviation to measure variation in the business process, as a measurement criterion for performance of each process. If Sigma is high, or variation increases, errors will rise. "Six" represents score of Sigma, implying success anticipated (Malasit, 2003, p. 156).

6.4 P.S.O.

Chansorn (1996, p. 13) defines a P.S.O. system (Thailand International Public Sector Standard Management System and Outcome) as the development of International Public Sector Standard Management System and Outcome in Thailand. At a meeting in 1998, the Cabinet approved a proposal, submitted by the Office of the Civil Service

Commission. to enforce the P.S.O. system. Ten major standard systems will be developed within the public sector. for (1) database. (2) communication. (3) decision-making. (4) personnel development. (5) checks-and-balances. (6) participation. (7) private service delivery. (8) evaluation. (9) projection and crisis resolution. and (10) culture and professional code of conduct. Effective outcome will be measured in four aspects. which are (1) outcome or production. (2) results. (3) end-results. and (4) prevention of undesirable end-results.

7. General Administration.

Most foreign researchers recognize the significance of general administrative function. Weber (1969, cited in Robbins & Coulter, 1999, pp.44-45). a wealthy ideologist and sociologist from Germany. has developed a theory concerning bureaucratic structure and activities. There are six major components under Weber's theory, comprising division of work, hierarchy of power, formal selection, formal rules and regulations for formal relationship and professionalism. General administration will lead to smooth management, being a means for effectiveness.

8. Transparency in Administration

Transparency in management implies that a university adopts a transparent and accountable managerial system for each educational quality standard. For a certain extent, transparency in management will coincide with an internal audit system. A managerial system, without sufficient internal audit cannot assure that actions will be achieved as planned. An internal audit system can be divided into two parts, which are (1) management audit and (2) financial audit (Chaloemprasert, 2001, pp.7-4-7-7).

Research Hypotheses

Hypotheses was set under a model created through processing of concepts, theories and research papers involved, which have been included in Chapter 2. And the ones needed to be investigated in order to prove the hypotheses because since the time being the investigation has been mainly focused on educational quality standard. Never has been done on how to manage in order to get the educational quality classified as Achievement, Attempt, and Awareness

Hypothesis 1

The assessment of higher educational quality of "Achievement" group relates to action planning, organizational structure, surrounding of development administration, laws, budgets, administrative process, quality principles, general administration management and transparency in administration.

Hypothesis 2

The assessment of higher educational quality of "Attempt" group relates to action planning, organizational structure, surrounding of development administration, laws, budgets, administrative process, quality principles, general administration management and transparency in administration.

Hypothesis 3

The assessment of higher educational quality of "Awareness" group relates to action planning, organizational structure, surrounding of development administration, laws, budgets, administrative process, quality principles, general administration management and transparency in administration.

Expected Benefits

1. To discover some other indicators for educational quality assessment than the ones suggested by ONESQA for further consideration by relevant parties.

2. To develop a model for educational quality administration, applicable for achieving educational quality as needed by higher educational institutions in Thailand.

Conceptual Framework for Higher Educational Quality Administration in Thailand

Independent Variables

Educational Quality Standard

IV1 Quality of Graduates

1. % of employment within 1 year, including self-employment
2. Employer satisfaction
3. Number of excerpts from dissertation
4. Number of excerpts from theses

IV2 Instruction

1. Student-centered
2. Instructors' efficiency
3. Students' activities
4. Learning process research & development

IV3 Learning supports

1. Number of regular instructors
2. Total expenses per full-time students Announcements
3. % of regular holding Ph.D. instructors
4. Number of computer sets
5. Library expenses

IV4 Research and Creativity

1. Number of published articles
2. Number of utilized research
3. External financial support for research
4. Internal research budget

IV5 Academic Service

1. Number of academic activities / projects
2. Number of committees

IV6 Arts and Cultural Activities

1. Number of arts and cultural promotion activities
2. Cultural development and creation of cultural standard

Department Variables

Educational Quality Administration

DV1 Operational Planning

1. Intention or vision
2. Policy
3. Objectives

DV2 Organizational Structure & Surrounding of Development Administration

1. Structure
2. Administrators and Officers
3. Committee

DV3 Law

1. Constitution
2. Act
3. Rules, Regulations and
4. Resolution

DV4 Budget

1. Sufficient budget allocation
2. Open for audit
3. Sufficient revenue
4. Open for audit

DV5 Administrative Process

1. p (Planning)
2. d (Do)
3. c (Check)
4. a (Action)

Conceptual Framework for Higher Educational Quality Administration in Thailand

Independent Variables

Department Variables

| |
|--|
| IV7 Administration 1. Adoption of management of overall personnel pay-roll per total expenses 2. Administrative personnel pay-roll per total expenses 3. Central administrative expenses per total expenses 4. Management of depreciation cost per total full-time students 5. Management of net expenses per actual income IV8 Internal Quality Assurance 1. Continual mechanism for educational quality assurance 2. Effectiveness of internal quality assurance |
|--|

| |
|---|
| DV6 Quality Principle 1. ISO 2. TQM 3. Six Sigma 4. P.S.O. DV7 General Administration DV8 Transparency |
|---|

| |
|--|
| IV9 Use of Local Wisdom 1. Application of local wisdom 2. Participation by local scholars IV10 Curriculum 1. Sufficient curricula 2. Regular updating 3. Emphasis on life quality improvement IV11 Instructional System 1. Participatory approach 2. Teaching plan preparation IV12 Financial Donations by Alumni Students IV13 Creation of Value-Added for Students IV14 Enrolment 1. Flexible 2. Placement Tests 3. Interview 4. Placement Tests and Interview |
|--|

Research Methodology

This research is mainly aimed at examining the educational quality standards of Thai higher education level, which should be assessed as a supplement to the requirements of ONESQA, and at investigating a model of educational quality administration of Thai higher education level to meet the set standard by focusing on a proper model that is suitable for the present situations. Details and the research methodology are as follows.

Population and Sampling Method Quality

1. Population

The population used in this research consisted of administrator of 70 higher education institutions on the announcement of external quality assessment results of ONESQA on October 14, 2005 comprising 14 institutions in the northern region, 8 institutions in the southern region, 34 institutions in the central regions, 12 institutions in the north eastern region, and 2 institutions in the eastern region.

2. Sampling Method

By classifying the higher education institutions in each region in an alphabetical order (Thai alphabet), then selection of institution was done through systematic sampling. Systematic sampling is used when the data of the population units are arranged in order. (Pongsakornrangsin, 2004, p22) Two out of three institutions were selected, and the third one was omitted. Therefore, the total of 42 institutions was selected. In each of 42 institutions, the sample

consisted of 5 persons namely, President or Vice President acting or acting on behalf of the President by that time, Vice President, responsible for external quality assessment, Assistant President or equivalents acting as External Quality Assessment Chief, and 2 Deans. This kind of sampling method is called purposive sampling. (Suwan, 2005, p84)

Arrangement of Variables and Measuring Instrument for Data Collection

A set of questionnaire was used for data collection. The questionnaire consisted of 3 sections:

- Section 1 : Basis Information Concerning University
- Section 2 : Educational Quality Standards
- Section 3 : Educational Quality Management

Research Tools

The questionnaires used for data collection comprising questions for all 3 sections.

Section 1 is multiple-choice and fill-in-the-blank questions. Three questions were about basis information of the sample: number of faculties, campus, and regional location.

Section 2 is the questions asking on educational quality standards divided into 2 parts.

Part A comprised 28 items on 8 standards of quality standard criteria by ONESQA, and Part B consisting of 31 items on 6 additional standard criteria by the researcher. The respondents chose to answer according to the existing situations as follows:

various working unit
(more)
5 means University has integration of utmost principle application (most)

| | | |
|---|-------|--------------------------|
| 0 | means | none (never done) |
| 1 | means | least frequently done |
| 2 | means | less frequently done |
| 3 | means | moderate frequently done |
| 4 | means | more frequently done |
| 5 | means | most frequently done |

This scale division is derived by using a scale question combining with the assessment criteria of National Quality Award namely, Approach, Deployment, Learning, and Integration (Office of Productivity Increase, 2005, p99)

This scale division is called a scaled question.
(Suwan, 2005, p96)

Data Collection

The data collection process can be summarized in the following.

Section 3 is the questions asking on educational quality administration principles divided into 2 parts. Part A consisted of the questions on the quality assessment results; while Part B was about the outcomes of educational quality administration principles. The total number of questions in this section was 24 items. The respondents chose to answer according to the existing situations as follows:

| | | |
|---|-------|--|
| 1 | means | University's tendency to use least administration principle (least) |
| 2 | means | University's tendency to use less administration principle (less) |
| 3 | means | University has transferred administration principle to deployment (moderate) |
| 4 | means | University creates learning towards deployment to |

1. Asking for an official letter from Burapha University requesting cooperation in answering the questionnaires to the selected university consisting of the sample.

2. Sending the letter together with the questionnaires to the sample by mail. An envelop, stamps, and the researcher's address were also enclosed. After having sent the questionnaires, the researcher again contacted the sample by phone to ask for cooperation.

Data Analysis

Statistical devices used for the data analysis are as follows:

1. Percentage for fundamental statistics with the questions on the number of Faculty, campuses, and respondents in various regions

2. \bar{X} and S.D. and classifying the performance level in the aspect of quality standard into 0 1 2 3 4 5 (none, least, less, moderate, more, most)

3. \bar{X} and S.D. classifying the performance level in the aspect of educational quality principles into 1 2 3 4 5 (least, less, moderate, more, most)

4. Pearson's Correlation Coefficient at the significance level of .01 to test the relations between educational quality administration and educational quality standard

5. Multiple regressions at the significance level of .01 to investigate the influences of educational quality standard factors upon educational quality administration

6. Testing the assessment results of Achievement, Attempt, Awareness by means of relations between educational quality standard and educational quality administration through MANOVA at the significance level of .01

Summary, Discussions, and Recommendations

The results of eight educational quality management principles showed positive relation with the quality assessment results of universities in Thailand (developed from the assessment results by ONESQA from "Awareness" to "Attempt" level, and from "Attempt" to "Achievement" level). That is, enhancement in all aspects of educational management affected the assessment results. Budget administration showed the highest relation with assessment results of educational quality, or 53.8 percent, as followed by transparency in management (47.6 percent), legal issues (44.2 percent), organizational structure and surrounding (43.2 percent), per detail as in Table 1.

Table 1 Relations between Educational Quality Assessment Results and 14 Factors of Educational Quality Management

| Areas of Educational Administration | R |
|--|---------|
| 1. Planning | 0.344** |
| 2. Organizational Structure and Surrounding for Development Administration | 0.432** |
| 3. Legal Issues | 0.442** |
| 4. Budget | 0.538** |
| 5. Administrative process | 0.253** |
| 6. Quality Assurance Principles | 0.262** |
| 7. General Administration Management | 0.345** |
| 8. Transparency in Management | 0.476** |

The assessment results showed clearly that educational quality management bears some direct impact on the assessment of educational quality, and thus a decrease or increase in management efficiency will affect the graduation from “Awareness” to “Attempt” level, and from “Attempt” to “Achievement”. The testing of the universities with educational quality assessment results at “Awareness”, “Attempt” and “Achievement” levels, with One-way Analysis of Variance showed significant distinctions in educational quality management. Those universities with assessment results at “Awareness” level showed the lowest mean, as followed by those universities with assessment results at “Attempt” and “Achievement” levels, respectively. Analyses of each principle of educational quality management, educational management in terms of planning, organizational structure and environment, legal issues, quality principles and general administration showed

the different statistical results at the significance level of .01. The organizational structure and surrounding, legal issues, quality assurance and general administration among the universities at “Awareness” level was lower than those at “Attempt level. Those at “Awareness” and “Attempt” level showed lower level of operations than those universities at “Achievement” level. as shown in Figure 3.

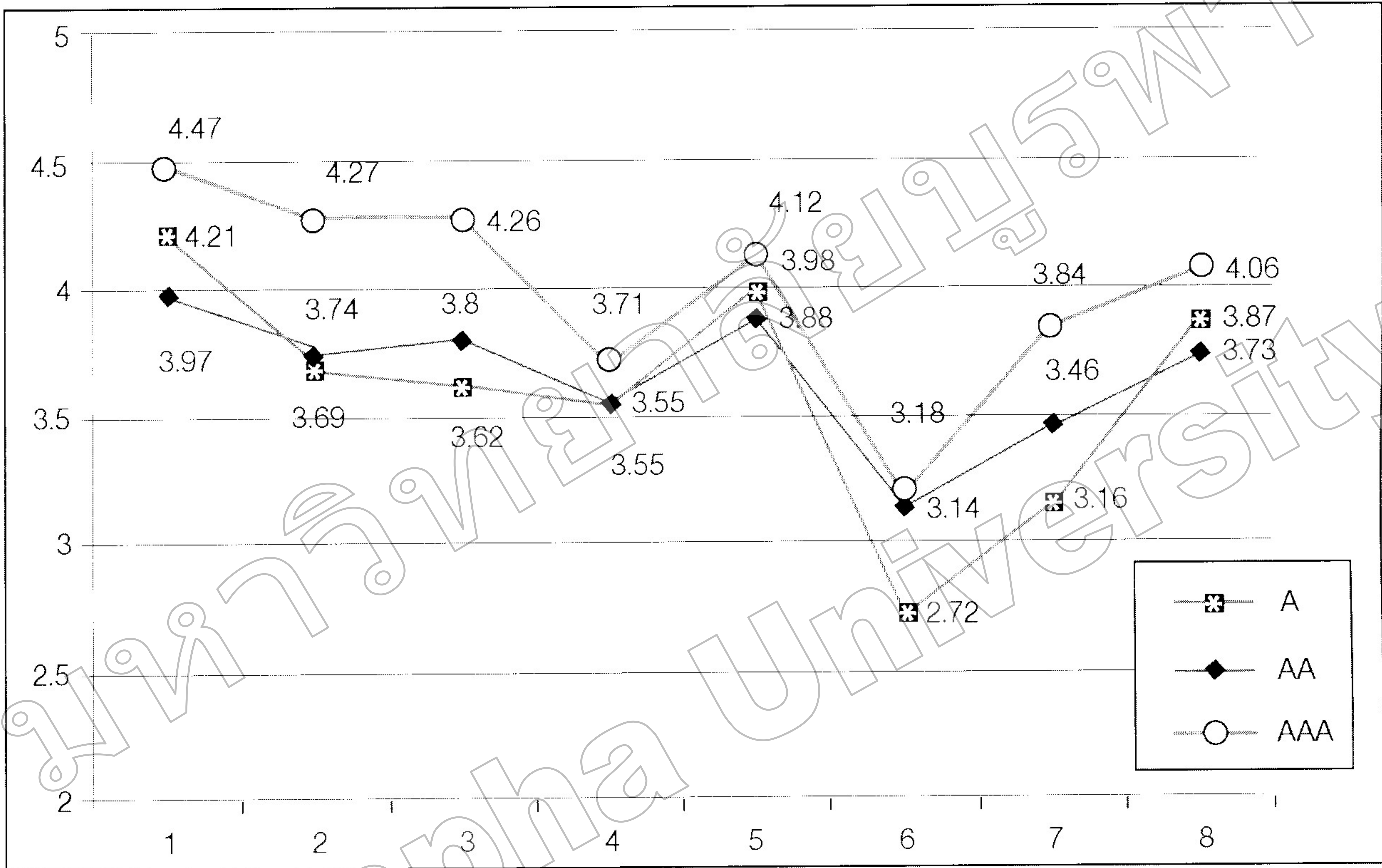


Figure 3 Mean of 8 Educational Quality Management Principles among Awareness (A). Attempt (AA) and Achievement (AAA)

Evidently, those universities in “Achievement” group show average value in 8 principles of educational quality management, higher than those in “Awareness” and “Attempt” levels.

Table 2 Comparison of Educational Quality Management in Three Groups of Universities

| Areas | Groups | | | | | | F-Test | P-Value |
|---|-----------|------|---------|-----|-------------|------|--------|---------|
| | AWARENESS | | ATTEMPT | | ACHIEVEMENT | | | |
| Planning | 4.21 | .61 | 3.97 | .81 | 4.47 | .65 | 8.116 | .000 |
| Organizational Structure and Surrounding for Development Administration | 3.69 | .63 | 3.74 | .66 | 4.27 | .59 | 13.850 | .000 |
| Legal Issues | 3.62 | .78 | 3.80 | .75 | 4.26 | .57 | 10.313 | .000 |
| Budget | 3.55 | .71 | 3.55 | .78 | 3.71 | .89 | 3.448 | .034 |
| Administrative Process | 3.98 | .70 | 3.88 | .67 | 4.12 | .75 | 2.074 | .128 |
| Quality Assurance Principles | 2.72 | .95 | 3.14 | .79 | 3.18 | 1.00 | 4.307 | .015 |
| General Administration | 3.16 | .67 | 3.46 | .80 | 3.84 | .91 | 8.743 | .000 |
| Transparency in Management | 3.87 | 1.01 | 3.73 | .87 | 4.06 | .77 | 2.468 | .087 |
| Total | 3.32 | .381 | 3.39 | .40 | 3.63 | .41 | 8.530 | .000 |

A table 2 shows that, the means in eight principles of educational quality management among universities in Thailand in “Achievement” were higher than those in “Awareness” and “Attempt”. Those in “Attempt” group showed higher means in organizational structure and surrounding, legal issues, quality assurance and general administration than those in “Awareness” group.

In conclusion, in order for universities rated at “Awareness” or “Attempt” level to move up to “Achievement” level, they must upgrade every principle of educational quality management, especially in terms of planning, organizational structure and surrounding, and legal issues. For universities rated at “Awareness” to move up to “Attempt” level, they have to enhance educational quality management in terms of legal issues, quality assurance and general administration.

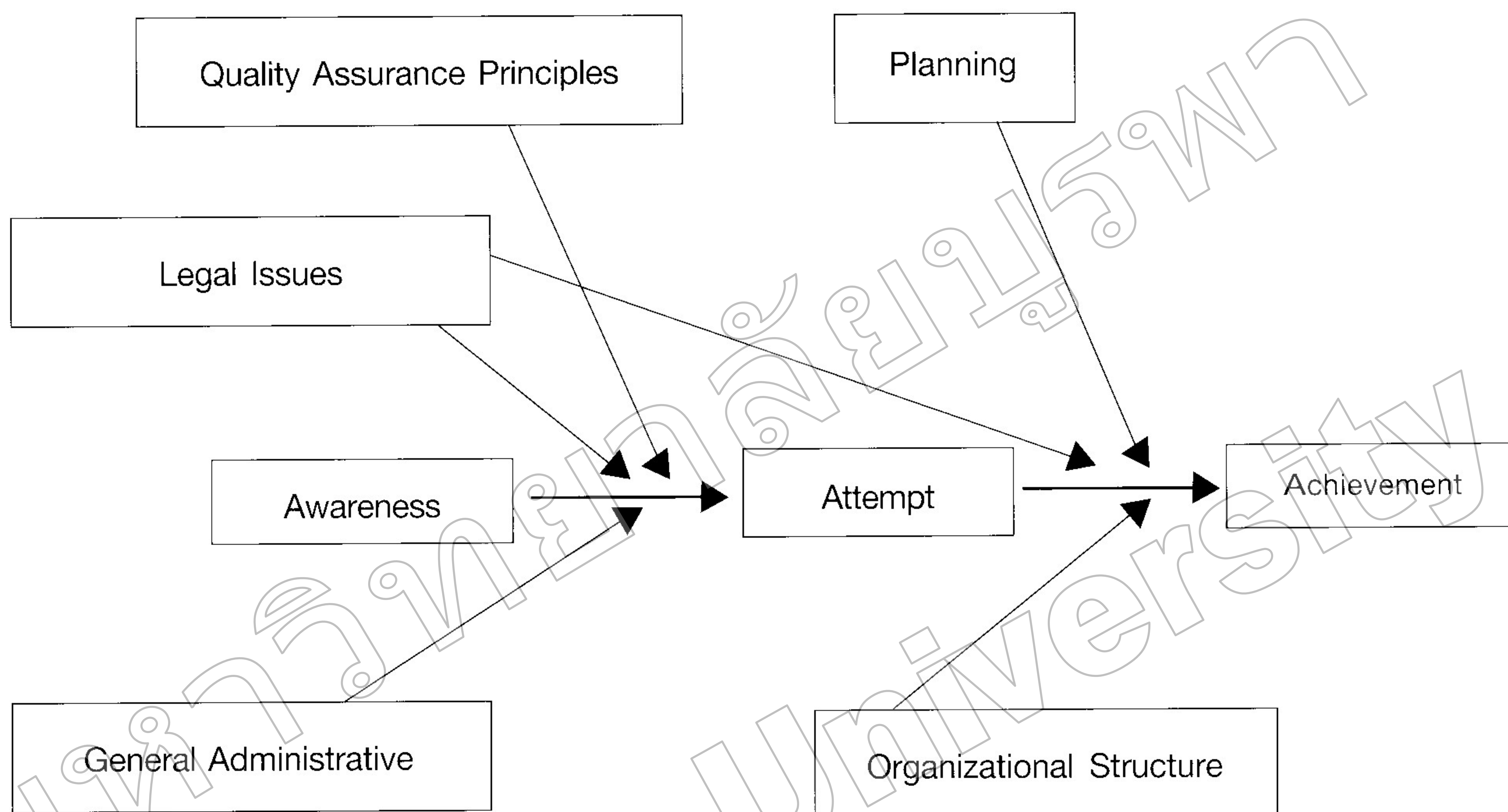


Figure 4 Enhancement of Educational Quality Management from “Awareness” to “Attempt” Level, and from “Attempt” to “Achievement” Level

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