

Manual for
The Internal Quality Assurance
for Higher Education Institutions :
Office of the Higher Education
Commission (OHEC)

**Manual for The Internal Quality Assurance for
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..... **PREFACE**

The Committee for Internal Quality Assurance in Higher Education is charged with the responsibility for devising criteria and procedures to enhance, support, and develop internal quality assurance process for Thailand's higher education institutions. Having seen the need to revise the existing internal quality assurance components and indicators, it has taken crucial factors into consideration to ensure that the new revised criteria and procedures will be better responsive to various current trends and the changing context of higher education quality and standards. Some of the documents reviewed include, the Second 15-Year Long Range Plan on Higher Education Plan (2008-2022), the 2010 Ministerial Regulation regarding the Systems, Criteria, and Procedures for Internal Quality Assurance, the Thai Qualifications Framework for Higher Education of 2009, the accreditation of Private Higher Education Institution, etc. The Commission on Higher Education has approved the use of the revised components and indicators as well as relevant information from the 2010 academic year onward.

This manual for the Internal Quality Assurance for Higher Education Institutions was produced at the time when all Thai education institutions would have to go through the third cycle of external assessment. Since much interest has been expressed to learn more about the content in this Manual, the Office of Higher Education Commission (OHEC) has, considered it useful to have it translated into English for widened dissemination. It hopes that this document will provide partner higher education institutions and agencies with understanding of these guidelines laid down to supervise and heighten the quality of education in Thailand, which corresponds well with the Thai context and its standing in the region and the world.



(Prof. Thosaporn Sirisumphand, Ph.D)

Secretary-General of Commission on Higher Education

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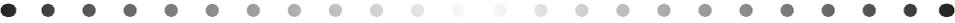
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CHAPTER I

Internal Quality Assurance for Higher Education Institutions



I. The Necessity and Objectives for Internal Quality Assurance in Higher Education

Higher Education Institutions in Thailand have 4 main missions : (a) to produce graduates, (b) to conduct research studies, (c) to provide academic services to the society, and (d) to preserve arts and culture. A quality assurance system is needed for higher education institutions to succeed in these missions and to meet both short-term and long-term objectives to develop the Nation. Currently, there are many internal and external factors that accentuate the need for higher education quality assurance system. These factors are as follows:

1) The quality levels of higher education institutions and graduates tend to be inequitable due to increasing numbers of newly established institutions.

2) Globalization has become a challenge for higher education. The establishment of the 'ASEAN Community', in particular, will necessitate cross-border educational services and student/graduate mobility. Both issues require educational quality guarantees.

3) Higher education institutions need to build the confidence for community that they can develop body of knowledge and produce capable graduates to complete in national development strategies, enhancing level of competitive capability in international arenas, development of actual production in both industrial and service sectors, career development, and quality of life at the local and community levels.

4) Higher education institutions have to provide public information for the benefits of the stakeholders, i.e. students, employers, parents, government, and the citizen.

5) The society demands a higher education system that provides opportunities for stakeholder participation, transparency and accountability according to the principles of good governance.

6) The National Education Act of 1999 (2nd Amendment in 2002) requires all education institutions to establish internal quality assurance system. Moreover, the Office for National Education Standards and Quality Assessment to certify educational standards and assess institutions' quality is established.

7) The Commission on Higher Education announced the Higher Education Standards on August 7, 2006 for use as the national framework to implement standard systems for all units in higher education institutions.

8) The Ministry of Education announced Standards for Higher Education Institutions on November 12, 2008 as a mechanism for enhancing and regulating educational management standards according to 4 group higher education institutions.

9) The Ministry of Education announced the Thai Qualification Framework for Higher Education of 2009 on July 2, 2009. Later, the Commission on Higher Education announced corresponding guidelines on July 16, 2009 to ensure that education management in higher education institutions complies with the Higher Education Standards and to guarantee the quality of graduates at all levels and in all academic disciplines.

Due to the aforementioned necessities, higher education institutions together with parent organizations must develop a system and mechanisms for educational quality assurance with the following objectives:

1) To audit and assess the operation of the practice of departments, faculties or educational units or equivalent, and institutions according to the system and mechanism established by the institution by analyzing and comparing the results based on the indicators of all quality components according to predetermined criteria and standards.

2) To make the departments, faculties or educational units or equivalent, and institution aware of their status leading to the determination of method to develop quality development programs to reach the established targets and goals.

3) To make the departments, faculties or educational units or equivalent, and institution realize their strengths and weaknesses, together with suggestions received to develop their operations to enhance strengths and develop deficient areas continuously.

4) To provide public information to stakeholders to ensure that institutions could produce qualified educational products according to the established standards.

5) To provide necessary information for governing organizations to promote and enhance the higher education management in the appropriate ways.

2. National Education Act of 1999 (2nd Amendment in 2002) and Education Quality Assurance

The National Education Act of 1999 (2nd Amendment in 2002) has set forth aims and rationale for education management that emphasize quality and standards. The details are delineated in Section 6: Standards and Education Quality Assurance. This assurance is composed of an 'Internal Quality Assurance System' and an 'External Quality Assurance System.' It is supposed to be a mechanism for maintaining the quality and standards of Thai higher education institutions.

Internal quality assurance is a system and mechanism for developing, auditing, and assessing the operation of institutions according to the policies, objectives, and quality levels established by the institutions themselves or by their parent organizations. Accordingly, the internal quality assurance is regarded as one of the ongoing education management tasks of the institutions and parent organizations. Thus, this necessitates the establishment of an internal quality assurance system in each institution. Furthermore, annual internal quality assessment reports must be prepared and presented to institution councils, parent organizations, and other relevant organizations for consideration and be announced to the public in order

to develop education quality and standards and support external quality assurance.

External quality assurance is an education quality assessment which monitors and verifies the education quality and standards of institutions based on the intentions, rationales, and approaches of education management at each level. The Office for National Education and Quality Assessment (Public Organization) or ONESQA is in charge of the external quality assurance process. The National Education Act of 1999 (2nd Amendment in 2002) requires all institutions 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. Accordingly, ONESQA conducted the first round of external quality assessment from 2001 to 2005 and now the second round of assessment (2006-2010) is taking place. The third round of external quality assessment (2011-2015) will cover both the institution and faculty levels. In cases where the institutions provide off-campus programs, all the off-campus programs are subject to this assessment as well. In addition, the quality assessment must be formulated so as to correspond with the emphases chosen by the institutions themselves and the institutional categories established by the Ministerial Announcement.

The format and methods for external quality assessment must follow the criteria established by the Office for National Education Standards and Quality Assessment (Public Organization) which are based on the 5 main principles as follows:

- 1) The assessment is aimed at developing the quality of education, not at judging, finding fault with institutions, or rewarding/punishing.
- 2) The assessment must be accurate, impartial, transparent, evidence-based and require accountability.
- 3) The cooperation should be like that between supportive friends rather than directing or controlling.

- 4) All parties involved are encouraged to participate in the quality assessment process and the development of education management.
- 5) Educational freedom must be balanced with national education goals and direction as stated in the National Education Act of 1999. There must be a unity in policies while diversity in practices is maintained. Institutions may adopt specific goals and improve education quality so that the full potential of institutions and students may be realized.

3. The Second 15-Year Long Range Plan on Higher Education (2008-2022)

The Second 15-Year Long Range Plan on Higher Education (2008-2022) has introduced a development approach and plan to address the problems of Thai higher education, which is directionless, overlapping, is deficient in quality, and inefficient, by using education quality and standards assessment as the main operational mechanism. Hence, an assessment mechanism must be created.

The quality of higher education institutions is evaluated based on the missions of each institutional group. Depending on the type of institution, the missions are different in terms of the service areas and levels of education that are emphasized. Furthermore, there is a diversity of roles and obligations in social and national economic development, such as laying the groundwork for social and economic improvement, decentralizing authority to local levels, and boosting production at the rural, local, and national levels so that it is competitive in a globalized world. Each group of higher educational institutions will bring about changes in Thai higher education and make significant contributions to the country. For example, institutions will be able to fulfill their missions with excellence, become more responsive to national development strategies, positively affect the productivity, development, and performance of university

instructors, and optimize the numbers of graduates from different disciplines according to the needs of society, hence reducing unemployment. There will be a common quality assurance mechanism for each group of institutions to facilitate transfer credits and student exchange within the group. Additionally, in the long run, quality assessment should lead to an accreditation system that has the confidence of students and the public. It should provide a basis and conditions for government budget allocations, support from the private sector, and credit transfer.

As a consequence of The Second 15-Year Long Range Plan on Higher Education Plan, the Ministry of Education promulgated the Ministerial Announcement regarding the Standards of Higher Education Institutions in 2008, dividing higher education institutions into 4 groups or categories:

Group A: Community colleges refer to the institutions which focus on producing graduates below the Bachelor degree level. Community colleges offer education that matches local needs in order to provide knowledgeable manpower for the actual production sectors of communities. These institutions support basic career changes, such as laborers exiting the agricultural sector. They are learning places which provide local people with opportunities for lifelong learning, enhancing the strengths of communities and leading to sustainable development.

Group B: Institutions focusing on Bachelor degrees refer to the institutions which focus on producing graduates at the Bachelor degree level. These institutions provide the graduates with the knowledge and capabilities necessary for bringing about development and changes at the regional level. These institutions play a role in strengthening organizations, businesses, and individuals in their regions so that they can make a living. They may also provide graduate studies, especially at the Master degree level.

Group C: Specialized institutions refer to the institutions which focus on producing specialized graduates in specific fields of study such as the physical sciences, biological sciences, social sciences, and humanities as well as vocational training. The institutions may place emphasis on a) thesis

writing or research, b) production of graduates with knowledge, capabilities, skills, and proficiencies required for professional occupations, or c) both. They may play a role in developing actual production in both the industrial and service sectors. The institutions in this group may be further divided into 2 classes, i.e. class 1: institutions focusing on the graduate studies levels and class 2: institutions focusing on the Bachelor degree level.

Group D: Institutions focusing on advanced research and production of graduates at the graduate studies levels, especially the doctoral level refer to institutions which focus on producing graduates at the graduate studies levels, especially the doctoral level and on thesis writing and research, including post-doctoral research. They place emphasis on the production of graduates who will be the thought leaders of the nation. These institutions have the potential to move Thai higher education to an internationally leading position, add to the existing body of theoretical knowledge, and make novel academic discoveries.

Thus, education quality assurance must build quality assessment mechanisms that are suitable for the 4 groups of higher education institutions.

4. Quality Assurance and Educational Standards

In section 5 of the National Education Act of 1999 (2nd Amendment in 2002), regarding Educational Administration and Management, Article 34 stipulates that the Commission on Higher Education has the responsibility for devising higher education standards which are consistent with the National Economic and Social Development Plan and the National Education Standards, taking into consideration the academic freedom and excellence of higher education institutions. The Commission on Higher Education, therefore, has produced Higher Education Standards as a mechanism at the ministry, commission, and organizational unit levels for formulating development policies for higher education institutions. The National Education Standards were used as a developmental framework when formulating the Higher Education Standards. The Higher Education

Standards describe the purposes and principles of education administration among higher education institutions in Thailand. The standards take into account the diversity of the groups or categories of higher education institutions so that all institutions can utilize these standards in setting forth their own missions and operational standards.

The Higher Education Standards published in the announcement of the Ministry of Education on August 7, 2006 consist of 3 standards, which are a) the Standard for the Quality of Graduates, b) the Standard for Higher Education Administration, and c) the Standard for Establishing and Developing a Knowledge-based and Learning-based Society. These standards are related respectively to 3 National Education Standards, which are a) Standard 1: Desirable Characteristics of Thai People as Citizens and Members of the World Community, b) Standard 2: Guidelines for Education Management, and c) Standard 3: Guidelines for Creating a Learning/Knowledge-based Society. As a result, improvements in educational quality and standards can fulfill the purposes and principles for national educational management.

In addition to the Higher Education Standards, which are primary standards, the Commission on Higher Education has established the Higher Education Institution Standards that were announced in 2008 by the Ministry of Education so that development of groups of higher education institutions with varied philosophies, objectives, and missions might proceed effectively and efficiently. There are 2 main standards, i.e. a) the Standard for the Capability and Readiness of Education Management and b) the Standard for Higher Education Institutional Operation. Additionally, higher education institutions are classified into 4 groups which are Group A: Community colleges, Group B: Institutions focusing on Bachelor degrees, Group C: Specialized institutions, and Group D: Institutions focusing on advanced research and production of graduates at the graduate studies levels, especially the doctoral level. Furthermore, the Thai Qualification Framework for Higher Education of 2009 was formulated in accordance with the Higher Education Standards in order to assure the quality of graduates at all educational levels and in all disciplines. The quality of graduates at all

degree levels and in all disciplines must meet learning outcome standards that cover at least 5 areas, which are 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.

The Commission on Higher Education has also devised other standards such as Standard Criteria for Higher Education Curricula, Criteria for Asking Permission to Offer and Manage Degree Programs in the Distance Education System, Criteria for Designating Degree Titles, and Criteria and Guidelines for the Assessment of Education Management Quality of Off-Campus Programs of Higher Education Institutions. These standards assist higher education institutions in developing their academic and professional strengths as well as enhancing and raising the quality and standards of higher education management to meet international standards, and make the education management flexible and smooth at all levels. Finally, they reflect the actual quality of higher education management.

To assure that education quality is maintained at all educational levels and categories of institutions according to these standards – namely the National Education Standards, the Higher Education Standards, the Higher Education Institution Standards together with other relevant standards and criteria, and the Thai Qualification Framework for Higher Education of 2009 – it is necessary to develop a quality assurance system according to the 2010 Ministerial Regulation regarding the Systems, Criteria, and Procedures for Internal Quality Assurance. The connection between the education standards, relevant regulations and the quality assurance system is shown in Figure 1.1

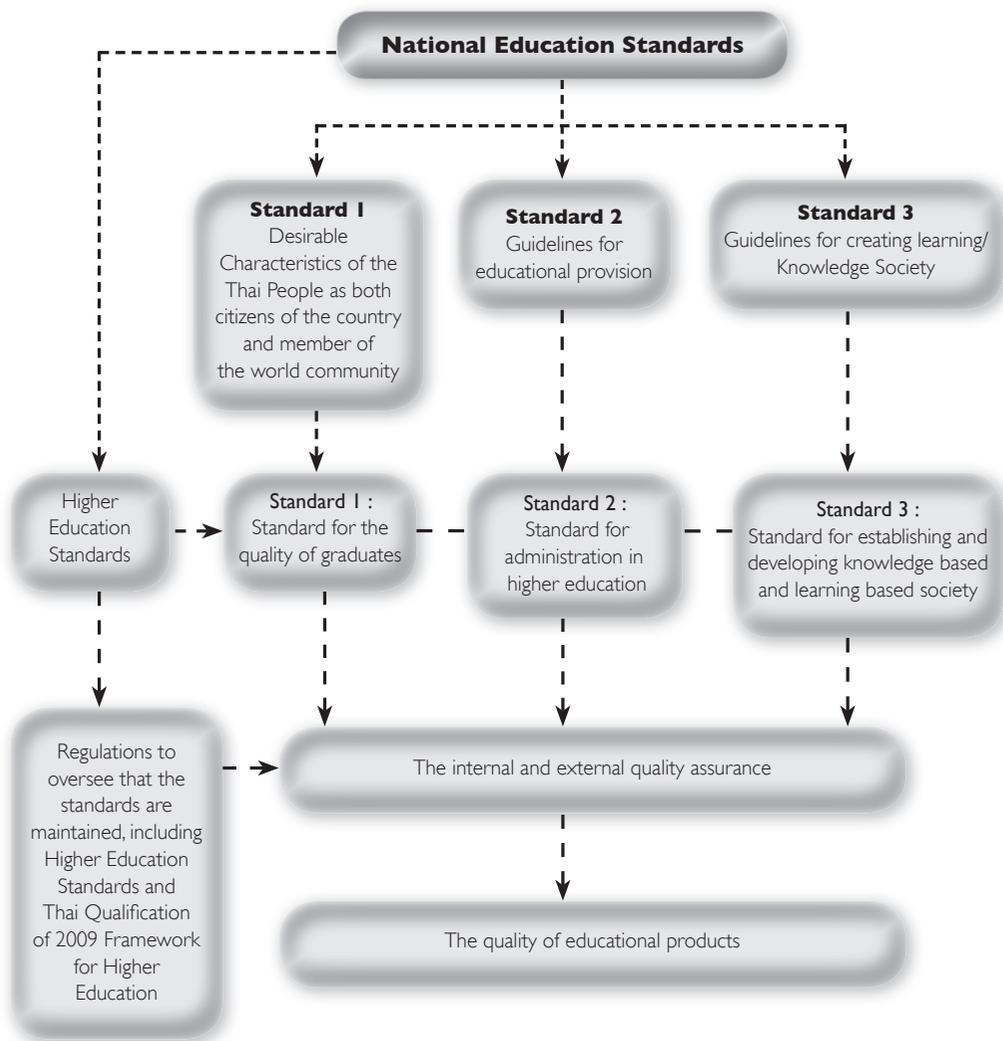


Figure I.1: The Relationship between the Education Standards, Relevant and the Quality Assurance System

5. Internal Quality Assurance

Before the announcement of the 1999 National Education Act, the Ministry of University Affairs (now known as Office of the Higher Education Commission) was well aware of the importance of quality assurance system hence stated policies and practices for higher education quality assurance since 1996 for use as the framework among higher education institutions. These policies and practices were drawn under three important pillars: Academic Freedom, Institutional Autonomy, and Accountability.

But after the National Education Act of 1999 (2nd amendment in 2002) was in effect, it identifies that the internal quality assurance should be practiced by education institutions along with relevant governing authorities. Additionally, the 2003 Administrative Regulations Act of the Ministry of Education and the Ministerial Regulation Apportioning Governmental Duties indicate that the Office of the Higher Education Commission (OHEC) has to propose policies, development plans, and standards of higher education which are in accordance with the National Economic and Social Development Plan and the National Education Plan. It also provides resources, monitors, verifies, and assesses higher educational management performance while taking into consideration the academic freedom and excellence of institutions as well as the laws establishing each institution and other relevant laws. OHEC, therefore, has a responsibility along with educational institutions to establish internal quality assurance systems with the following details.

5.1 The Ministerial Regulation regarding the Systems, Regulations, and Methods for Internal Quality Assurance

After the National Education Act 1999 was in effect, the Office of the Higher Education Commission (formerly known as the Ministry of University Affairs), as the governing authority of higher education institutions suggested a system for education quality assurance to the Cabinet for consideration. The Ministry announced the required Systems,

Regulations, and Methods for Internal Quality Assurance among Higher Education Institutions in 2002. In 2003, the announcement was supported as a ministerial regulation regarding the systems, regulations, and methods for the internal quality assurance among higher education institutions (2003). Since then it was used as the basis for the internal quality assurance practice.

Later in 2010, the Ministry of Education announced the Ministerial Regulation regarding Systems, Regulations, and Methods for Internal Quality Assurance of 2010 to replace the former Regulation. It encompasses both internal and external quality assurance at all levels of education and indicates that the Committee for Internal Quality Assurance in Higher Education has two main duties: 1) to introduce regulations or announce criteria and practices for internal quality assurance to facilitate, support and improve the internal quality assurance processes at higher education institutions; 2) to propose guidelines for ongoing improvement and development of educational quality of institutions by using the results of both internal and external quality assessments. Furthermore, the internal quality assurance system was expanded to include quality assessment, inspection, and development. Parent organizations must monitor and inspect educational quality at least once every three years, and report the results to institutions and disclose them to the public as well.

5.1.1 Regulations for the internal quality assurance

Regulations for the internal quality assurance are considered from the following issues:

1) A system and mechanism of the education quality assurance for faculties and institutions, in light of the Higher Education Standards announced by the Ministry of Education

2) The performance results of all higher education faculties and institutions that meet the predetermined quality assurance systems and mechanism.

3) The effectiveness and efficiency of the practice based on the quality assurance system and mechanism that reflects the education quality exhibited by education quality indicators.

5.1.2 Methods for the internal quality assurance system

Methods for the internal quality assurance system should follow these procedures :

1) Faculties and institutions appoint units or committee who are responsible for the quality assurance system. This committee has the responsibility to develop, administer, and follow-up on the operations of the institution. This committee also has to coordinate with external offices to assure that the education administration in all level is efficient.

2) Faculties and institutions develop an efficient system and mechanism for internal quality assurance in order to control, audit, and assess the educational quality in line with the policies and principles set by OHEC.

3) Faculties and institutions implement systems and mechanism for internal quality assurance which considering one part of the educational administration process.

4) Faculties and institutions establish a system and mechanisms to control qualities of all components used to produce graduates. These components cover (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 institute considers appropriate.

Each faculty and institution may establish an appropriate internal system to audit and assess educational quality. OHEC would promote and supports the development of the quality assurance systems in the faculty level on an ongoing basis.

5.1.3 Report for the internal quality assurance

An internal quality assurance system is considered one part of the education administration process that faculties and institutions in higher education have to perform systematically and continuously. In addition, higher education institutions have to prepare an

annual report that assess the educational quality internally and submit it to the institution council, OHEC, relevant organizations, and the public, in accordance with the intent of the National Education Act of 1999 (2nd Amendment in 2002).

5.1.4 Inspection by parent organizations

Parent organizations of higher education institutions are responsible to inspect educational quality at least once in every three years and report the results to the institutions as well as to disclose the findings to the public.

5.2 The Developing of Systems and Mechanisms for the Internal Quality Assurance

5.2.1 System for education quality assurance

Higher education institution may develop appropriate quality assurance system that is in accordance with the level of development in each institution. It may use a generally practiced quality assurance system well known in the national or international level or develop its own quality assurance system. Whatever system being used it must start with making plan, operation according to plans, assessment, and improvement in order to attain the institution's goals, as well as to ensure the public that it could produce quality educational products.

5.2.2 Standards, indicators, and criteria for the internal quality assessment

The core standards which is used as a the framework for the operations of higher education institutions is the Higher Education Standards. However, there are standards that higher education institutions must comply with such as standards criteria of higher education curriculum, standards for the external quality assessment of ONESQA and standards of the Office of Public Sector Development Commission, in case of public universities.

Indicators that the Commission on Higher Education developed from the 9 quality components which cover the 4 main missions and other supporting missions for all higher education institutions. The 9 quality components are (1) Philosophy, Commitments, Objectives, and Implementation Plans, (2) Graduate Production, (3) Student Development Activities, (4) Research, (5) Academic Services to Community, (6) Preservation of Arts and Culture, (7) Administration and Management, (8) Finance and Budgeting, and (9) Systems and Mechanisms for Quality Assurance. Higher education institutions can use these indicators for the internal assessment including input, process, and output/outcome. Besides, the indicators suggested by the Commission on Higher Education also include recommended practices and examples of development approaches.

The scoring criteria of each indicator was developed from good practice approach. Other parts are derived from the criteria set by the Commission on Higher Education or other related organizations such as ONESQA in order that the education quality assessment moves in the same direction.

5.2.3 Mechanisms for the internal quality assurance

The committee that makes policy and the top administrators are integral parts in moving the mechanism of continuous quality assurance. These administrators must be aware of the significance and determine policy of educational quality assurance to be commonly understood at all levels. They should appoint units or sub-committee to follow-up, audit, assess and stimulate the quality development continuously. An important responsibility of these sub-committees or unit is to create a quality assurance system as well as indicators and quality scoring criteria which are suitable for each institution, in addition to the indicators and criteria which the Commission on Higher Education has established. These systems to improve quality must be linked among the individual, department, faculty, and institutional levels. It is necessary to create quality manual in each level to guide the practices. Most importantly, the committee or unit should coordinate and push for efficient database and information systems.

5.2.4 Database and information systems for the internal quality assurance

An important part in the quality assurance system is the analysis and evaluation of operational results. The analyses and evaluation of the operations would be inaccurate and inefficient in the absence of realistic database and information system in the individual, department, faculty and institutional level which can be timely retrieved. The efficient information system is an important factor affecting the education quality assurance. Moreover, it affects quality in every step starting from planning, operating, auditing, and assessing, improvement and development.

6. The Relationship between the Internal Quality Assurance and the External Quality Assessment

Section 48 of the National Education Act of 1999 (2nd Amendment in 2002) identifies that “parent organizations with jurisdiction over educational institutions and the institutions internal quality assurance shall be regarded as a part of educational administration which must be a continuous process.” Section 49 of the same Act suggests about the external quality assessment that “an Office for National Education Standards and Quality Assessment shall be established as a public organization, responsible for development of criteria and methods of external evaluation, conducting evaluation of educational achievements in order to assess the quality of institutions.”

The aforementioned Sections support that the internal quality assurance system is one part of the education administration process which should be practiced all the time. There must be a control of components related to quality, an audit, a follow-up, and an assessment of performance to regularly improve quality. Hence, the internal quality assurance should monitor the inputs, process, and outputs/outcomes of the system while external quality assessment focuses on outputs/outcomes. Therefore, the

connection between the internal and the external quality assurance is necessary. The prevailing system connects these programs through an annual report that details the internal quality assessment of each institution. The relationship between the internal quality assurance and the external quality assessment is shown in Figure 1.2.

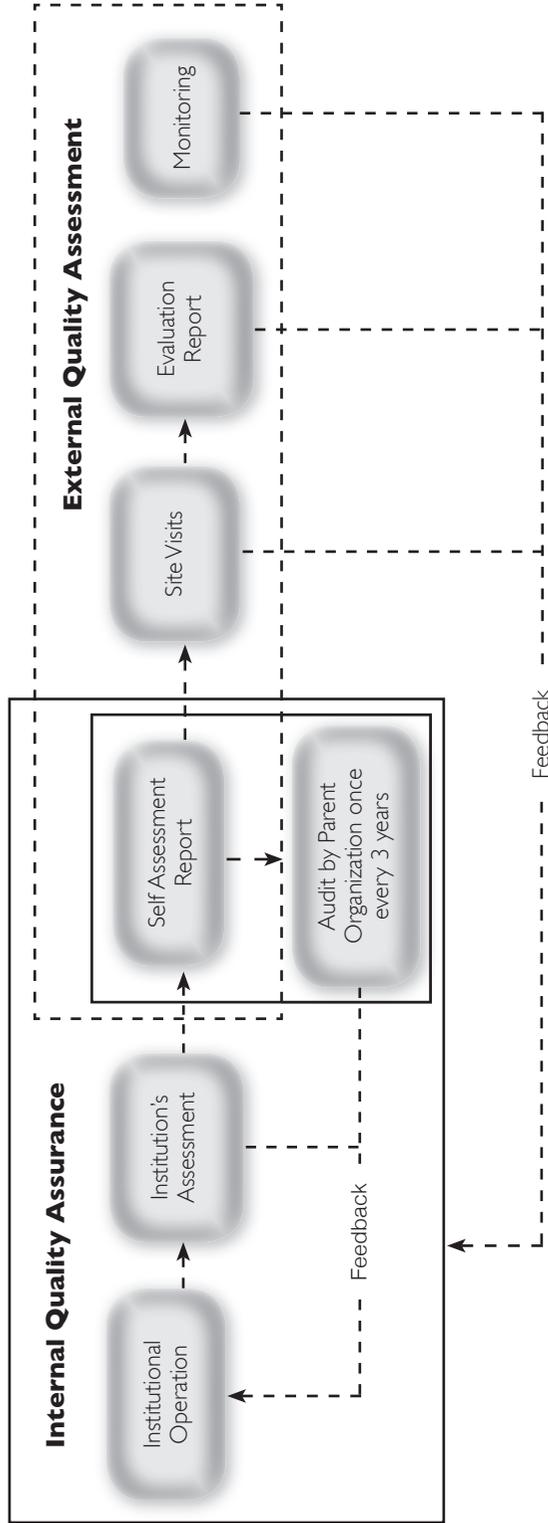


Figure 1.2: Relationship between the Internal Quality Assurance and the External Quality Assessment

As shown in Figure 1.2, after higher education institutions have finished the internal quality assurance process, they must prepare annual internal quality assessment reports. These reports contain the results of the internal quality assurance and are called Self Assessment Reports (SAR). The reports are to be presented to institution councils, parent organizations, relevant organizations, and the public. These documents are connecting links between internal quality assurance, monitoring by parent organizations, and external quality assessment by ONESQA. Therefore, higher education institutions must prepare in-depth self assessment reports which reflect realistic pictures of the institutions in regards to all quality components.

CHAPTER 2

Internal Quality Assessment Process

I. Methods in Managing the Internal Quality Assessment

The purposes of the internal quality assessment are to control, audit, and assess the operations of higher education institutions so that institutions would be aware of their real performances. This paves the way towards the establishment of directions and continuous development of quality according to the preset criteria and standards. For an effective quality assessment, institutions should set proper roles and duties which must be in accordance to the ministerial regulation regarding the systems, regulations, and methods for Internal quality assurance among higher education institution (2003).

Institutions must plan and organize the internal quality assessment before to yield the following benefits from the quality promotion of the institution:

- 1) To use the assessment results and suggestions to improve and develop the education process in the following academic year and prepare budgets within October (in case of public university).
- 2) To prepare annual report of quality assessment and submit to OHEC and release to the public within 120 days after the end of academic year.

To maintain the above-mentioned benefits, the organization of quality assessment process should be established as suggested in Table 2.1 This table can be divided into 4 steps according to the PDCA quality development system: Plan, Do, Check, and Act. The details are as follows:

P = The first activity starts from the beginning of the academic year. Use the previous year's assessment as an input for planning. In case of changes in the quality assurance system, indicators, or criteria, there must be an announcement to all units throughout the institution to realize and implement the changes before the beginning of the academic year since data collection will begin starting in June.

D = The second activity involves operating and collecting performance results starting from the beginning of the academic year or the 1st month throughout the 12th month of the academic year (June – May).

C = The third through the eighth activities are the assessments according to the quality assurance system in the department, faculty, and institutional levels during June – August of the next academic year.

A = The ninth activity is the planning and improvement according to the assessment. Use the recommendations and results from the internal quality assessment committees to plan for operation improvement.

The tenth activity in the table is the activity that all educational institutions are required by law to practice for the benefit of the institution to improve quality and for OHEC and other parent organizations to utilize the information to improve the nation's education system.

2. Procedures for the Internal Quality Assessment

2.1 Preparation of the institution before the internal assessors' visit.

A. Prepare self assessment report (SAR) that details the internal quality assessment. The format for such report for internal quality assessment based on the CHE QA Online system.

Table 2.1: The Cycle for the Organization of the Internal Quality Assessment for Higher Education Institutions

	Oct-May	Jun(start semester)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Comparison between Budget Year and Academic Year	●	Budget Year (Oct – Sep)			●		Academic Year (June–May)			Following Budget Year			●					●
Activities	Oct-May ●	Jun(start semester)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1. The institution plans for the next quality assessment, announces indicators for upcoming academic year, and distributes manual for SAR (in case of changes in indicators, methods, and internal quality assessment table.)	●	●																
2. The institution collects 12 months data on the indicators announced in the CHE QA Online system. (with data collection consulting teams for individuals/ units/ faculties and consider the appropriate improvements for operations)		●											●					

Activities	Oct-May	Jun(start semester)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
3. Departments or equivalent units prepare SAR and prepare for assessment and appoint assessment committee																		
4. The assessment of the department or equivalent level.																		
5. The faculty or equivalent units uses the assessment results of departments to prepare SAR and prepare for the assessment and appoints assessment committee.																		
6. The assessment of the faculty or equivalent level using theCHE QA Online system.																		
7. The institution uses the assessment results of faculties to prepare SAR reports on the CHE QA Online system, and prepares forinstitutional level assessment, and appoint assessment committee.																		
8. The assessment at the institutional level using theCHE QA Online system. The assessment results are reported to the institution council in order to prepare a development plan for the institution in the next academic year.																		

Activities	Oct-May	Jun(start semester)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
9. The administrators use recommendations and results from the internal quality assessment committees together with the institution council) to plan for the annual operation improvement and prepare budget for the following year or propose mid-year budget.																		
10. Submit annual report of internal quality assessment (including SAR and internal quality assessment at the faculty or equivalent units and institutional levels) to OHEC via the CHE QA Online system and the parent organization (within 120 days from the end of the academic year.)																		

(*) = the beginning of new academic year

OHEC has developed a database system for quality assurance called CHE QA Online as the central database for the benefit of policymaking and higher education quality development. Furthermore, the education quality assurance process of institutions is facilitated by online registration of the common data set and supporting documents, SAR, and assessment results of the quality assessment committees. The self assessment report (SAR) can also be prepared on the electronic database system as an e-SAR. Additionally, the information is readily accessible to the public in order to protect consumers. OHEC has a policy for all higher education institutions under its jurisdiction to use this database for the internal quality assurance process, submit self assessment report (SAR) via the online system, and present the information to the public as required by law.

B. Prepare refereed documents for each quality component

1) Refereed document should contain information of the same period as the self assessment report. Details in the documents should match the names, number, and details in the self assessment report.

2) The presentation of documents during the assessment visit can be performed by two methods. The first is to keep the documents in their usual places and provide the specific names or numbers of documents, and individuals or units where they may be retrieved. The second method is to pool the documents together in the place where the assessors are working and arrange them in an easy-to-retrieve manner. The second method is more popular because of the convenience of retrieving and cross-checking of documents at a single session.

Currently, documents and supporting evidence related to each indicator and quality component can be uploaded or linked via the CHE QA Online system. The system makes it easier for assessment committees to search for relevant data and reduces the document storage task of the institutions.

2.1.2 Personnel preparation

A. The preparation of all personnel should cover the following issues:

1) To clarify the understanding in quality assessment issues such as the meaning of quality assessment, its importance to educational development, and steps in quality assessment process.

2) Emphasize the need for cooperation in answering or interviewing and to provide only the real information from operations and results.

3) Provide opportunity for discussion, questions, and reflection so the personnel would have clear and correct understanding in all issues regarding the operations of all units.

4) Make the personnel realize that the quality assurance is a regular and continuous mission of everybody.

B. Prepare a group of personnel so that they can coordinate during the visits. There should be 1 – 3 people to coordinate between the assessors and relevant individuals or units. The coordinators should prepare as follows:

1) Seek thorough understanding in all activities of the assessment.

2) Seek understanding in the operation of the faculty and institution so as to provide information to the assessors. They also need to know the individuals or units to contact when the assessors require information that do not have.

3) Possess name list, locations, and telephone numbers of people who shall be invited to provide information to the assessors.

4) Coordinate with the internal and external informants beforehand. Arrange for the timing, locations, and interviewers.

5) Able to facilitate the assessors and prompt coordination to offer services.

2.1.3 Location preparation for internal assessors

A. Office of the assessors

1) Prepare an office and tables to place large amount of document. The office should be free from interruption during the work for the privacy of the assessors.

2) Prepare computers and stationary in the office together with all other necessary equipment for the assessors.

3) Prepare telephone and important numbers in the office or nearby.

4) The office should be close to the areas to serve snack or lunch and other infrastructure.

5) Coordinate with assessors for any other requirements

B. Prepare separate and suitable room(s) for interviewing administrator, faculty, personnel, students, and others.

2.1.4 The appointment of internal committee for assessment (assessors) and coordination

A. The higher education institution should prepare appointment orders and inform the internal assessment committees. The guidelines for appointing committees are as follows:

1) Committees for the department or equivalent unit

- There should be at least 3 members in each committee depending on the size of the department or equivalent unit.

- There should be at least one external assessor from outside the department or equivalent unit who has passed the assessor training program offered by OHEC. In cases where the external assessor is knowledgeable and experienced and capable of providing very useful recommendations for the department or equivalent unit, the assessor may not have to receive assessor training from the OHEC. For internal assessors from inside the department or equivalent unit, they must have passed the assessor training program offered by OHEC or training arranged by the institution that uses the OHEC's curriculum.

- The chairman of the committee should not be a member of the assessed department. These chairmen should pass the assessor training program offered by OHEC or institution that uses OHEC's curriculum.

2) *Committees for the faculty or equivalent unit*

- There should be at least 3 members in each committee depending on the size of the faculty or equivalent unit.

- There should be at least one external assessor from outside the institution who has passed the assessor training program offered by OHEC. In case that the external assessor is knowledgeable and experienced and capable of providing very useful recommendations for the faculty or equivalent unit, the assessor may not have to receive the assessor training of OHEC. For the internal assessors from inside the institution, they must have passed the assessor training program offered by OHEC or training arranged by the institution that uses the OHEC's curriculum.

- The chairman of the committee may be an assessor either from inside or outside the institution. In case of a chairman from inside the institution, the person should come from the other faculty. The chairman must have his or her name on the OHEC's list of internal quality assessment chairman.

3) *Committee for the institution level*

- There should be at least 5 members in each committee depending on the size of the institution.

- At least 50% of the committee members must be external assessors from outside the institution who have passed the assessor training program offered by OHEC. For the internal assessors from inside the institution, they should pass the assessor training program offered by OHEC or the institution that uses the OHEC's curriculum.

- The chairman of the committee should come from outside the institution who has his or her name on The OHEC's list of internal quality assessment chairman.

B. The institution informs the committee members that they have been appointed to perform the internal quality assessment at the faculty level or equivalent and institutional level via the CHE QA Online system and provides each of them with usernames and passwords at least 2 weeks before the visit so that they have time to study the self assessment reports in advance. For the committee chair person for the institution, the institution must request OHEC to send an ID code to the chairperson who is responsible for verifying the common data set and assessment results before submitting the quality assessment report to the system.

In addition, the institution must inform committee members of the names, telephone numbers, and e-mail addresses of the coordinators between the committee and the institution for the faculties or equivalent units.

C. Coordinate with the chairpersons or representatives of the quality assurance committees to make plans for internal quality assessments such as visitation schedules, additional information that assessors request before visits, and other appointments.

2.2 The process for the institutions during the visit for internal assessment

1) Provide opportunity for all personnel at all levels to hear the assessors' explanation of objectives and methods for assessment on the first day of visit.

2) All personnel should work normally during the visit but prepared for the visit or answer questions or be interviewed by the assessors.

3) Provide a coordinator throughout the visit to coordinate with individual or unit that the assessors need information from and to lead the internal visit as well as other facilitation.

4) In case the assessors work overtime, some coordinators should remain facilitation.

5) All personnel should have the opportunity to listen to feedback from assessors after the visit and open forum for questions or comments.

2.3 Procedures for the institutions after the internal assessment

1) Departmental, faculty, and institution administrators together with relevant personnel should bring the assessment results to meetings or conferences at various levels to make plans for objective performance development or improvements. This might be operation plans to correct weaknesses and enhance strengths including the activities to perform, timing of activities, budgets for each activity, and responsible individuals to enable continuous follow-up of the development.

2) Plan for activity to enhance morale by illustrating that the institution admires the success and realizes that it is the result from the contributions of everybody.

3) Departments, faculty or equivalent units, and institution may provide feedback to the assessors for the development of assessors.

CHAPTER 3

Indicators and Criteria for the Internal Quality Assessment by Quality Component



I. Indicators and Criteria Development Approaches for the Internal Quality Assessment of the Commission on Higher Education Quality Assurance

1.1 Rationale

The development of the indicators for quality assurance in higher education institutions follows these 6 principles:

1) These indicators should cover all areas of quality components which cover all 4 main missions and supporting missions of higher education. They comply with the criteria stated in the Ministerial Regulation regarding the Systems, Criteria, and Procedures for Internal Quality Assurance (2010).

2) The indicators should reflect the objectives of the National Education Act of 1999 (2nd Amendment in 2002), The Second 15-Year Long Range Plan on Higher Education (2008-2022), the National Education Standards, Higher Education Standards, Higher Education Institution Standards, Thai Qualification Framework for Higher Education of 2009, and other relevant standards. They must conform to ONESQA's indicators for external quality assessment. An important consideration is not to create duplication of tasks for higher education institutions.

3) The indicators assess input, process, and output/outcome factors. In regards to the output/outcome indicators, some are developed by OHEC and some are devised by ONESQA for external quality assessment with an aim to create coherence and unity in the Thai higher education quality assurance system, and to support external assessment

by ONESQA.

4) The indicators should balance the 4 administrative perspectives i.e. students and stakeholders; internal processes; finance; human resources, learning and innovation.

5) The numbers of indicators and criteria for each indicator developed serves as basic requirements only. Each institution may add other indicators and criteria according to specific circumstance for the development of the institution.

6) Indicators and criteria developed include both generally applicable indicators to all institutions and specific indicators for unique institutions that emphasize on different institution groups, i.e. Group B: Institutions focusing on Bachelor degrees, Group C-1: Specialized institutions focusing on graduate studies, Group C-2: Specialized institutions focusing on Bachelor degrees, and Group D: Institutions focusing on advanced research and production of graduates at the graduate studies levels, especially the doctoral level, according to the definitions specified by the Ministerial Announcement regarding the Standards for Higher Education Institutions.

1.2 Methods for Indicators and Criteria Development

1.2.1 Examination relevant laws and documents, including:

1) National Education Act 1999 (2nd Amendment in 2002)

2) Ministerial regulation regarding the systems regulation and method for internal quality assurance (2010)

3) The Second 15-Year Long Range Plan on Higher Education (2008-2022), the Office of the Higher Education Commission

4) National Education Standards of 2004, the Office of the Education Council

5) Higher Education Standards of 2006, the Office of the Higher Education Commission

6) Higher Education Institution Standards of 2008, the Office of the Higher Education Commission

7) Thai Qualification Framework for Higher Education of 2009, the Office of the Higher Education Commission

8) Standard Criteria of Higher Education Curriculum of 2005, the Office of the Higher Education Commission

9) Standards and Indicators for external assessment in Higher Education of the Office for National Education Standards and Quality Assessment (Public Organization)

1.2.2 Analyzing and compiling data from relevant documents mentioned in item 9.2.1 to develop indicators categorized by dimension of the system which are input, process, output and outcome. The 9 quality components were developed to cover all the missions of higher education institutions, as well as to cover the higher education standards, and enabled the measurement of quality in all dimensions.

1.2.3 Assign the indicators for the internal quality assurance in higher education as input, process, and output/outcome. The indicators must cover all of the quality components, all the Higher Education Standards, and all the Higher Education Institution Standards.

1.2.4 Monitoring the balancing of these indicators in 4 management perspectives, namely students and stakeholders; internal processes; finance; human resources, learning and innovation. Ensure a balance between the indicators from the 4 administrative perspectives, namely students and stakeholders, internal processes, finance, and human resources, learning, and innovation.

1.2.5 Classify the indicators into 2 types, i.e. qualitative indicators and quantitative indicators, as follows:

1) For qualitative indicators, the criteria are listed one by one. The evaluation scheme is divided into 5 levels, from 1 to 5. For the evaluation, the number of criteria satisfied by the performance is counted and a score is given accordingly. In case of non-performance or performance below the level of 1 point, a score of 0 is given.

2) The quantitative indicators are scored as percentages or average values. The evaluation range is continuously distributed from 1 to 5 (with decimals). To convert the performance results for an indicator

(in percentage or average value form), the score is calculated to three decimal points and rounded to two decimal points, with a given standard value assigned for a score of 5.

Example 1: Let 100 percent be equal to a score of 5. The performance based on an indicator is 75.51 percent,

$$\text{Score} = \frac{75.51}{100} \times 5 = 3.78$$

Example 2: Let 85 percent equal a score of 5. The performance based on an indicator is 34.62 percent,

$$\text{Score} = \frac{34.62}{85} \times 5 = 2.04$$

Example 3: Let the average value of the research fund per faculty/researcher of 200,000 Baht equal a score of 5. The performance is 152,500.35 Baht per person,

$$\text{Score} = \frac{152,500.35}{200,000} \times 5 = 3.81$$

Example 4: Let 90 percent equal a score of 5. The performance based on an indicator is 92.08 percent,

$$\text{Score} = \frac{92.08}{90} \times 5 = 5$$

Instructions for calculating the scores at the faculty levels are as follows

Formulae for calculating final scores from percentages or average values
Instructions for calculating the scores at the faculty levels are as follows

1) Performance equal to or higher than the percentage or average value assigned for a score of 5 is set at 5.

2) Performance lower than the percentage or average value assigned for a score of 5 is calculated by

$$\text{Score} = \frac{\text{Percentage or average value of performance} \times 5}{\text{Percentage or average value for a score of 5 for each indicator}}$$

Rules for decimals

Use 2 decimal places for the calculation of percentages, average values, and scores. The third decimal place is rounded up if it is 5 or higher and rounded down, otherwise. For example,

72.364 becomes 72.36
3.975 becomes 3.98

1.2.6 Assessment is graded 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 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

2. Other Instructions on How to Apply the Indicators to the Internal Quality Assessment

1) For internal quality assessment at the institutional level, all higher education institutions must use all the quality indicators.

2) For internal quality assessment at the level of the department, faculty or equivalent, or any other unit which provides teaching programs, let

the institution consider which indicators are applicable to the corresponding contexts, structures, and administrative systems. The descriptions of the indicators and criteria may be adjusted to suit the levels of units being assessed. For example, Indicator 7.1: the assessment of the institution council and administrators may be modified to become the assessment of the department committee and administrators.

3) The assessment of all indicators follows the cycle of the academic year, except for Indicator 1.1, Indicator 4.3, and Indicator 8.1, for which institutions may opt for assessment which follows the fiscal year. In that case, the chosen format must be clearly specified and the fiscal year assessment must be performed on an ongoing basis. Institutions must use the fiscal year corresponding to the academic year for which the assessment is conducted. For ONESQA indicators, assessment follows the yearly cycle adopted by ONESQA.

4) A full-time instructor is a government official, employee, or personnel member who has an employment contract with a higher education institution for a full academic year and is responsible for the main missions of the institution.

A full-time researcher is a government official, employee, or personnel member who has an employment contract with a higher education institution for a full academic year and holds a position as a research official or researcher.

The number of full-time instructors and full-time researchers is counted based on the following periods of employment:

9 – 12 months	counted as 1 person
6 months or longer but shorter than 9 months	counted as 0.5 person
Shorter than 6 months	not counted

3. Glossary of Relevant Terms

Student-centred learning process is education management which places the highest importance on the learners. The main objective of this education management process is to encourage learners to increase and develop their knowledge by themselves, or it may include training and practice in an actual working environment. The learners should be able to relate and apply the acquired knowledge to their real social life. The learning process provides learners with activities and processes which let them think, analyze, synthesize, assess, and use their creativity.

In addition, the capabilities of the learners must be naturally developed to their full potential. This may be reflected from the fact that the learners can choose to take courses or carry out the projects that they are interested in.

A wide variety of higher education learning management practices which emphasize the importance of learners and develop knowledge, professional skills, life skills, and social skills may be found in Thai education circles, for example¹ (See)

- 1) Problem-based Learning, PBL
- 2) Individual Study
- 3) Constructivism
- 4) Self-Study
- 5) Work-based Learning
- 6) Research-based Learning
- 7) Crystal-based Approach

Integration is harmonious intermixing of plans, processes, information, allocation, resources, actions, results, and analysis. It supports the organization-wide goals of institutions. Effective integration is more than just alignment. The operation and performance of each unit in a management system must be connected in perfect unison.

Research publication at a national academic conference is the presentation of a research article at an academic conference and the

publication of the full paper in the proceedings. At least 25 percent of the editorial department or conference committee must be comprised of professors, or experts holding a doctorate degree, or experts with recognized work in the field, who are not working for the host institution. There must be article assessors who are experts in the field and do not work for the same institutions as the article's author.

Research publication at an international academic conference is the presentation of a research article at an academic conference and the publication of the full paper in the proceedings. At least 25 percent of the editorial department or conference committee must be comprised of professors, or experts holding doctoral degrees, or experts with recognized work in the field who are working in foreign countries. There must be article assessors who are experts in the field and are from foreign countries.

Academic services to society Community are activities or projects which provide services to society outside of an institution or services which are provided at the institution that serve outside clients.

Granting decision-making authority is the giving of decision rights and responsibility to the personnel who actually carry out tasks who have a knowledge and understanding of the work, which leads to operational effectiveness and efficiency.

Research is a methodically organized procedure for finding the answer to a question, discovering new facts, or creating an invention, which is the result of a systematic process of study, discovery, or experimentation, with analysis, interpretation, and the drawing of conclusions.

Creative work is acknowledged academic work (not necessarily research) which is based on study or investigation that expresses an artistic or musical notion.

Code of conduct for researchers² (See) is a set of regulations that outlines proper general practices for researchers. It helps assure that the conduct of research is based on ethics and proper academic principles,

and that the standards of inquiry study are respectable as follows:

- 1) Researchers must be honest, academically and managerially.
- 2) Researchers must realize their obligations to the organizations that support the research and parent organizations according to agreed-upon contracts.
- 3) Researchers must have basic knowledge in their fields of research.
- 4) Researchers must take responsibility for the subjects/objects that are studied, whether living or non-living.
- 5) Researchers must respect the dignity and rights of human subjects.
- 6) Researchers must have freedom of thought without bias at every step of the research process.
- 7) Researchers should utilize research results appropriately.
- 8) Researchers should respect the academic views of others.
- 9) Researchers should be responsible to all levels of society.

Code of conduct for instructors and support personnel is a set of proper behavior for instructors and support personnel. It helps maintain and reinforce the honor, reputation, and status of the instructors and support personnel according to the directive of the university council. The Committee for Civil Service in Higher Education Institutions announcement entitled Desirable Code of Conduct Standards in Higher Education Institutions may be used to provide guidelines, and the code must be consistent with the following 6 principles: 1) firmly adhere to what is right; 2) be honest and responsible; 3) work with transparency and accountability; 4) work without partiality or bias; 5) strive to accomplish one's work; 6) do not abuse authority over students. The code must also cover these 10 points regarding conduct 1) code of conduct towards oneself; 2) code of conduct towards one's profession; 3) code of conduct towards work; 4) code of conduct towards the institution; 5) code of conduct towards superiors; 6) code of conduct towards subordinates; 7) code of conduct towards colleagues; 8) code of conduct towards students and service clients; 9) code of conduct towards the public; 10) code of conduct towards society.

Full-time researcher is a government official, employee, or a personnel member who has an employment contract with a higher education institution for a full academic year and holds a position as a research official or researcher.

Full time equivalent student (FTES) is a student who enrolls in courses according to the standard number of required credits as shown below:

- Semester system
 - Bachelor student: 36 credits per academic year (18 credits per semester)
 - Graduate student, both normal and special programs: 24 credits per academic year (12 credits per semester)
- Trimester system
 - Bachelor student: 45 credits per academic year (15 credits per trimester)
 - Graduate student: 30 credits per academic year (10 credits per trimester)

Steps for calculating an FTES value are as follows:

1) Calculate Student Credit Hours (SCH) which is the summation of the product of the number of students who enroll and credits for all courses offered during the entire academic year. The data must be compiled after all students have finished the enrolment process (after the end of the Add-Drop period). The formula is

$$\text{SCH} = \sum n_i c_i$$

where n_i = number of students enrolled in course i
 C_i = number of credits of course i

2) Calculate FTES from the formula

$$\text{FTES} = \frac{\text{SCH}}{\text{Standard number of annual credits required for a certain degree program}}$$

Normal program student is a student who studies during or outside official work hours and the institution regards the program as part of instructors' teaching work load without extra payment.

Special program student is a student who studies during or outside official work hours and the institution does not regard the program as part of instructors' teaching work load and/or provides the instructors with extra payment.

Best practices are methods or processes of operation which lead an organization to success or excellence according to its goals. The practices are accepted by academia or a relevant professional circle. There is clear evidence of success and a documented summary of the operational methods or processes as well as knowledge and experience. These documents are distributed among the internal units or to external organizations for utilization

Stakeholders are groups of people who are affected or may be affected by the operation and success of an institution. Examples of important stakeholder groups are students, parents, parents' associations, workers, official and unofficial partners, committees that supervise various aspects of an institution's work, alumni, employers, other education institutions, organizations responsible for monitoring rules and regulations, organizations granting subsidies, taxpayers, policymakers, suppliers, as well as local communities and academic or professional circles.

Strategic plan is a long-term plan, generally for 5 years, which sets the direction of the development of an institution. The strategic plan is comprised of a vision, missions, goals, objectives, SWOT analysis, and strategies of the institution. It should cover all the tasks of the institution and specify the key performance indicators for each strategy as well as target values in order to measure the success rate of strategy implementation. The strategic plan is used to formulate implementation plans or annual action/operation plans.

Operation plan is a short-term plan with the implementation timeframe of 1 year. It is a transformation of a strategic plan into a practical plan in order to practically proceed according to the strategies. An operation plan clearly describes the projects or activities planned to be undertaken in that year, key performance indicators of the projects

or activities, target values for the indicators, main persons in charge or project leaders, budgets, operational details, and required resources.

System and Mechanism

System is a set of operative steps which are clearly arranged in order to attain a certain goal. System must be generally known and accessible in the form of hard copy documents, electronic media, or another format. The elements of a system are inputs, processes, outputs, and feedback, and these elements are interconnected.

Mechanisms are any components that propel or allow the system to function, such as resource, organization management, and units or individuals acting as operators.

Information system is a system which uses the resources of people, hardware, software, data, and networks to perform collecting, processing, storing, analyzing data, and disseminating information to support operation management and decision making. The information systems in an organization may have many types, and each type may contain many subsystems to meet the requirements of specific tasks.

National journal is an academic journal recognized by OHEC as a national journal. The journal's name must appear on the list published by the office or in the Thaijournal Citation Index Centre (TCI) database

International journal is an academic journal that appears in an international database which is widely recognized in a field of study such as the Web of Science (Science Citation Index Expand, Social Sciences Citation Index, Art and Humanities Citation Index), Scopus; or a journal recognized by OHEC as an international journal, whose name appears on the list published by the Office.

National unit or organization is a government organization at the level of a department or its equivalent or higher; a public enterprise, public organization, or national-level public or private central organization.

Good governance³ (See) is administration, management, control, or supervision which is conducted with morality. It can also refer to good

management which is applicable to both public and private sectors. The morals used for administration have a very broad meaning. They are not merely limited to religious principles but, in fact, they encompass scruples, virtues, ethics, and righteousness that all conscientious humans should adopt, such as transparency, accountability, and no interference by external organizations.

Good governance principles which are suitable for implementation in the public sector have 10 elements as follows⁴ (See):

1) Effectiveness means the performance attains the objectives and goals of the implementation plan within the allocated budget. It is comparable to the performance of other government units with similar tasks and first-rate operational results at the national level. The implementation must follow a clear strategic direction and goals, and the operational procedures and working system must have good standards. Furthermore, the follow-up assessment and development/improvement processes must be continuously and systematically carried out.

2) Efficiency means administration is carried out in accordance with good supervisory guidelines. The operational procedures are well designed by the use of proper managerial techniques and tools. As a result, the organization is able to utilize resources such as costs, labor, and time to develop operational capabilities and create maximum benefits so that the needs of the public and stakeholders are fulfilled.

3) Responsiveness means services are successfully provided within a specified timeframe, which builds confidence, trust and reliability. In addition, the services meet the expectations and needs of a wide variety of people, clients, and stakeholders.

4) Accountability is the taking of responsibility for duties and performance in order to achieve the set goals. The level of accountability should satisfy public expectations, and it also includes responsibility for public problems.

5) Transparency refers to a process whereby information is candidly disclosed, any doubts raised are clearly explained, and all information which is not classified by law is freely accessible. The people are able to learn about every step of activities and procedures and verify them.

6) Participation is the process by which government officials, the people, and all stakeholder groups as shareholders in development have an opportunity to be informed, learn about and understand relevant issues, share their opinions, present problems and important related issues, seek solutions, make decisions, and take part in the development process in a cooperative manner.

7) Decentralization is the transfer of decision-making authority, resources, and duties from the central government sector to other administrative units (local administration) and the public sector so that they can carry out administrative duties with reasonable freedom. It also includes the transfer of power and responsibility for decision-making and implementation to individuals. It aims to satisfy service clients and stakeholders, improve processes, and increase productivity in order to produce good performance.

8) Rule of law refers to the enforcement of laws, rules, and regulations with morality, without bias or favoritism, and with consideration of the rights and freedom of stakeholders.

9) Equity is the equal receipt of treatment and services without discrimination in regards to gender, birthplace, race, language, age, disability, physical or health condition, personal, social or economic status, religious belief, education, training, etc.

10) Consensus oriented means a common agreement is reached within the group of stakeholders involved via a discussion process between those who gain and lose benefits. For important issues, there must be no serious objections from those who are directly affected. Nevertheless, consensus does not necessarily mean unanimity.

Vocational curriculum is all of the courses and experience which learners must take in order to be certified by a legal professional council or organization.

Full-time instructor is a government official, employee, or a personnel member who has an employment contract with a higher education institution for a full academic year and is responsible for the main missions of the institution.

4. Quality Components, Indicators, and Scoring Criteria

● Component I: Philosophy, Commitments, Objectives, and Implementation Plans

Rationale

Since the philosophy, commitments, and emphases of every higher education institution are different, each institution has a responsibility to clearly formulate a vision, strategic plans, and operation plans which correspond to its philosophy, commitments, laws, and emphases. The vision and plans must meet the obligations of higher education institutions according to the Principles of Higher Education, National Education Standards, Higher Education Standards, professional standards (if applicable), as well as The Second 15-Year Long Range Plan Higher Education (2008-2022) and global changes.

As part of the process of devising the vision and strategic plans, institution councils should provide an opportunity for the participation of all member groups in the institution. Then the vision and strategic plans that are adopted should be communicated to the faculty, staff, students and other stakeholders such as parents, communities, service clients, and society in general.

Relevant standards and documents

1. National Education Act of 1999 (2nd Amendment in 2002), the Office of the Education Council
2. Public and Private Higher Education Institution Act
3. The Second 15-Year Long Range Plan on Higher Education (2008-2022), the Office of the Higher Education Commission
4. National Education Standards of 2004, the Office of the Education Council
5. Higher Education Standards of 2006, the Office of the Higher Education Commission
6. Higher Education Institution Standards of 2008, the Office of the Higher Education Commission
7. Thai Qualification Framework for Higher Education of 2009 (TQF: HEd.), the Office of the Higher Education Commission
8. Principles of Higher Education

Indicator: I indicator

- 1.1 Plan development process

Indicator 1.1 : Plan development process

Indicator type : Process

Indicator description : Every higher education institution has the main missions of teaching and learning, research, academic service to society, and preservation of arts and culture. To carry out these main missions, a higher education institution needs to set developmental and operational directions so that the implementation is in harmony with its identity or emphases. This also guarantees the high quality, internationally accepted standards, and sustainable growth of its operations. Consequently, the institution must define its vision, missions, as well as its strategic and implementation plans, which serve as operational guidelines.

In the development of strategic plans, the institution must consider not only its own identity or emphases but also the Principles of Higher Education, Framework for Long-term Higher Education Plan, National

Education Standards, Higher Education Standards, relevant professional standards, various national strategies including the direction of national development as stated in the National Economic and Social Development Plan, and global changes in order to assure that institutional operations are of high quality, widely accepted, and truly serve society.

Standard criteria:

1. The institution formulates strategic plan according to its institution council policies with the participation of its personnel. This plan must be approved by the institution council and comply with its philosophy or commitments, the Institution's Act, as well as the emphases of the institution group, The Second 15-Year Long Range Plan Higher Education (2008-2022), and Higher Education Development Plan, 10th ed. (2008-2011).

2. The institutional strategic plans are transmitted to all internal organizational units.

3. The strategic plans converted into operation plans that cover all 4 missions, i.e. teaching and learning, research, academic service to society, and preservation of arts and culture.

4. The institution sets indicators for the strategic and operation plan together with a target value for each indicator so that the success of implementation based on the strategic plan and operation plan can be measured.

5. All 4 of the main missions are fulfilled by following the operation plans.

6. Operational results are monitored according to the operation plan indicators at least twice a year, and the results are reported to the administrators for consideration.

7. Operational results are assessed according to the strategic plan indicators at least once a year, and the results are reported to the administrators and institution council for consideration.

8. The comments and suggestions of the institution council are used to improve the strategic plans and operation plans.

Scoring criteria :

1	2	3	4	5
1 item	2 or 3 items	4 or 5 items	6 or 7 items	8 items

● Component 2: Graduate Production

Rationale

The most important mission of higher education institutions is graduate production or, in other words, the provision of teaching and learning activities which impart academic and professional skills and other qualifications specified by curricula to learners. Currently, teaching and learning uses a student-centred learning approach. Hence, this mission is concerned with management of the curriculum and instructional process. This starts with identifying input factors that meet the predetermined standards, having a sufficient number of qualified faculty members according to curricular standards, and having a process to manage teaching and learning that relies on the cooperation of all parties, both internal and external to the institution.

Therefore, it is necessary to devise a system and mechanisms to control the quality of relevant elements that are used in graduate production, i.e. (a) curricula in various academic disciplines, (b) faculty members and the faculty development system, (c) education media and teaching techniques, (d) library and other learning sources, (e) educational equipment, (f) learning environment and educational services, (g) measurement of educational outcomes and student achievements, and (h) other components indicated in the Ministerial Regulation regarding the Systems, Criteria, and Procedures for Education Quality Assurance of 2010 that each institute considers appropriate.

Relevant standards and documents

1. National Education Act of 1999 (2nd Amendment in 2002), the Office of the Education Council
2. The Second 15-Year Long Range Plan on Higher Education Plan (2008-2022), the Office of the Higher Education Commission
3. National Education Standards of 2004, the Office of the Education Council
4. Higher Education Standards of 2006, the Office of the Higher Education Commission

5. Higher Education Institution Standards of 2008, the Office of the Higher Education Commission

6. ก.พ.อ. The Committee on Civil Service of Higher Education Announcement regarding Desirable Code of Conduct Standards in Higher Education Institutions of 2008

7. Thai Qualification Framework for Higher Education of 2009 (TQF: HEd.), the Office of the Higher Education Commission

8. Ministerial Regulation regarding the Systems, Criteria, and Procedures for Education Quality Assurance of 2010, Ministry of Education

9. Practical Guidelines for the Thai Qualification Framework for Higher Education of 2009, the Office of the Higher Education Commission

10. Standard Criteria for Higher Education Curriculum of 2005, the Office of the Higher Education Commission

11. Standards and Indicators for the 3rd External Assessment in Higher Education of 2010, the Office for National Education Standards and Quality Assessment (Public Organization) (ONESQA)

Indicators: 8 indicators

2.1 System and mechanisms for curriculum development and administration

2.2 Full-time instructors holding doctoral degrees

2.3 Full-time instructors holding academic titles

2.4 System for faculty and supporting personnel development

2.5 Library, educational equipment, and learning environment

2.6 System and mechanisms for teaching and learning management

2.7 System and mechanisms for developing educational achievements according to graduates' qualifications

2.8 Success rate in reinforcing moral and ethical character traits in students

Indicator 2.1 : System and mechanism for curriculum development and administration

Indicator type : Process

Indicator description : A higher education institution has a responsibility to develop curricula according to its philosophy, commitments, vision, missions, and capabilities as well as the academic and professional demands of society. Every curriculum must be assessed regularly based on its quality assurance criteria. The institution must devise an effective system and mechanisms for curricular management, and curricula should be updated in order to keep up with current changes.

General standard criteria:

1. The institution establishes a system and mechanisms for launching new programs and the revised program according to the guidelines of the Commission on Higher Education, and operates in accordance with the system.

2. The institution establishes a system and mechanisms for discontinuing programs according to the guidelines of the Commission on Higher Education, and operates in accordance with the system.

3. All of the institution's curricula comply with the Standard Criteria for Higher Education Curricula and the Thai Qualification Framework for Higher Education of 2009. (For operations to comply with the Thai Qualification Framework for Higher Education of 2009, assessment based on the 'performance indicators and degree standards announced for programs in each academic discipline must be conducted to assure the quality of the curriculum and instruction.' In case that there is no announcement yet regarding degree standards for a certain discipline yet, the common assessment indicators shown in Appendix A are used instead.) For professional programs, the curricula must be also approved by a related professional council or organization. (Note: For existing or revised curricula which are not yet operated in accordance with the Thai Qualification Framework for Higher Education of 2009 before the 2012 academic year, they must comply with the Standard Criteria of Higher Education Curriculum of 2005.)

4. The institution appoints a committee that is responsible for monitoring the implementation of items 1, 2 and 3 throughout the time that the program is offered. Every curriculum must be assessed at least as frequently as indicated by the Standard Criteria for Higher Education Curriculum. For curricular programs that follow the Thai Qualification Framework for Higher Education of 2009, the operations must be supervised in accordance with the indicators specified in item 3, all curricula must pass the first 5 indicators and at least 80 percent of member of indicators identified in each year.

5. The institution appoints a committee in charge of monitoring the implementation of items 1, 2 and 3 throughout the time that the program is offered. The committee is also responsible for improving all the curricula based on the assessment results in item 4. For all programs that follow the Thai Qualification Framework for Higher Education of 2009, the operations must be supervised in accordance with the indicators specified in item 3, and all programs must pass the assessment for all indicators.

Specific standard criteria :

6. More than 30 percent of an institution's total number of professional programs at all degree levels hence cooperation with public or private sector organizations involved in these professions in developing and administering the curricula. (only for groups C1 and C2)

7. The number of graduate studies programs that focus on research (Master Plan A and Doctoral degrees) is more than 50 percent of the total number of all programs at all degree levels. (only for groups C1 and D)

8. The number of students in the graduate studies programs that focus on research (Master Plan A and Doctoral degrees) is more than 30 percent of the total number of students in all programs at all degree levels. (only for groups C1 and D)

Notes :

1. The number of graduate studies programs that focus on research (Master Plan A and Doctoral degrees) is counted from the programs that have registered students in the academic year being assessed. The total number of all programs is counted from all programs approved at all degree levels, including programs that are not receiving new students, but not those that the institutional council has approved to officially discontinue.

2. The number of students in item 8 is counted from the students in each academic year in both normal and special programs, including both on- and off- campus programs.

3. The committee(s) in charge of a curriculum is the committee responsible for proposing new curricula, revised curricula, or discontinued curricula and a committee responsible for curriculum administration according to the relevant curriculum details approved by the institution council. There can be one committee in charge of all these tasks, or separate committees.

Scoring criteria :**1. General criteria**

1	2	3	4	5
1 item	2 items	3 items	4 items	5 items

2. Specific criteria for institution groups C1, C2, and D

1	2	3	4	5
1 item from general criteria	2 items from general criteria	3 items from general criteria	4 or 5 items from general criteria	all items from general and specific criteria

Indicator 2.2 : Full-time instructors holding doctoral degrees

Indicator type : Input

Indicator description : Higher education is the highest level of education and thus requires knowledgeable and skillful instructors with deep insights in their academic fields in order to perform the crucial mission of the institution, namely graduate production. They must also conduct research to keep up with academic advancement and develop the body of knowledge. Hence, the institution should have instructors with academic qualifications in suitable proportions to carry out its missions or emphases.

Scoring criteria : The institution can choose between the following 2 scoring criteria:

- 1) Convert the percentage of full-time instructors holding doctoral degrees to a score between 0 – 5 or
- 2) Convert the percentage increase in full-time instructors holding doctoral degrees compared with the previous year to a score between 0 – 5

1. Specific criteria for institution groups B and C2

- 1) The percentage of full-time instructors holding doctoral degrees required for a full score of 5 = 30 percent or higher or
- 2) The percentage increase in full-time instructors holding doctoral degrees compared with the previous year required for a full score of 5 = 6 percent or higher

2. Specific criteria for institution groups C1 and D

- 1) The percentage of full-time instructors holding doctoral degrees required for a full score of 5 = 60 percent or higher or
- 2) The percentage increase in full-time instructors holding doctoral degrees compared with the previous year required for a full score of 5 = 6 percent or higher

Formulae :

1. To calculate the percentage of full-time instructors holding doctoral degrees

Percentage of full-time instructors holding a doctoral degrees =

$$\frac{\text{Number of full-time instructors holding doctoral degrees} \times 100}{\text{Total number of full-time instructors}}$$

2. To convert the percentage in item 1 to a score

$$\text{Score} = \frac{\text{Percentage of full-time instructors holding doctoral degrees} \times 5}{\text{Percentage of full-time instructors holding doctoral degrees required for a score of 5}}$$

or

1. The percentage increase in full-time instructors holding doctoral degrees compared with the previous year = the percentage of full-time instructors holding doctoral degrees in the assessed year minus the percentage of full-time instructors holding doctoral degrees in the previous year

2. To convert the percentage increase in full-time instructors holding doctoral degrees compared with the previous year to a score

$$\text{Score} = \frac{\text{Increase in the percentage of full-time instructors holding doctoral degrees compared with the previous year} \times 5}{\text{Increase in the percentage of full-time instructors holding doctoral degrees compared with the previous year required for a score of 5}}$$

Notes :

1. Doctoral qualifications are evaluated based on the degrees acquired or their equivalents in accordance with the Criteria for Consideration of Qualifications issued by the Ministry of Education. In the case of educational upgrading, a graduation certificate granted within the assessment cycle is required. Other types of qualifications may be used

instead of doctoral qualifications for some professional areas where deemed appropriate; however, this must be approved by the Commission on Higher Education.

2. The total number of full-time instructors is counted based on the academic year from those who are actually working and on study leave. In case a new instructor is appointed, follow the criteria for counting full-time instructors on page 44.

3. Faculties may choose either of the scoring criteria, not necessarily the same as the one chosen by the institution.

Indicator 2.3 : Full-time instructors holding academic titles

Indicator type : Input

Indicator description : Higher education institutions are a national storehouse of wisdom. Hence, they have a responsibility to encourage their instructors to study and conduct research to discover and add to the body of knowledge in each discipline on an ongoing basis. They should also apply this experience to teaching and learning, problem solving, and in promoting national development. The holding of academic title reflects an instructor's performance of these aforementioned duties in accordance with institutional missions.

Scoring criteria : The institution can choose between the following 2 scoring criteria:

1) Convert the percentage of full-time instructors holding academic titles to a score between 0 – 5 or

2) Convert the percentage increase in full-time instructors holding academic titles compared with the previous year to a score between 0 – 5

1. Specific criteria for institution groups B and C2

1) The percentage of full-time instructors holding title of assistant professors, associate professors, or professors required for a full score of 5 = 60 percent or higher or

2) The percentage increase in full-time instructors holding a title of assistant professors, associate professors, or professors compared with the previous year required for a full score of 5 = 12 percent or higher

2. Specific criteria for institution groups C1 and D

1) The percentage of full-time instructors holding title of associate professors or professors required for a full score of 5 = 30 percent or higher or

2) The percentage increase in full-time instructors holding title of associate professors or professors compared with the previous year required for a full score of 5 = 6 percent or higher

Formulae :

1. To calculate the percentage of full-time instructors holding academic titles

Percentage of full-time instructors holding academic title =

$$\frac{\text{Number of full-time instructors holding academic titles} \times 100}{\text{Total number of full-time instructors}}$$

2. To convert the percentage in item 1 to a score

$$\text{Score} = \frac{\text{Percentage of full-time instructors holding academic titles} \times 5}{\text{Percentage of full-time instructors holding academic titles required for a score of 5}}$$

or

1. The percentage increase in full-time instructors holding academic titles compared with the previous year = the percentage of full-time instructors holding academic titles in the assessed year minus the percentage of full-time instructors holding academic titles in the previous year

2. To convert the percentage increase in full-time instructors holding academic titles compared with the previous year to a score

$$\text{Score} = \frac{\text{Increase in the percentage of full-time instructors holding academic titles compared with the previous year} \times 5}{\text{Increase in the percentage of full-time instructors holding academic titles compared with the previous year required for a score of 5}}$$

Notes :

1. The total number of full-time instructors is counted based on the academic year from those who are actually working and on study leave.

2. Faculties may choose either of the scoring criteria, not necessarily the same as the one chosen by the institution.

Indicator 2.4 : System for faculty and supporting personnel development

Indicator type : Process

Indicator description : A student-centred instructional process requires appropriate administration and development of instructors in terms of their teaching techniques, learning outcome evaluation, and use of educational media. The learning and teaching process should be optimized, using learning outcomes and opinions of the learners. In addition, qualified supporting personnel are needed in order to fulfill the missions and goals of the institution.

Standard criteria:

1. The institution has administrative and development plans for the faculty in terms of their academic knowledge, teaching techniques, and learning outcome measurement, and has an administrative and development plan for supporting personnel that is based on analysis of empirical data.

2. The administration and development of faculty and supporting personnel is carried out in accordance with the aforementioned plans.

3. Employment benefits that promote health and boost the morale of faculty and supporting personnel are in place so that they can carry out their work efficiently.

4. A system to monitor the faculty and supporting personnel is in place to ensure that knowledge and skills acquired from development activities are applied to improve teaching and learning, evaluation of student learning outcomes, and other related obligations.

5. The faculty and support personnel are instructed about the institution's professional code of conduct, and monitoring is carried out to ensure that the code of conduct is put into practice.

6. The success rate of the administrative and development plans for the faculty and supporting personnel is assessed.

7. The assessment results are used as feedback to improve these plans or the administration and development of the faculty and supporting personnel.

Note :

Evidence for assessing item 3 may include faculty and supporting staff evaluation or survey results regarding their satisfaction with the benefits, health promotion, and morale-boosting activities, or other empirical evidence that reflects improved performance.

Scoring criteria :

1	2	3	4	5
1 item	2 items	3 or 4 items	5 or 6 items	7 items

Indicator 2.5 : Library, educational equipment, and learning environment

Indicator type : Input

Indicator description : In addition to teaching and learning, the institution should provide a comprehensive physical plant and range of services as well, especially things that facilitate learning such as educational technological media, libraries and other learning resources, registration services, international student services, etc. Additionally, an environment and physical plant that enhances the quality of student life is essential as well, such as a suitable campus environment, student dormitories, classrooms, exercise facilities, sanitation services, and food services.

Standard criteria :

1. Computers are available for the students so that a ratio lower than 8FTES per computer is maintained.

2. Library and other learning resources are accessible via a computer network system, and students are trained in its use every academic year.

3. There are physical facilities services suitable for teaching and learning and student development, including at least classrooms, laboratories, educational equipment, and Internet connection hotspots.

4. There are other necessary facilities, including at least a registration service via a computer network, sanitation and nursing services, food services, and sport fields.

5. There are public utility and security systems for the buildings and surrounding campus area, including at least electricity, water, waste disposal and management systems, as well as fire protection systems and equipment that comply with relevant laws.

6. The quality assessment score for each service in items 2 – 5 is not less than 3.51 out of a full score of 5.

7. The assessment results in item 6 are used as feedback to further develop the management of the physical facilities services and services in response to the needs of service recipients.

Notes :

1. For item 1, count the laptops and mobile devices of students that are registered to use the institutional WIFI system as well.

2. To calculate FTES, use the combined FTES for all levels of degree programs, without converting to the FTES at Bachelor level.

Scoring criteria :

1	2	3	4	5
1 item	2 or 3 items	4 or 5 items	6 items	7 items

Indicator 2.6 : System and mechanisms for teaching and learning management

Indicator type : Process

Indicator description : The teaching and learning management process must follow the practices stated in the National Education Act of 1999 (2nd Amendment in 2002), which requires the process to be student-centred. The format of the teaching and learning should be appropriate and flexible, with the participation of external individuals, organizations, or communities. It must take the diversity and individuality of students into account as this is vital in developing the inquiring minds and learning capacity of students. For example, the institution may offer students a chance to conduct personal independent research projects, schedule classes in laboratories with applied practical activities, as well as arrange for training which offers adequate time for field experience. It may also organize seminars, workshops, projects, set up online instructional systems, and provide access to an adequate electronic library and search engine system so that students are able to learn on their own.

Standard criteria :

1. Each curriculum has a quality assurance system and mechanisms that emphasize student-centred instructional management.
2. Every course and corresponding field experience (if applicable) in each curriculum has course specifications (course outlines) that are prepared before the beginning of each semester/trimester. The course specifications must comply with the Thai Qualification Framework for Higher Education of 2009.
3. Every curriculum has courses that develop self-directed learning skills and learning from practical activities that are conducted both inside and outside of class or by doing research.
4. Experienced academics or professionals from external organizations or the community participate in the teaching and learning process of every program.

5. Teaching and learning management developed from research or knowledge management process in performed to develop teaching and learning process.

6. The satisfaction of learners with the quality of the instruction and learning facilities is assessed for every course in every semester/trimester. The satisfaction assessment results for each course must not be lower than 3.51 out of a full score of 5.

7. The teaching and learning management, teaching strategies, or evaluation of learning outcomes is developed or improved based on the assessment results for each course.

Notes :

1. The university or faculty must assess learner satisfaction with the quality of instruction and learning facilities for every course in every semester/trimester; except for courses that do not involve learning or teaching in a classroom or laboratory, such as an internship, cooperation education, independent study, project, individual study and dissertation, or a thesis.

2. Research to develop teaching and learning in item 5 means the research conducted by an instructor at the institution which is used to improve teaching methodologies.

In the case of curricula that are not under the Thai Qualification Framework for Higher Education of 2009, the course specifications (course outlines) and corresponding field experience (if applicable) must be prepared before the beginning of the courses each semester/trimester.

Scoring criteria :

1	2	3	4	5
1 item	2 or 3 items	4 or 5 items	6 items	7 items

Indicator 2.7 : System and mechanisms for developing educational achievements according to graduates' qualifications

Indicator type : Process

Indicator description : Graduate qualifications are the desirable qualities which higher education graduates should possess. These qualifications are based on 2 sources, i.e. 1) graduate qualities from the Thai Qualification Framework for Higher Education of 2009 for each program of studies and 2) graduates qualities demanded by employers. The graduate qualities specified by the Thai Qualification Framework for Higher Education of 2009 are composed of 5 aspects which are morality and ethics, knowledge, intellectual skills, interpersonal skills and responsibility, and skills in quantitative analysis, communication, and information technology usage. The graduate qualities required by employers may vary depending on professions and contexts. These qualities may appear in the national qualification framework or include additional capabilities such as administrative skills, an inquiring mind, ability to keep up with technological advances, and ability to apply knowledge to actual working situations. Those who have completed a graduate studies program or a program that focuses on research should possess additional qualities, e.g. scholarliness, thought leadership, especially critical thinking skills, and presentation skills.

General standard criteria :

1. The institution surveys employers about desirable graduate qualifications at least for all Bachelor programs during each curricular cycle.

2. The results from item 1 are used to improve the curricula, teaching and learning management, evaluation of educational outcomes, and achievements supporting professional skills and desirable characteristics specified by employers.

3. Development of graduate qualifications should be supported through the use of human, information technology, and financial resources.

4. There is a system and mechanisms to encourage undergraduate and graduate students to participate in academic conferences, or to present their academic work at inter-institutional, national, or international conferences.

5. Activities that edify the morality and ethics of undergraduate and graduate students are organized by the institution.

Specific standard criteria:

6. There is a system and mechanisms to support the application and use of graduate students' theses, and there is confirmation of their actual utilization by public, private, or professional organizations. **(only for group CI)**

7. Students' skills in organizing materials from their theses and writing research articles are developed, as well as publishing the articles in international journals. **(only for group D)**

Scoring criteria :

1. General criteria

1	2	3	4	5
1 item	2 items	3 items	4 items	5 items

2. Specific criteria for institution groups CI and D

1	2	3	4	5
1 item from general criteria	2 items from general criteria	3 items from general criteria	4 or 5 items from general criteria	all item from general and specific criteria

Indicator 2.8 : Success rate in reinforcing moral and ethical characteristics on students

Indicator type : Output

Indicator description : High moral and ethical standards are desirable qualities on students. These are essential factors that contribute to the quality of graduates according to the intent of the National Education Act, Thai Qualification Framework for Higher Education of 2009, and the expectations of employers and society. Thus, it is important for institutions to measure the success rate of the moral and ethical edification that they provide for students.

Standard criteria:

1. Desirable moral and ethical behavior which the institution would like to impart to students is defined in a written statement.

2. The statement regarding desirable behavior in item 1 is distributed to the administrators, faculty, students, and other persons involved.

3. There are projects or activities that promote development of moral and ethical behavior in item 1. The projects or activities have defined indicators and goals for measuring their rate of success.

4. Projects or activities to promote moral and ethical behavior by students in item 3 are assessed based on the indicators and goals, and the assessment results show that at least 90 percent of all indicators were achieved.

5. There is a student or a student activity who/which receives praise and an award for moral and ethical merit from a national unit or organization.

Notes :

1. If the award in item 5 is achieved at the university level, at least 50 percent of the selection panel members must be from outside the university, and the participants must come from many institutions (3 institutions or more).

2. A national unit or organization is an external agency at the department or equivalent level (e.g. provincial level) or state enterprise or public organization or public limited company or national central organization in the public or private sector (e.g. the Federation of Thai Industries, Board of Trade of Thailand, professional councils.)

Scoring criteria :

1	2	3	4	5
1 item	2 items	3 items	4 items	5 items

● Component 3 : Student Development Activities

Rationale

Student affairs are extracurricular activities supported by higher education institutions that help the students to acquire desirable graduate qualifications. Student development activities can be divided into 2 groups, which are (1) services offered by institutions to students and alumni which correspond to their needs and provide maximum benefits to them, and (2) student activities which are managed by student organizations, and approved, and supported by the institutions. These services and activities are aimed at developing the students physically, emotionally, socially, and intellectually, as well as imparting the desirable graduate qualifications, i.e. morality and ethics, knowledge, intellectual skills, interpersonal skills and responsibility, and skills in quantitative analysis, communication, and information technology usage to the students.

Relevant standards and documents

1. National Education Act of 1999 (2nd Amendment in 2002), the Office of the Education Council
2. The Second 15-Year Long Range Plan on Higher Education (2008-2022), the Office of the Higher Education Commission
3. National Education Standards of 2004, the Office of the Education Council
4. Higher Education Standards of 2006, the Office of the Higher Education Commission
5. Higher Education Institution Standards of 2008, the Office of the Higher Education Commission
6. Thai Qualification Framework for Higher Education of 2009 (TQF: HEd.), the Office of the Education Council
7. Student Activity Standards of 1998, the Office of the Higher Education Commission
8. Standards and Indicators for the 3rd External Assessment in Higher Education 2010 of the Office for National Education Standards and Quality Assessment (Public Organization) (ONESQA)

Indicators: 2 indicators

3.1 System and mechanism to provide guidance and information services

3.2 System and mechanism to promote student activities

Indicator 3.1 : System and mechanism to provide guidance and information services

Indicator type : Process

Indicator description : A higher education institution should provide a comprehensive range of services for its students and alumni, especially (1) counseling service which gives advice on both academic and life issues, (2) beneficial information services about useful topics for students and alumni, such as educational loans, scholarship sources, job placement assistance, professional work experience opportunities, and current events inside and outside the institution, and (3) projects that provide various types of professional experience for students and alumni.

Standard criteria :

1. There is a counseling service which provides advice on both academic and life issues for students.

2. There is an information service which provides useful information for students.

3. There are activities that help increase the academic and professional experience of students.

4. There is an information service which provides useful information for alumni.

5. There are activities that help increase the knowledge and experience of the alumni.

6. The quality of the services in items 1 – 3 is assessed, and each item receives a score of not less than 3.51 out of a full score of 5.

7. The quality assessment results of the services are used as feedback to improve the services so that they meet student needs.

Note :

If a faculty or institution does not have any alumni yet, then it may be considered that it has complied with standard criteria items 4 and 5.

Scoring criteria :

1	2	3	4	5
1 item	2 or 3 items	4 or 5 items	6 items	7 items

Indicator 3.2 : System and mechanism to promote student activities

Indicator type : Process

Indicator description : A higher education institution must support a variety of types of appropriate student activities. The student activities are extra curricular activities organized either by the institution or student organizations in which participants have an opportunity to develop themselves intellectually, socially, emotionally, physically, and morally based on the 5 desirable graduate qualifications which are (1) morality and ethics (2) knowledge (3) intellectual skills (4) interpersonal skills and responsibility and (5) skills in quantitative analysis, communication, and information technology usage, and other additional desirable characteristics specified by professional councils or organizations and graduate employers.

Standard criteria :

1. The institution prepares a student development activities plan which promotes all of the learning outcomes specified by the Thai Qualification Framework for Higher Educations of 2009.

2. There are activities that provide knowledge and skills in regards to education quality assurance for students.

3. Students are encouraged to apply their quality assurance knowledge when organizing their student activities. For undergraduate students, at least 5 types of the following activities must be conducted, while for graduate students, at least 2 types are required.

- Academic activities which impart desirable graduate qualifications.
- Sports activities or activities that promote health
- Charitable or environmental conservation activities
- Morally and ethically edifying activities
- Activities that promote arts and culture

4. Students are encouraged to build quality development networks within the institution and with other institutions and arrange activities together.

5. The success of student development activities is assessed based on the objectives of the plans.

6. The assessment results are used as feedback to improve the planning or implementation of student development activities.

Scoring criteria :

1	2	3	4	5
1 item	2 items	3 or 4 items	5 items	6 items

● Component 4 : Research

Rationale

Each higher education institution may have different research emphases depending on the environment and expertise of the institution. Nonetheless, research is an essential mission of every institution. Hence, institutions must have a system and mechanisms to carry out this mission effectively and efficiently based on their own focus in order to generate beneficial research and creative work. There are 3 crucial elements that help to ensure that research is successful and beneficial: 1) institutions must have a research plan, system and mechanism, as well as resources to support the plan's implementation; 2) the faculty assiduously participate in research and integrate it with their teaching and student learning and other missions; and 3) the research is useful and of high quality, corresponds with national strategies, and is widely publicized.

Relevant standards and documents

1. The Second 15-Year Long Range Plan on Higher Education Plan (2008-2022), the Office of the Higher Education Commission
2. Higher Education Standards of 2006, the Office of the Higher Education Commission
3. Higher Education Institution Standards of 2008, the Office of the Higher Education Commission
4. Standards and Indicators for the 3rd External Assessment in Higher Education of 2010, the Office for National Education Standards and Quality Assessment (Public Organization) (ONESQA)
5. National Research Policy and Strategy of 2008-2011, the Office of the National Research Council of Thailand
6. Code of Conduct for Researchers of 1998, the Office of the National Research Council of Thailand

Indicators: 3 indicators

- 4.1 System and mechanism to develop research or creative work
- 4.2 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

Indicator 4.1 : System and mechanism to develop research or creative work

Indicator type : Process

Indicator description : The institution must possess an effective administrative system for research and creative work, with comprehensive operational guidelines that serve as a supportive system and mechanism. This ensures that operations are carried out in accordance with the plan, which includes locating research funding sources and allocating funds, support and development of researcher and research team capabilities and performance, and provision of necessary resources, including human resources, financial resources, and other equipment.

General standard criteria:

1. A system and mechanism to administer research and creative work is established, so that the institution's planned research goals are achieved and work is carried out according to the system.
2. Research or creative work procedures are integrated with teaching and learning management.
3. The research or creative work abilities and potential of faculty and full-time researchers are developed, and they are also educated about the research code of conduct.
4. An institutional budget is allocated for research or creative work.
5. The research or creative work mission is supported in accordance with the institution's identity, and at least the following resources and activities are provided:

- A research laboratory, research unit, instrument center, or research counseling and support center
- Library or information resources to support research
- Research facilities e.g. information technology system or research equipment and laboratory security system
- Supplementary academic activities that promote research, e.g. organizing an academic conference or exhibition, guest or visiting professors

6. Monitoring and assessment of each support item specified in items 4 and 5 is carried out.

7. The assessment results are used as feedback to improve support for the research and creative work mission.

Specific standard criteria:

8. The institution setup a system and mechanism for research and creative work that is based on local wisdom or social problems, in order to meet the needs of local communities and society, and operates in accordance with this system. **(only for groups B and C2)**

Scoring criteria :

I. General criteria

1	2	3	4	5
1 item	2 or 3 items	4 or 5 items	6 items	7 items

2. Specific criteria for institution groups B and C2

1	2	3	4	5
1 item from general criteria	2 or 3 items from general criteria	4 or 5 items from general criteria	6 or 7 items from general criteria	all general items from general and specific criteria

Indicator 4.2 : System and mechanism to manage the knowledge gained from research or creative work

Indicator type : Process

Indicator description : The management of knowledge acquired from research or creative work and the circulation of the insights among faculty, students, academia, the public and private sectors, as well as target communities will lead to the application of this knowledge. This is an important mission of every higher education institution. Therefore, the institution must establish a system to encourage and support the compilation, distribution, and exchange of knowledge and intellectual property obtained from research or creative work for each user group. The information distributed must be useful, reliable, and up-to-date.

General standard criteria :

1. The institution setups a system and mechanisms to support the presentation of research or creative work in academic conferences, or its publication in national or international journals, and this system effectively disseminates research results.

2. The institution setups a system and mechanism to collect, select, analyze, and synthesize the knowledge gained received from research or creative work in order to make the insights understandable to lay people, and operations are carried out in accordance with this system.

3. The knowledge from research or creative work in item 2 is publicized to the general public and other relevant audiences.

4. The outcomes of research or creative work are utilized in beneficial ways, and there is confirmation of this utilization by external or community organizations.

5. The institution establishes a system and mechanism to protect the rights of research or creative work that is used in beneficial ways, and operations are carried out in accordance with this system.

Specific standard criteria :

6. The institution sets up a system and mechanism to support patent/petty patent applications, and there are applications for patents or petty patents. **(only for groups C I and D)**

Scoring criteria :

1. General criteria

1	2	3	4	5
1 item	2 items	3 items	4 items	5 items

2. Specific criteria for institution groups C I and D

1	2	3	4	5
1 item from general criteria	2 items from general criteria	3 items from general criteria	4 or 5 items from general criteria	all items from general and specific criteria

Indicator 4.3 : Funds for research or creative work per full-time instructor faculty/researcher

Indicator type : Input

Indicator description : An important factor that stimulates research and creative work in higher education institutions is funding. Accordingly, the institution must allocate funds from internal and external sources to effectively support research and creative work in accordance with the environment and emphases of the institution.

Furthermore, funds for research or creative work from external sources are an important indicator that reflects an institution's research potential, especially among institutions that emphasize research.

Scoring criteria : Convert the funds for research and/or creative work per full-time faculty and researcher into a score between 0 – 5.

1. Specific criteria for institution groups B and C2 There are 3 groups of academic disciplines:

1.1 Sciences and technology group

The amount of funds for research or creative work from internal and external sources required for a full score of 5 = 60,000 Baht per person

1.2 Health sciences group

The amount of funds for research or creative work from internal and external sources required for a full score of 5 = 50,000 Baht per person

1.3 Humanities and social sciences group

The amount of funds for research or creative work from internal and external sources required for a full score of 5 = 25, 000 Baht per person

2. Specific criteria for institution groups C1 and D There are 3 groups of academic disciplines:

2.1 Sciences and technology group

The amount of funds for research or creative work from internal and external sources required for a full score of 5 = 180,000 Baht per person

2.2 Health sciences group

The amount of funds for research or creative work from internal and external sources required for a full score of 5 =150,000 Baht per person

2.3 Humanities and social sciences group

The amount of funds for research or creative work from internal and external sources required for a full score of 5 =75,000 Baht per person

Formulae :

1. Calculate the amount of funds for research or creative work from internal and external sources per full-time faculty/researcher

$$\text{Funds for research per capita} = \frac{\text{Total amount of research funds}}{\text{Total number of full-time faculty and researchers}}$$

2. Compare the value in item 1 with the standard value required for a full score of 5

$$\text{Score} = \frac{\text{Funds for research per capita} \times 5}{\text{Research funds required for a score of 5}}$$

Instructions for calculating the scores at the faculty and institutional levels

1. Score at faculty level = the average of the scores received for all groups of academic disciplines in the faculty

2. Score at the institutional level = the average of the scores received for all faculties in the institution

Notes :

1. Count the number of full-time faculty and researchers for the corresponding academic year, and do not count those on study leave.

2. Calculate the total amount of funds from the figures in signed research grants for the corresponding academic or fiscal year, not the actual amounts that were disbursed.

3. In the case of funds distributed among institutions, if there is documentary evidence of the allocation, such as a contract with the funding source or an agreement between the cooperating institutions, divide the funds according to this evidence. If there is no evidence, then divide the funds based on the proportion of co-researchers in the institutions.

4. Include research funds only from contracts signed by faculty or researchers, but not those signed by a supporting staff.

● **Component 5: Academic Services to Community**

Rationale

The provision of academic services for society community is one of the main missions of higher education institutions. Institutions should offer academic services to communities, society, and the nation by utilizing the abilities and expertise of each institution. These academic services may be provided free of charge or a reasonable fee may be charged. The services may be provided to the public sector, private sector, independent entities, public organizations, communities, and society in general. The academic services may take many forms, for example permitting the utilization of institutional resources, serving as academic references, providing counseling or training, organizing academic conferences or seminars, and conducting research to answer questions or guide society. Providing academic services not only benefits community, but also benefits institutions in many ways. The instructors gain more knowledge and experience, and this knowledge and experience, in turn, helps them to improve curricula and may be integrated with teaching, learning, and research. Provision of academic services also assists instructors in obtaining academic title or promotion, creating networks with potential sources of jobs for students, and generating revenue for institutions.

Relevant standards and documents

1. The Second 15-Year Long Range Plan on Higher Education (2008-2022), the Office of the Higher Education Commission
2. Higher Education Standards of 2006, Office of the Higher Education Commission
3. Higher Education Institution Standards of 2008, the Office of the Higher Education Commission
4. Standards and Indicators for the 3rd External Assessment in Higher Education of 2010, the Office for National Education Standards and Quality Assessment (Public Organization) (ONESQA)

Indicators: 2 indicators

- 5.1 System and mechanism for academic services to community
- 5.2 Process of academic services to benefit community

Indicator 5.1 : System and mechanism for academic services to community

Indicator type : Process

Indicator description : The provision of academic services to community is one of the main missions of every higher education institution. The institution should devise systematic criteria and procedures for academic services and build an institutional structure to be a mechanism for accomplishing this. The provision of academic services must be tangibly connected to and integrated with teaching, learning, and research in a concrete manner.

Standard criteria :

1. The institution setups a system and mechanism for providing academic services to community, and operates in accordance with this system.
2. Academic services to community are integrated with teaching and learning.
3. Academic services to community are integrated with research.
4. The effectiveness of efforts to integrate academic services to community with teaching, learning and research is assessed.
5. The assessment results are used as feedback to improve the integration of academic services to community with teaching, learning, and research.

Note :

Item 4 requires that the success of integration in items 2 and 3 must be assessed.

Scoring criteria :

1	2	3	4	5
1 item	2 items	3 items	4 items	5 items

Indicator 5.2 : Process of academic service benefits society

Indicator type : Process

Indicator description : The ability to effectively and reliably provide academic services in the form of a quality chain meets needs and provides assistance to communities, the public and private sectors, professional organizations, and society. This takes place in accordance with the capabilities and emphases of the institution and can be measured from (1) the benefits or impact of academic services, (2) cooperation with external organizations, and (3) knowledge gained from academic services and the dissemination of this knowledge to personnel in both internal and external institutions.

Standard criteria :

1. The needs of communities, the public or private sector, or professional organizations are surveyed in order to set the direction and devise plans for academic services according to the institution's emphases.

2. There is cooperation in providing academic services in order to learn about and enhance the strengths of the communities, the public or private sector, or professional organizations.

3. The benefits or impacts of academic services to community are assessed.

4. The assessment results in item 3 are used to improve the system and mechanism or academic service activities.

5. The knowledge gained from provision of academic services is developed and transferred to institutional personnel, as well as disseminated to the general public.

Scoring criteria :

1	2	3	4	5
1 item	2 items	3 items	4 items	5 items

● **Component 6: Preservation of Arts and Culture**

Rationale

The preservation of arts and culture is an important mission of higher education institutions. Therefore, every institution must have a system and mechanisms so that this mission is carried out with effectiveness and efficiency. The emphases of each institution may differ from one another according to the philosophy and nature of the institution. The preservation of arts and culture should be integrated with other missions, especially graduate production. The institutions should arrange activities for reviving, conserving, developing, and propagating arts and culture as well as creating and promoting folk wisdom to be the foundation for further development of the body of knowledge.

Relevant standards and documents

1. The Second 15-Year Long Range Plan on Higher Education (2008-2022), the Office of the Higher Education Commission
2. Higher Education Standards of 2006, the Office of the Higher Education Commission
3. Higher Education Institution Standards of 2008, the Office of the Higher Education Commission
4. Standards and Indicators for the 3rd External Assessment in Higher Education of 2010, the Office for National Education Standards and Quality Assessment (Public Organization) (ONESQA)

Indicator: I indicator

6.1 System and mechanism for the preservation of arts and culture

Indicator 6.1 : System and mechanism for the preservation of arts and culture

Indicator type : Process

Indicator description : The institution must have policies, plans, structures, and administration for the preservation of arts and culture so that the implementation is effective and efficient. This mission covers the conservation, restoration, promotion, and propagation of culture and folk wisdom according to the emphases of the institution, and the preservation of arts and culture should be integrated with teaching, learning, and student activities.

Standard criteria :

1. The institution sets up a system and mechanism for the preservation of arts and culture, and operates in accordance with this system.

2. The preservation of arts and culture is integrated into teaching and learning and student activities.

3. The institution publicizes its activities or services to preserve arts and culture to the general public.

4. The success of efforts to integrate the preservation of arts and culture with teaching and learning and student activities is assessed.

5. The assessment results are used as feedback to improve the integration of the preservation of arts and culture with teaching and learning and student activities.

6. The institution establishes or defines quality standards for arts and culture, and creates works that are accepted at the national level.

Scoring criteria :

1	2	3	4	5
1 item	2 items	3 items	4 items	5 or 6 items

● **Component 7: Administration and Management**

Higher Education Institutions must recognize the importance of administration and management, and their institutional councils must oversee their operations to ensure their effectiveness. Institutions must efficiently administer and manage a broad range of duties such as human resources, database systems, risk management, change management, resource management, etc. in order to achieve their established goals. This should be done using the principles of good governance.

Relevant standards and documents

1. The Second 15-Year Long Range Plan on Higher Education (2008-2022), the Office of the Higher Education Commission
2. Higher Education Standards of 2006, the Office of the Higher Education Commission
3. Higher Education Institution Standards of 2008, the Office of the Higher Education Commission
4. Standard for Evaluation of Public Services of Performance Agreement, the Office of the Public Sector Development Commission (OPDC)
5. Educational Criteria for Performance Excellence of 2009-2010
6. Public Sector Management Quality Award (PMQA)
7. Announcement of the Commission on Higher Education regarding a Manual and Guidelines for Considering Granting Private Higher Education Institution Establishment Permits of 2008
8. Announcement of the Ministry of University Affairs regarding Standards for the Libraries of Higher Education Institutions of 2001

Indicators: 4 indicators

7.1 Leadership of the institution council and administrators at all levels of the institution

- 7.2 Institutional development towards becoming a learning institution
- 7.3 Information system for administration and decision-making
- 7.4 Risk management system

Indicator 7.1 : Leadership of the institution council and administrators at all levels

Indicator type : Process

Indicator description : The institutional council and administrators at all levels are key factors that support the progress of the institution. If the council and administrators are visionary and progressive, possess social responsibility, leadership qualities, use good judgment in decision making and problem solving, use good governance principles in administration, take good care of the personnel, allow communities an opportunity to take part in the administration, and monitor the institutional operations so that it moves forward in the right direction, the institution will be able to progress at a rapid pace.

Standard criteria :

1. The institution council performs all its duties as prescribed by law and assesses itself according to predetermined criteria.
2. The administrators have vision, set an operational direction and transmit it to the personnel at all levels, devise strategic plans, and use information systems as a basis for the operations and institutional development.
3. The administrators supervise, monitor, and assess the performance of employees' assigned work, and communicate institutional plans and performance results to the personnel.
4. Administrators encourage personnel to participate in administration, and delegate decision-making authority to them as appropriate.
5. The administrators pass on knowledge and support the development of their colleagues so that the institution may achieve its objectives and reach its full potential.

6. Administrators use good governance principles in their administration and take institutional and stakeholder benefits into consideration.

7. The institutional council assesses the administrative performance of the institution, and administrators use the assessment results as feedback to improve their administration in a concrete manner.

Note :

In order to successfully pass item 6, evidence must be presented showing that administrative operations comply with all 10 good governance principles as stated in its definition, which is consistent with the ONESQA criteria.

Scoring criteria :

1	2	3	4	5
1 item	2 or 3 items	4 or 5 items	6 items	7 items

Indicator 7.2 : Institutional development towards becoming a learning institution

Indicator type : Process

Indicator description : The third item in the Higher Education Standards requires that higher education institutions build and develop a knowledge-and-learning-based society; they must implement knowledge management in order to become learning institutions. The body of institutional knowledge which is scattered among individuals or documents must be amassed and systematized so that everyone in the institution can access this information and use it to become more knowledgeable. This, in turn, enables them to perform their tasks more efficiently and helps the institution achieve maximum competitiveness. The process of institutional knowledge management is comprised of knowledge identification, selection, compilation, storage, access, and exchange within the institution and with external organizations. It also involves creation of a learning atmosphere and culture in the institution, formulation of practical guidelines, and usage of information technology to enhance the efficiency of knowledge management in the institution.

Standard criteria :

1. The institution identifies knowledge elements and targets for knowledge management according to the institution's strategic plans, at least for the missions of graduate production and research.

2. The targeted groups of personnel whose knowledge of and skills in graduate production and research are to be developed are clearly specified, in accordance with the knowledge elements stipulated in item 1.

3. Those who have tacit knowledge and skills share and exchange them in order to discover best practices related to the knowledge elements in item 1, and these practices are disseminated to the target groups of personnel.

4. Knowledge consisting of best practices related to the knowledge elements in item 1 is collected from individuals and other sources, developed, systematically stored, and circulated as explicit knowledge.

5. Best practices in the forms of explicit and tacit knowledge and skills gained from knowledge management in the current or previous academic years are applied to improve actual operations.

Scoring criteria :

1	2	3	4	5
1 item	2 items	3 items	4 items	5 items

Indicator 7.3 : Information systems for management and decision-making

Indicator type : Process

Indicator description : The institution should develop information systems for management and decision-making that are consistent with institutional policies and planning. To be comprehensive, the information systems must be able to be connected with all internal and external units involved. They must be utilized for management administration, planning, and decision-making by administrators at all levels, and by personnel carrying out all aspects of their duties, for performance monitoring and assessment, as well as institution improvement and development. In addition, the systems must be easy to use as shown by user satisfaction evaluations.

Standard criteria :

1. There is an information system plan.
2. There are information systems for management administration and decision-making according to the missions of the institution. They must cover at least the teaching and learning, research, administration and management, and finance missions, and can also be used for quality assurance operations.
3. The satisfaction of the information system users is assessed.
4. The satisfaction assessment results of information system users are used as feedback to improve the information systems.
5. The institution transmits specified information via the network systems of related external organizations.

Scoring criteria :

1	2	3	4	5
1 item	2 items	3 items	4 items	5 items

Indicator 7.4 : Risk management system

Indicator type : Process

Indicator description : The institution should have a risk management system to manage and control factors, activities, and processes which may become potential causes of damage (either monetary or non-monetary in form, such as reputation, prosecution for violating laws, regulations, or rules, effectiveness, efficiency, and cost effectiveness). The system also limits the degree of risk and the magnitude of damage which may occur in the future to an acceptable and controllable level. The institution must learn about and come up with prevention methods by anticipating potential problems and their chances of occurrence to prevent or alleviate the severity of the problems. In addition, the institution should have contingency plans for emergency situations and make sure that all operational systems are ready for use. The systems should be improved on an ongoing basis and updated to keep up with changes so that institutional goals are achieved in accordance with its strategies.

Standard criteria :

1. The institution appoints a risk management committee or team which has top administrators and representatives who are responsible for the main institutional missions as its members.

2. There is an analysis and identification of at least 3 areas of risk and risk factors based on the context of the institution, e.g.

- Resources (financial, budgetary, information technology system, physical plant)
- Institutional strategies
- Policies, laws, regulations, rules
- Operations such as curriculum administration, research administration, work systems, and the quality assurance system
- Personnel and good governance, especially related to the code of conduct for instructors and personnel
- External events
- Others according to the context of the institution

3. The possibilities and effects of the risks in item 2 are assessed and prioritized.

4. The institution prepares a risk management plan for the high-priority risks and operates according to the plan.

5. The plan's implementation is monitored and assessed, and the results are reported to the institution council for consideration at least once a year.

6. The assessment results and suggestions from the institution council are used as feedback to modify the plan or analyze the risks during the next assessment cycle.

Notes :

The assessment score will be 0 if a serious incident that threatens the life or security of a student, faculty, or staff member, or damages the reputation, or undermines the financial stability of the institution occurs during the year being assessed, and there is strong evidence indicating that the incident resulted from an institutional mistake or negligence in controlling or managing risk or related factors.

Examples of serious incidents which warrant a score of 0 are :

1. There is a death or serious physical or psychological injury to a student, faculty, or staff member even though the institution had the ability to prevent or reduce the severity of the incident. But no risk management plan or attempt by the institution to prevent the incident was evident.
2. The reputation of the institution or an organizational unit is damaged because an instructor, researcher, or staff member is unscrupulous, violates the code of conduct, or does not comply with relevant Standards or Ministerial Regulations, and news of this appears in the media such as newspaper or online media.
3. The institution or an organizational unit lacks financial liquidity so that a program of studies must be discontinued, or cannot meet the Standard Criteria of Higher Education Curricula of the OHEC, and the incident has a serious effect on the current students.

Scoring criteria :

1	2	3	4	5
1 item	2 items	3 or 4 items	5 items	6 items

**** In the aforementioned cases, when a faculty earns a zero (0) for the assessment, the institution will also receive a score of zero (0) as well.**

Exceptions to this may be made for the following cases :

1. The institution has analyzed and prepared a preventive risk management plan or an alternative plan to reduce the effects of the serious incident in advance, and operated according to this plan.
2. The incident is a force majeure beyond the capability of the institution to manage (control or prevent).
3. The severity of the incident was lessened due to the plan to alleviate the effects of the incident that was made in advance.

● Component 8: Finance and Budgeting

Rationale

Finance and budgeting are important tasks of all higher education institutions, whether the source of funds is from the national budget (in the case of public higher education institutions) or revenue from tuition and other educational fees, income from research, academicservices, asset rental fees, etc. Institutional administrators must have a financial plan which reflects needs and allows for efficient disbursement in harmony with strategic and anoperation plans. They must also understand financial analysis such as total expenditures per student, fixed assets per student, per capita costs of producing graduates categorized by field of study, the total institutional incomeafter deducting all operational expenses, budgets for developing instructors, the speed of disbursement, and the percentage of the budget that can be saved after all operations are carried out. These insights demonstrate an institution's financial administrative capability in a manner that emphasizes transparency, integrity, cost effectiveness, efficiency, and optimization of benefits.

Relevant standards and documents

1. Financial Development Plan for Higher Education, the Office of the Higher Education Commission
2. An operation plan of the institution
3. Higher Education Institution Standards of 2008, the Office of the Higher Education Commission
4. Standards and Indicators for the 3rd External Assessment in Higher Education of 2010, the Office for National Education Standards and Quality Assessment (Public Organization) (ONESQA)
5. Standard Practices of Government Service, the Bureau of the Budget
6. Annual Government Statement of Expenditure (public higher education institutions) and revenue

Indicator: I indicator

8.1 System and mechanism for finance and budgeting

Indicator 8.1 : System and mechanism for finance and budgeting

Indicator type : Process

Indicator description : The higher education institution must possess an efficient system for acquiring and allocating funds and a financial strategic plan to provide enough funds to drive the implementation of the institution's strategic plans. There should be an analysis of revenue, both from the national budget and other types of income, as well as of operational expenses. Allocation of budgets and preparation of financial reports must be performed systematically and cover all the institutional missions. There must be an efficient financial audit system, and the financial reports must detail the expenses of all missions, projects, and activities so that the financial status and stability of the institution can be analyzed.

Standard criteria :

1. There is a financial strategic plan that is aligned with the institution's strategic plan.
2. There are guidelines for acquiring financial resources, allocation criteria, and an expenditure plan which are efficient, transparent, and verifiable.
3. The annual budget is aligned with the implementation plan for each mission and the institutional and personnel development plans.
4. Financial reports are systematically prepared and submitted to the institution council at least twice a year.
5. Financial information is used to continuously analyze the expenses, the financial status, and the financial stability of the institution.
6. There are internal and external units to monitor and audit the disbursement of funds to ensure that it is in accordance with the rules and regulations established by the institution.

7. The senior administrators pay attention to the use of funds so that financial goals are met, and use information from the financial reports for planning and decision-making.

Note :

A financial strategic plan is a long-term plan that specifies the sources and uses of financial resources required to implement the strategic plans of an institution. The financial strategic plan must be aligned with the strategic plans. The institution should evaluate the resources required to carry out each strategy and assess the costs of these resources. This represents the long-term financial needs within the same timeframe as of the implementation of the strategies. Then, the institution should clearly indicate the sources of these funds such as educational fees, national budget or subsidies from the government, reserve funds, or donations from external organizations or alumni. The institution may arrange additional fundraising activities. The duration of the financial strategic plan should be equal to that of the institution's strategic plan.

Scoring criteria :

1	2	3	4	5
1 item	2 or 3 items	4 or 5 items	6 items	7 items

● **Component 9: System and Mechanism for Quality Assurance**

Rationale

The system and mechanism for internal quality assurance are important factors which reflect the potential for quality improvements at the higher education institution. They must cover the input, process, output/outcome factors as well as other effects which may occur. The higher education institution must continuously develop its system and mechanism for internal quality assurance and set up a knowledge management process which leads to innovations in internal quality assurance that are appropriate to the institution.

Relevant standards and documents

1. National Education Act of 1999 (2nd Amendment in 2002), the Office of the Education Council
2. The Second 15-Year Long Range Plan on Higher Education (2008-2022), the Office of the Higher Education Commission
3. Ministerial Regulation regarding the Systems, Criteria, and Procedures for Education Quality Assurance of 2010
4. National Education Standards of 2004, the Office of the Education Council
5. Higher Education Standards of 2006, the Office of the Higher Education Commission
6. Higher Education Institution Standards of 2008, the Office of the Higher Education Commission
7. Thai Qualification Framework for Higher Education of 2009 (TQF: HEd.), the Office of the Higher Education Commission
8. Standard Criteria for Higher Education Curriculum of 2005, the Office of the Higher Education Commission
9. Standards and Indicators for the 3rd External Assessment in Higher Education of 2010, the Office for National Education Standards and Quality Assessment (Public Organization) (ONESQA)

Indicator: I indicator

9.1 System and mechanism for internal quality assurance

Indicator 9.1 : System and mechanism for internal quality assurance

Indicator type : Process

Indicator description : Internal quality assurance is a mandate of institutions as stated in the National Education Act of 1999 (2nd Amendment in 2002). The institution must devise a system and mechanism to control, audit, assess, and improve its operations in accordance with the policies, goals, and quality standards adopted by the institution, its parent organization, and other relevant organizations. Internal quality assurance must be measured, and the results reported to relevant organizations and disclosed to the public. There must be constant and ongoing assessment and improvement, and institutions should also provide good examples of innovation.

Internal quality assurance is regarded as part of educational administration which must be carried out on an ongoing basis. All personnel must realize that the development of educational quality is their responsibility so that the public may be assured that the institution produces quality educational products.

Standard criteria :

1. There is a system and mechanism for internal quality assurance which are appropriate and correspond to the missions and developmental level of the institution from the department level or its equivalent on up, and operations are conducted in harmony with this system.

2. Policy-making committees and senior institutional administrators formulate policies and play importance role on internal quality assurance.

3. Additional indicators are specified based on the institution's identity.

4. The implementation of internal quality assurance covers all of the following aspects: 1) control, monitoring and assessing quality system, 2) the submission of an annual quality assessment report to the institution council and OHEC within the specified timeframe; the report must contain all the information requested by OHEC as indicated in the CHE QA Onlinesystem, and 3) The quality assessment results are used to formulate plans to improve the institution's educational quality.

5. Internal quality assurance results are used to improve performance, and operations are developed according to all indicators listed in the strategic plans.

6. There is an information system which provides useful information for all 9 quality components of internal quality assurance.

7. Stakeholders - especially students, employers of graduates, and service recipients according to the institutional missions - participate in the educational quality process.

8. There are networks and joint activities for exchanging knowledge about education quality assurance among institutions.

9. The institution develops good practices or researches on internal quality assurance and distributes these materials to other organizations so that it may be used in beneficial ways.

Scoring criteria :

1	2	3	4	5
1 item	2 or 3 items	4 or 5 or 6 items	7 or 8 items	9 items

CHAPTER 4

Practical Guidelines for Process Indicators



● **Indicator 1.1 Plan Development Process**

1. The institution formulates strategic plan according to its policies with the participation of its personnel. The plan must be approved by the institution council and comply with its philosophy or commitments, the Institution's Act, as well as the emphases of the institution group, The Second 15-Year Long Range Plan on Higher Education (2008-2022), and the Higher Education Development Plan, 10th ed. (2008-2011).

1.1 The institution formulates its philosophy or commitments. If the institution already has had a philosophy or commitments since its establishment, it should reconsider them to ascertain whether they are suitable for the institution's current circumstances. If so, the institution must ensure that all personnel and stakeholders are well aware of them.

1.2 If the philosophy or commitments need to be adjusted due to changes in circumstances, the administrators, faculty, and personnel should participate in the procedure so as to ensure its acceptance by all parties. This will lead to cooperation and unity in achieving results that are in accordance with the proposed philosophy or commitments. The philosophy and commitments must be approved by the institution council.

1.3 Strategic plans developed that are aligned with the institution's philosophy or commitments, emphases, policies of the institution council, the Institution's Act, as well as the long-term higher education plan, and other related principles and standards. The institution prepares a table that clearly analyzes and demonstrates the harmony between these strategies and the philosophy, commitments, and policies of the institution council, item by item. If some strategies do not conform, they should be revised.

1.4 The institution appoints a committee to formulate strategic plan in order to successfully achieve what is desired, namely a vision, missions, goals, and objectives. The committee should analyze the strengths, weaknesses, opportunities, and threats of the institution and use the analysis to formulate strategies which are clear and cover all the institution's missions i.e. teaching and learning, research, academic services to community, and preservation of arts and culture. The process of formulating the vision and strategic plan should include public sessions in which administrators, faculty, and personnel participate in order to ensure its acceptance by all parties. This will lead to cooperation and unity in working to achieve the institution's hopes and expectations. The strategic plan must be approved by the institution council.

2. The institutional strategic plan is transmitted to all internal organizational units.

2.1 Administrators of internal units are informed about and understand the vision, strategies, and strategic targets. Internal units are officially appointed to be responsible for implementing the strategic plan.

2.2 Operational targets are established and officially assigned to each internal unit in accordance with the strategic plan.

3. The strategic plan is converted into operation plan that cover all 4 missions, i.e. teaching and learning, research, academic services to community, and preservation of arts and culture.

3.1 A strategic map is created in order to assist in the conversion of the strategic plans to action plan according to the Balanced Scorecard.

3.2 The institution prepares an analytical report concerning the consistency between the strategic plan and operation plan for all 4 missions, i.e. teaching and learning, research, academic services to community, and preservation of arts and culture.

4. The institution sets indicators for the strategic and operation plan together with a target value for each indicator so that the success of implementation based on these plans can be measured.

4.1 The institution sets key performance indicators and corresponding target values for each indicator to measure the success of operations according to the strategic plan and operation plan. The indicators and target values should be devised simultaneously with the strategic and operation plans.

4.2 There is a procedure that encourages administrators, faculty, and personnel involved in operations related to indicators to participate in the formulation of those indicators and target values, so as to ensure their acceptance by all parties. This will lead to cooperation and unity in working to achieve the targets.

5. All 4 of the main missions are fulfilled by following an operation plans.

The institution should prepare an operational calendar for the action plans of all 4 missions. This should provide practical guidelines and ensure that operations will be performed on a timely basis.

6. Operational results are monitored based on an operation plan indicators at least twice a year, and the results are reported to the administrators for consideration.

A monitoring system is developed to check whether the implementation follows the action plans or not. The operational results based on the indicators are compared with the target values and reported to the administrators on a regular basis, for example, every 3 months or every 6 months. If some results do not meet the targets, there should be an analysis of the causes and improvement methods should be proposed.

7. Operational results are assessed based on the strategic plan indicators at least once a year, and the results are reported to the administrators and institution council for consideration.

There is an operational assessment based on the strategic plan indicators. The results are compared with the target values, and an item is placed on the agenda for consideration by a meeting of administrators and a meeting of the institution council at least once a year.

8. The comments and suggestions of the institution council are used to improve the strategic plans and operation plans.

8.1 The institution appoints persons responsible for implementing the suggestions that are received and preparing an improvement plan according to these suggestions.

8.2 The revised strategic plans and operation plans are presented to the institution council.

• Indicator 2.1 System and mechanisms for curriculum development and administration

1. The institution establishes a system and mechanisms for launching new programs and the revised program according to the guidelines of the Commission on Higher Education, and operates in accordance with this system.

1.1 The institution formulates a method or steps for launching new programs of study and improving curricula, and appoints a unit or committee to be responsible for monitoring new and revised curricula. The committee should include external experts who are experienced in the academic discipline.

1.2 Before launching a new program, the following issues should be studied: the extent of demand for graduates in this discipline in the job market; whether graduate production in the discipline complies with national policies and the National Economic and Social Development Plan; institutional readiness to offer teaching and learning in the discipline. Apart from these studies regarding demand or necessity, the institution should analyze the resources required to operate the new program and its break-even point, and this should be submitted to the institution council for approval.

1.3 To revise a curriculum, academic advancement in the discipline along with the opinions of graduates and employers who hire the graduates should be studied, so as to identify the issues where improvements are needed.

1.4 To launch or revise a program, the process must follow the system set up by an institution. For example, the matter must be considered by the faculty committee or academic council before being submitted to the institution council for approval.

1.5 To launch or revise a program, the process must use the form specified by the Commission on Higher Education, and must be submitted to OHEC within 30 days of approval by the institution council.

2. The institution establishes a system and mechanisms for discontinuing programs according to the guidelines of the Commission on Higher Education, and operates in accordance with this system.

2.1 The institution formulates criteria or steps for discontinuing programs that do not meet job market demands for graduates, have a small number of students, or offer outdated knowledge that does not contribute to development of the country.

2.2 When a program meets the criteria for discontinuation, the closure process must be approved by relevant committees appointed by the institution, e.g. the faculty committee, academic council, etc., before submitting the matter to the institution council for approval. OHEC must be informed within 30 days of approval by the institution council.

3. All of the institution's curricula comply with the Standard Criteria for Higher Education Curricula and the Thai Qualification Framework for Higher Education of 2009. (For operations to comply with the Thai Qualification Framework for Higher Education of 2009, assessment based on the 'performance indicators and degree standards announced for programs in each academic discipline must be conducted to assure the quality of the curriculum and instruction.' In case there is no announcement yet regarding degree standards for a certain discipline, the common assessment indicators shown in Appendix A are used instead.) For professional programs, the curricula must be also approved by a related professional council or organization.

3.1 All curricula must comply with the Standard Criteria for Higher Education Curricula, and the operation of all programs must follow these criteria throughout the time that the program is offered.

3.2 The operations are in accordance with the Thai Qualification Framework for Higher Education of 2009. Quality assurance of the curricula and teaching and learning management is conducted on an ongoing basis. The indicators and scoring criteria are devised in such a way that they reflect performance in harmony with the announcement regarding degree standards for each discipline. (In cases where no announcement regarding degree standards for a certain discipline has been issued yet, the common assessment indicators should be used instead.) These indicators and scoring criteria should cover the following aspects: curriculum administration, teaching and learning resources administration, faculty administration, supporting personnel administration, student support and counseling, demand in the job market, and satisfaction of graduate employers. The operations are supervised, monitored, and assessed based on the adopted indicators, and the results are reported to relevant parties and the public.

3.3 For professional curricula, the curriculum administrators should carefully study the criteria and details for curriculum approval. The curriculum development committee for a vocational curriculum should include at least 1 expert from a professional council or organization who takes part in the process of curricular development. The committee should ensure that the curriculum is approved by the relevant professional council or organization before admitting students and beginning the teaching and learning process. It should also request accreditation extensions on a regular basis.

4. The institution appoints a committee that is responsible for monitoring the implementation of all the items 1, 2 and 3 throughout the time that the program is offered. Every curriculum must be assessed at least as frequently as indicated by the Standard Criteria for Higher Education Curricula. For curricular programs that follow the Thai Qualification Framework for Higher Education of 2009, the operations must be supervised in accordance with the indicators specified in item 3, all curricula must pass the first 5 indicators and at least 80 percent of member of indicators identified in each year.

4.1 The institution creates a mechanism in the form of a committee to monitor the operation of each program and ensure that it meets the Standard Criteria for Higher Education Curricula, professional standards, and the Thai Qualification Framework for Higher Education of 2009 throughout the time that the program is offered. This can be the same committee which is responsible for the curriculum administration of a department or faculty, or it may be a separate committee.

4.2 The performance of all curricula must be assessed based on the required indicators and criteria at least once each academic year; this is so that the degree to which the quality of operations meets the Standard Criteria for Higher Education Curricula may be measured.

4.3 The institution sets up a system for reporting the performance results based on the indicators for each program. There may be a form for the persons in charge to fill in the indicator data, analysis of assessment results, and improvement or development approaches for submission to the relevant committees.

5. The institution appoints a committee in charge of monitoring the implementation of all the items 1, 2 and 3 throughout the time that the program is offered. The committee is also responsible for improving all the curricula based on the assessment results in item 4. For all the programs that follow the Thai Qualification Framework for Higher Education of 2009, the operations must be supervised in accordance with the indicators specified in item 3, and all programs must pass the assessment for all indicators.

The committee responsible for each curriculum uses the assessment results in item 4 to improve or develop the curriculum, so that the performance meets all the standards and passes the criteria for all indicators.

6. More than 30 percent of an institutions' total number of professional programs at all degree levels hence cooperation with the public or private sector organizations involved in these professions in developing and administering the curricula. (only for groups C1 and C2)

The committee in charge of considering a curriculum in item 1 and the department or faculty committee should include an external expert from a public or private organization that is related to the professional programs so as to provide comments about the knowledge, abilities, and skills necessary for actual work situations. Such comments are beneficial for developing and administering the curriculum and ensure that the teaching and learning process enables learners to work efficiently in real working environments.

7. The number of graduate studies programs that focus on research (Master Plan A and Doctoral degrees) is more than 50 percent of the total number of all programs at all degree levels. (only for groups C1 and D)

Specialized institutions that focus on graduate studies and institutions that focus on advanced research and production of graduates at graduate studies levels, especially the doctoral level, should offer more graduate studies programs than Bachelor programs – at least not less than half of the total number of programs. The Master programs should be Plan A (thesis programs) so as to comply with institutional emphases. The institutions may offer scholarships for students in Master Plan A programs (thesis programs) as an incentive.

8. The number of students in the graduate studies programs that focus on research (Master Plan A and Doctoral degrees) is more than 30 percent of the total number of students in all programs at all degree levels. (only for groups C1 and D)

Not only must specialized institutions focusing on graduate studies and institutions focusing on advanced research and production of graduates at the graduate studies levels, especially the doctoral level, offer more graduate studies programs emphasizing research than Bachelor programs, but they must also ensure that the number of students in graduate studies programs emphasizing research is high enough to produce graduates who possess research skills and benefit the development of the country.

● **Indicator 2.4 System for faculty and supporting personnel development**

1. The institution has administrative and development plans for the faculty in terms of their academic knowledge, teaching techniques, and learning outcome measurement, and has an administrative and development plan for supporting personnel that is based on analysis of empirical data.

The following important data should be used in formulating plans for human resource administration and development.

1.1 The current number of instructors and supporting personnel, and the target numbers for at least the next 5 years. This data is used to plan for the institution's human resource needs, determine the workforce needed to carry out the strategic plans, facilitate routine work, and formulate employment plans along with employee recruitment methods in order to hire personnel who have knowledge, skills, and positive attitudes. These recruitment efforts may be conducted both inside and outside of an institution.

1.2 The training needs of faculty and supporting personnel. Unit directors should assess these needs so that training programs which meet institutional standards can be provided, and to ensure that trainees can utilize the acquired knowledge to increase their work performance efficiency. Data on essential operational competencies at different levels can also be used to provide orientation and training so that personnel understand how to do their jobs and learn about relevant regulations, have positive notions and attitudes towards their jobs, and possess good skills. These things will lead to more efficient work performances; in addition, data regarding work training obligations, job rotation, and attendance at activities offered by the institution should also be included.

1.3 Feedback on performance and development results for each career path in the previous yearly cycle. This data is used to assign tasks, draw up work contracts, improve performance, commend or reward employees, and adjust remuneration rates and benefits so they are

suitable and fair; as well as recruit good and competent people to work for the institution.

1.4 An analysis of data regarding human resource strengths and weaknesses. This data is used to indicate which aspects of the human resource plan should be altered according to the needs and expectations of the personnel and the institution.

2. The administration and development of faculty and supporting personnel is carried out in accordance with the aforementioned plans.

2.1 The personnel recruitment and selection process is systematic and transparent. Operational guidelines are clearly written and distributed to the faculty or personnel within a specified timeframe, and actual recruitment figures are consistent with the plans proposed by the institution.

2.2 A job analysis is performed which includes preparation of job descriptions, job specifications, and competencies necessary for operations. This information is used for orientation and training activities concerning essential work methods and skills so that personnel will understand their work.

2.3 A clearly specified job evaluation takes place, and career paths for every personnel group are spelled out. Employee turnover in each group is analyzed in order to find ways to make improvements, and the results are monitored.

2.4 Faculty and supporting personnel are developed in accordance with the plans and specified career paths for all positions and personnel groups, and performance is monitored on an individual basis in order to support personnel on an ongoing basis.

3. Employment benefits that promote health and boost the morale of faculty and supporting personnel are in place so that they can carry out their work efficiently.

3.1 A pleasant workplace atmosphere is created which encompasses the environment, working atmosphere, benefits, along with nurturing care and equitable treatment for all personnel. These are organized in such a way that employees are satisfied and happy to work.

3.2 There is a system to assist faculty and supporting personnel applications for awards. For example, information about available awards is collected and announced in a timely manner to faculty and supporting personnel. Potential candidates are encouraged and assisted in applying for various types of awards – for example, the preparation of application documents, coordination of application processes, and other general matters.

3.3 Recipients of awards are honored in various ways: for example, by publicizing the achievements which led to their awards both inside and outside the institution, organizing festive occasions to honor them, and arranging for special awards.

3.4 There is a mentoring system in which those who have received awards give advice and support less experienced faculty and supporting personnel in applying for awards.

3.5 There are joint development activities that give subordinates an opportunity to express their opinions and work together. There are many communication channels between superiors and subordinates, and among subordinates to create positive feelings and joint development activities.

3.6 There are preventive and supportive health care policies. The personnel are provided with medical check-up benefits and encouraged to exercise in various ways: for example, by providing exercise areas and health care counseling by experts.

4. A system to monitor the faculty and supporting personnel is in place to ensure that knowledge and skills acquired from development activities are applied to improve teaching and learning, evaluation of student learning outcomes, and other related obligations.

Any training program or project aimed at increasing operational knowledge and skills should have guidelines or follow-up methods for assessing the success of the training or development. This is in order to ensure that personnel are able to apply the acquired knowledge and skills to their work or to improve themselves. For example, the institution may devise a mechanism for following up the application of knowledge and skills 6 – 9 months after the training or development, or a knowledge management mechanism as a tool to assess the success of the training or development.

5. The faculty and support personnel are educated about the institution's professional code of conduct, and monitoring is carried out to ensure that the code of conduct is put into practice.

5.1 The institution educates the faculty and supporting personnel about relevant codes of conduct, and arranges activities which impart the code of conduct to them on a regular basis.

5.2 The persons in charge of code-of-conduct education should follow up the self-improvement/development results of the faculty and supporting personnel on an ongoing basis.

6. The success rate of the administrative and development plans for the faculty and supporting personnel is assessed.

The institution assesses how successfully it has accomplished the activities in its proposed plans – including the success rate of administrative and development plans for the faculty and supporting personnel – based on the key performance indicators and target values specified in the plans. These indicators and target values should correspond with institutional strategies. The assessment results should be used to improve the plans or the administration and development of the faculty and supporting personnel during the next yearly cycle.

7. The assessment results are used as feedback to improve these plans or the administration and development of the faculty and supporting personnel.

7.1 The assessment results of the successfulness of the administrative and development plans for the faculty and supporting personnel are used as feedback to improve these plans.

7.2 The revised plans for the administration and development of faculty and supporting personnel are carried out within the specified timeframe.

7.3 The needs and satisfaction levels of faculty and supporting personnel regarding development activities are surveyed, and the information is used to prepare future development plans for the faculty and supporting personnel.

● **Indicator 2.6 System and mechanisms for teaching and learning management**

1. Each curriculum has a quality assurance system and mechanisms that emphasize student-centred instructional management.

1.1 The institution develops a system and mechanisms for teaching and learning management in such a way that the process is flexible and responsive to the diverse needs and aptitudes of learners. It takes into account the fact that learners have different capabilities and various learning styles, and allows learners to take part in designing teaching and learning approaches. The instruction should emphasize analytical thinking and impart essential learning skills, a thirst for knowledge, and creation or development of new knowledge on their own by the learners. The instructors play a role in stimulating learners to think analytically and make practical applications, suggesting sources of data and knowledge, organizing the instruction, and facilitating the learning process so as to ensure that learning achievements take place in every course.

1.2 Every course provides student-centred learning activities – for instance, practical class sessions, group discussions, seminars, case studies or projects or research, off-campus learning, as well as work training and experience.

1.3 Key performance indicators for student-centred teaching and learning management are specified for each course, and performance is monitored and verified. Assessment results are used to improve the efficiency of teaching and learning.

2. Every course and corresponding field experience (if applicable) in each curriculum has course specifications (course outlines) that are prepared before the beginning of the course in each semester/trimester. The course specifications must comply with the Thai Qualification Framework for Higher Education of 2009.

2.1 The instructors prepare course specifications for all the courses that are taught each semester/trimester. Each course specification (outline) must include at least the following points:

- Course objectives indicating the learning outcomes that learners will gain from the course. The objectives should focus on behavior which results from the learning process, and comply with the Thai Qualification Framework for Higher Education of 2009.
- Format and implementation, including the course descriptions and other course details, such as the teaching and advising hours.
- Learners' performance development, indicating the knowledge and skills that the course aims to impart to learners, teaching methods, and various types of learning outcome assessment in accordance with the Thai Qualification Framework for Higher Education of 2009.
- Teaching and assessment plan, specifying the topics or contents taught in each period, teaching and learning activities, educational equipment to be used, and the method to assess learning outcomes for each topic or content area.
- Teaching and learning resources, listing up-to-date documents, books, and textbooks required for the course, as well as out-of-class learning sources which will help learners gain real or practical experience.
- Assessment and improvement of the course implementation, including assessment of the teaching and learning process by collecting data from various sources such as the learners' opinions, instructors' opinions, student learning outcomes, observation, etc.

2.2 Instructors hand out the course outline which contains the teaching plan and other course details to learners during the first period.

2.3 The learning outcome assessment for each course should consist of both formative (during the semester) and summative (at the end of the semester) evaluation.

3. Every curriculum has courses that develop self-directed learning skills and learning from practical activities that are conducted both inside and outside of class or by doing research.

3.1 The curriculum committee includes a course(s) that encourages learners to learn on their own and learn by doing both inside and outside of class, such as practical class sessions, group discussions, seminars, case studies or projects or research, off-campus learning, as well as work training and experience in every curriculum.

3.2 There is a system to report the development of each individual learner which reflects their ability to learn on their own and practice in actual work situations after completing a program of studies.

4. Experienced academics or professionals from external organizations or the community participate in the teaching and learning process of every program.

Every program should offer learners an opportunity to learn from external individuals, organizations, or communities which have experience in the academic or professional area so that learners know how to apply theoretical knowledge to practical contexts and possess up-to-date academic knowledge. An external expert may be invited to be a special instructor for a whole course or for some class periods, students may attend a lecture, visit an external site or organization, or practice as a trainee in a business company as part of cooperative education, etc.

5. Teaching and learning management developed from research or knowledge management process is performed to develop teaching and learning process.

5.1 The instructors should improve the teaching and learning process and teaching methods of the courses they are responsible for on an ongoing basis. To do so, they should analyze their past instruction and conduct in-class research to measure the appropriateness of teaching methods, teaching and learning processes, and assessment of student learning outcomes. They should find areas that need improvement, and ways to accomplish this.

5.2 There should be seminars or opportunities for instructors to exchange their research knowledge and teaching experiences in order to improve and develop their teaching on a regular and ongoing basis.

6. The satisfaction of learners with the quality of the instruction and learning facilities is assessed for every course in every semester/trimester. The satisfaction assessment results for each course must not be lower than 3.51 out of a full score of 5.

At the end of each semester/trimester, the institution collects learners' opinions about the quality of the instructors' teaching for every course. The quality, sufficiency, and suitability of the learning equipment and media, such as classroom equipment, computers, laboratory tools, library books, textbooks, and printed materials, etc. is also assessed. These opinions are used as feedback to improve the teaching and learning process and learning support. The course syllabus for the next semester/trimester states how teaching and learning will be improved and developed based on the previous assessment.

7. The teaching and learning management, teaching strategies, or evaluation of learning outcomes is developed or improved based on the assessment results for each course.

The institution or faculty should appoint a committee in charge of the curricula which is responsible for the following tasks:

- Examine and check the completeness of course specification details in item 2.
- Monitor and analyze the operational results for each course and the overall performance of each program every semester/trimester. It should focus on assessment results received from students and prepare an improvement plan for relevant issues or propose improvement methods to higher-level committees.
- Ensure that the implementation of each curriculum is assessed by the stakeholders, e.g. current learners, those who are about to graduate, alumni, and an independent committee according to the specified criteria and timeframe in every academic year.

- Ascertain the necessity for revising, closing, or opening a course or program of studies based on evidence from the assessment results of current learners, those who are about to graduate, independent assessors, and those who employ graduates on an ongoing basis.

- **Indicator 2.7 System and mechanisms for developing educational achievements according to graduates' qualifications**

1. The institution surveys employers about desirable graduate qualifications at least for all Bachelor programs during each curricular cycle.

1.1 The committee responsible for curricula must survey or analyze the needs of employers of graduates regarding graduate qualifications on a regular basis, i.e. at least once in every 5 years. The survey data are integrated with the Thai Qualification Framework for Higher Education of 2009 and used to improve the curricula or teaching and learning management so as to provide the graduates that best satisfy the demands of graduate users.

1.2 The committee responsible for curricula must revise and improve the essential graduate qualifications to match each field of study and degree level and meet the demands of graduate employers. It must take into account the modernity of the curriculum, which must be consistent with current changes at the local, national, and international levels. Graduate production targets are jointly determined by the instructors and circulated among all personnel involved so that they may unitedly develop the students.

2. The results from item 1 are used to improve the curricula, and teaching and learning management, evaluation of educational outcomes, and achievement of supporting professional skills and desirable characteristics specified by employers.

2.1 The committee responsible for curricula analyzes, monitors, and assesses curricular implementation and uses the survey results of graduate employer requirements to improve the curricula. Special attention is given to the aspects of curricular structure, management of teaching and learning activities, educational media, and learning outcome evaluation.

2.2 The committee responsible for curricula sets up a quality assurance system for teaching and learning management at the curriculum level. The courses should be linked to the approved graduate qualifications so that the instructors of each course realize and take responsibility for developing the skills required for the course. Integrated teaching and learning activities may be designed which involve two or more courses, or in-class learning may be integrated with out-of-class activities so that learners possess both theoretical knowledge and practical experience, and have the skills necessary for working in the real world.

2.3 The committee responsible for curricula establishes a system to supervise the teaching and learning activities designed by the instructors to ensure that the activities encourage students to learn by themselves. A meeting should be held that gives the instructors a chance to criticize the teaching and learning, educational media, and assessment methods so that instructors can use this information from their colleagues to improve themselves.

2.4 There is an assessment system that reflects students' learning skills and abilities. This system should emphasize authentic assessment and focus on advanced learning abilities. Various measurement and assessment methods should be utilized to reflect learners' true performance, especially research-based learning skills.

2.5 There should be a meeting between the committees responsible for different curricula to exchange their experiences concerning teaching and learning activities, and to jointly resolve the problems of learners who require special development.

3. Development of graduate qualifications should be supported through the use of human, information technology, and financial resources.

3.1 The committee responsible for curricula should formulate plans to acquire a sufficient budget or the resources necessary for supporting teaching and learning activities that develop graduate qualifications.

3.2 Units at the faculty and department levels encourage learners to use educational media technology for self-directed learning. They may create a website so that students and instructors can build a learning society in the form of a community of practice, so that the learning can take place at any place and any time.

4. There is a system and mechanisms to encourage undergraduate and graduate students to participate in academic conferences, or to present their academic work at inter-institutional, national, or international conferences.

4.1 Information about academic conferences held both inside and outside of the country is provided for students.

4.2 There is a budget allocated for students to attend both internal or external academic conferences.

4.3 If possible, students may be required to attend a national academic conference every year, or an international conference at least once during their program of studies.

4.4 The instructors develop student skills in presenting academic work in class and encourage them to submit their work to academic conferences, so that they learn the techniques of how to submit academic work that may be selected for publication.

5. Activities that edify the morality and ethics of undergraduate and graduate students are organized by the institution.

5.1 There is a budget allocation for arranging morality and ethics edification activities for the students. These activities should be held regularly, including both activities specified in the curricula and extra curricular activities.

5.2 The students are required to participate in the institution's morality and ethics edification activities. There is objective assessment of these activities, and the assessment results should have an important impact on students' academic grades or graduation eligibility.

6. There is a system and mechanisms to support the application and use of graduate students' theses, and there is confirmation of their actual use by public, private, or professional organizations. (only for group CI)

6.1 Public or private organizations, units, institutions, employers of graduates, or academics are invited to share knowledge or information related to research issues that would be desirable topics for student theses about once per semester/trimester. This is done so that students will be able to conduct research projects that meet the needs of the organizations involved.

6.2 Information about scholarships offered by organizations is provided for the students. Student skills in preparing research project proposals are developed so that they can prepare effective proposals that correspond to the timeframe for scholarship applications.

6.3 The students are encouraged to submit their thesis project proposals to organizations that supply research scholarships.

6.4 A thesis examination committee may include an external expert whose work is related to the student's research topic, as the expert may be able to utilize the research results.

6.5 Student theses are publicized via various channels such as news on the radio, television, or newspapers. Research abstracts may be categorized and distributed to related institutions or organizations. Or when a problematic event or situation occurs, this may be an opportunity to circulate a student's research results that point towards ways to resolve the problem.

6.6 A thesis database system is set up for the use of individuals or organizations, and methods of use may include searching for references or responding to survey questionnaire forms from related organizations.

7. Students' skills in organizing materials from their theses and writing research articles are developed, as well as publishing the articles in international journals. (only for group D)

7.1 Instructors may assign students in various courses to read research articles published in academic journals, and then critically analyze

and synthesize knowledge from them.

7.2 A course or extracurricular activity concerning the preparation of research articles for publication in academic journals is provided for students to develop the necessary skills.

7.3 A clinic may be set up to assist with the preparation of research articles, including translating them into a foreign language(s).

7.4 Students are encouraged to use parts of their theses to write and publish research articles in journals during the process of thesis preparation.

7.5 Student articles, whether selected for publication or not selected, are presented in class so that the students may critically analyze and learn from them.

● **Indicator 3.1 System and mechanism to provide guidance and information services**

I. There is a counseling service which provides advice on both academic and life issues for the students.

1.1 An institution sets up an information system with students' information, e.g. physical and mental health information, educational information, family information, and persons that the institution can contact when a student has a problem.

1.2 Units at the departmental level set up a system for appointing academic advisors that takes into consideration the ratio of instructors to students so that all students are fully cared for. There is a system that provides personal care for the students and emphasizes individual development. Formal or informal meetings are held so that instructors or faculty members responsible for the program may exchange information about students who have learning problems. This assistance and service should be primarily preventive rather than corrective.

1.3 The institution or units at the faculty level such as the student affairs department provides service or advice to students with problems in their lives. There are persons available to listen to student complaints at all

times. A hotline service may be provided to give counsel or help students who have critical problems and require urgent assistance. There is a system to care for students who are referred by their advisors to receive this service.

1.4 There is a system to transfer students who have physical or mental problems that the institution cannot care for to a hospital or specialized organization, especially in serious cases.

1.5 Individuals at all levels who are associated with students have systems to follow up the results of student request for help or counseling until the problems are successfully resolved.

1.6 Regular meetings are held to develop the instructors and persons responsible for taking care of students to help build a common understanding and create a cooperative assistance network.

1.7 Meetings are held that help build relationships between the institution and students' families, so that problems can be cooperatively resolved.

1.8 There is a channel for students or persons involved to make suggestions to improve this service.

2. There is an informational service which provides useful information for students.

2.1 The institution sets up an electronic information system, boards, or websites to announce useful information and news to the students: for instance, information about scholarships, research grants, employment opportunities, and up-to-date academic news related to students' fields of study.

2.2 There is a channel for students or persons involved to make suggestions to improve this service.

2.3 There is a system to monitor and assess the performance of the information service.

3. There are activities that help increase the academic and professional experience of the students.

3.1 Internal units and external organizations work together to become learning and work training locations for students. The quality of the learning and work training locations is evaluated, and the results are used as

data for plans to organize suitable vocational training in the future.

3.2 Students are the main organizers of academic or social activities that develop their skills and increase their experience in working together.

3.3 There is a channel for students or persons involved to make suggestions to improve the development of academic and vocational experience.

3.4 There is a system to monitor and assess the performance of academic and vocational training.

4. There is an information service which provides useful information for the alumni.

a. The institution has an alumni database and sets up an electronic information system, websites, newsletters, etc. to announce useful information and news to the alumni: for instance, information about academic conferences, seminars, sources of upgrading scholarships, research grants, employment opportunities, and relevant news.

b. The alumni regularly receive news about academic activities to develop their knowledge and increase their experience.

c. The alumni have opportunities to take part in curriculum improvement and development, teaching and learning management, collaborative interdisciplinary research, and serve as members on thesis examination committees. Not only do these activities provide a chance for current students to learn from the knowledge and experience of the alumni and lead to network linkages between current students and alumni, but alumni and instructors also acquire new knowledge in their roles as givers and recipients.

d. There is a channel for alumni to make suggestions to improve this service.

5. There are activities that help increase the knowledge and experience of the alumni.

e. Activities that increase the academic and vocational knowledge and experience of the alumni are held regularly, and news about these activities is sent to the alumni.

f. There is a channel for the alumni to make suggestions to improve these activities that increase academic and vocational knowledge and experience.

6. The quality of the services in items 1 – 3 is assessed, and each item receives a score of not less than 3.51 out of a full score of 5.

a. Related internal units at the department, sector, faculty, and institutional levels set up a system to monitor and assess the performance of all services provided for the students and alumni. Personnel are assigned to be in charge of the assessment, and the assessment timeframe is specified.

b. The quality of all services is assessed, and the assessment results are presented to the persons in charge and administrators at the faculty and institutional levels.

c. The average student satisfaction scores for the assessments should be 3.51 or higher out of a full score of 5 to be regarded as indicative of good services. If the quality of a service does not meet the criterion (lower than 3.51), the causes, problems, and obstacles should be analyzed in order to find ways to improve the service. The students and alumni should have a chance to make suggestions and propose problem-solving or service improvement approaches.

7. The quality assessment results of the services are used as feedback to improve the services so that they meet student needs.

7.1 The service quality assessment results are presented to persons involved at all levels. A plan to develop and improve the services is formulated, especially for services that do not meet the target.

7.2 Services for students and alumni are improved and developed, and all aspects of their quality is assessed according to this plan.

7.3 The students and alumni are surveyed to assess their satisfaction with all services offered by the institution at least once a year. This information is used to make a plan to develop the service system in the future.

● **Indicator 3.2 System and mechanisms to promote student activities**

1. The institution prepares a student development activities plan which promotes all of the learning outcomes specified by the Thai Qualification Framework for Higher Education of 2009.

1.1 Organizational units at the faculty and institutional levels formulate a clear plan to foster student activities other than the teaching and learning student development activities in the curricular courses. These activities are organized by either the institution or a student organization to develop and impart to students the qualities specified by the institution and in accordance with the Thai Qualification Framework for each level of education.

1.2 Key performance indicators for the management of student development activities are established. They include the main indicators specified by the Thai Qualification Framework for Higher Education of 2009, and additional specific indicators (if any) to monitor and assess student learning outcomes acquired from development activities.

2. There are activities that provide knowledge about and skills in regards to education quality assurance for the students.

The institution develops students' knowledge and understanding of quality assurance, and requires them to formulate key performance indicators and quality assessment methods for projects or activities that they propose in order to receive institutional support.

3. Students are encouraged to apply their quality assurance knowledge when organizing their student activities. For undergraduate students, at least 5 types of the following activities must be conducted, while for graduate students, at least 2 types are required.

- Academic activities which impart desirable graduate qualifications.
- Sports activities or activities that promote health
- Charitable or environmental conservation activities
- Morally and ethically edifying activities

- Activities that promote arts and culture

3.1 For educational management at the Bachelor level, an institution should encourage students to prepare a student development activities plan with activities which are organized by the students. These activities should consist of at least the following 5 types, i.e. academic activities which impart desirable graduate qualification sports activities or activities that promote health, charitable or environmental conservation activities, morally and ethically edifying activities, and activities that promote arts and culture.

3.2 For educational management at the graduate studies levels, an institution should encourage Master and Doctoral students to plan activities which are organized by the students, consisting of at least 2 types of the following activities, i.e. academic activities which impart desirable graduate qualification sports activities or activities that promote health, charitable or environmental conservation activities, morally and ethically edifying activities, and activities promoting arts and culture.

3.3 For all student-led activities organized at the Bachelor and graduate studies levels, students must submit a project proposal to the persons in charge (faculty advisors or an institution's student affairs department). This proposal needs to include a description of the quality assurance system used for the activity which includes the activity's objectives, key performance indicators, type of activity, target groups, and method of evaluating its success. The performance of previous activities should be monitored and evaluated, and the results used for planning new projects or activities.

3.4 The persons in charge should provide feedback for students so that they can develop correct and proper project proposals especially in regards to the section for implementing quality assurance.

4. Students are encouraged to build quality development networks within the institution and with other institutions, and arrange activities together.

4.1 The institution requires students to prepare a plan to build quality development networks within the institution, together with

corresponding activities. The institution supports the organization of activities to exchange workexperiences in various formats, such as KM: knowledge management. In the meetings, students have a chance to present their operational results (assessment results) so as to inform other groups of students and exchange knowledge about planning methods, indicator development, and performance assessment.

4.2 At the institutional level, the faculty members in charge of student affairs should hold meetings with other institutions to encourage joint activities with students from different institutions, and to help create inter-institutional student quality development networks. The institution should provide funds for activities jointly organized with other institutions.

4.3 Each year, institutions may take turns hosting a meeting or seminar for students to share their experiences organizing activities, or to present the results of their activities. They may also exchange their experiences using quality assurance systems to organize student activities.

4.4 Institutions may cooperate to create a channel for publicizing joint student development activities. This institutional network is a medium for exchanging experiences in organizing student activities, and the persons in charge may be instructors and students from different institutions.

5. The success of student development activities is assessed based on the objectives of the plans.

5.1 The institution (student affairs department) has a system to monitor and assess the performance of student development activities based on the specified indicators.

5.2 The institution requires students to prepare a report on activity results. This report helps to synthesize an institution's activities, and provide an overview of them and their effects on students during each yearly cycle.

5.3 Based on this report of student activity results, the institution assesses the knowledge, understanding, and application of the quality assurance system to the organization of student activities.

5.4 The institution analyzes student strengths and weaknesses in order to prepare the student activities plan for the next year.

6. The assessment results are used as feedback to improve the planning or implementation of student development activities.

6.1 The institution uses the evaluation results of student development activities and an analysis of strengths and weaknesses for planning student development activities on an ongoing basis, especially for qualities that are specified by the Thai Qualification Framework for Higher Education of 2009 but did not previously meet the expectations.

6.2 The institution presents this information to relevant persons at all levels and brainstorms to find ideas so that the students will acquire all the qualities specified by the Thai Qualification Framework for Higher Education of 2009 through student activities.

• Indicator 4.1 System and mechanism to develop research or creative work

1. A system and mechanism to administer research and creative work is established so that the institution's planned research goals are achieved and work is carried out according to the system.

1.1 An institution or faculty should establish an approach, steps, and criteria and appoint a unit, individual, or group of individuals to be responsible for the research mission. It should also provide sufficient funds for the administration of research and creative work. Regarding administration, the institution should regularly plan, inspect, assess, and improve performance so as to attain the goals of the institution's research plan.

1.2 To successfully administer research and creative work, the institution should allocate funds for research administration – for instance, funds for supporting the operation of research groups or research centers – so that research or creative work may be efficiently undertaken. Apart from that, the institution may offer research funds to students or post-doctoral researchers working in the research groups or centers.

2. Research or creative work procedures are integrated with teaching and learning management.

The research or creative work process is integrated with teaching and learning management, e.g. 1) a requirement that graduate students must be part of instructors' research teams, 2) a requirement that Bachelor students must do a research or creative work project which is related to the research or creative work of their instructors, 3) a requirement that students at all levels must attend lectures or seminars on the progress of instructors' research, or visiting professors' lectures, or exhibitions of instructors' creative work, 4) the organization of conferences where students can present their research or creative work or support for students to attend national and international research/creative work conferences, 5) support for instructors to use parts of their research results in teaching and learning management, etc.

3. The research or creative work abilities and potential of faculty and full-time researchers are developed, and they are also educated about the research code of conduct.

3.1 An institution sets up a system to recruit and supervise instructors and researchers. For example, an institution analyzes its workforce, makes plans, and recruits personnel (instructors, researchers, and graduate students) who possess qualities suitable for its emphases on research or creative work from inside and outside of the country. It should devise relevant regulations and guidelines and encourage instructors to do research or creative work and publish the results in journals or at exhibitions which are recognized nationally and internationally. This must be clearly defined as a duty of the instructors.

3.2 The capabilities of researchers are developed through processes optimal for the experience of each individual group. In the case of new researchers, this may begin with training, conducting research or creative work under the supervision of experienced researchers, joining a research group of experienced researchers, attending academic conferences, or advising graduate students on their theses. In the case of general researchers, they should have an opportunity to work in research laboratories or work with leading external research groups from inside and outside of the country. This is a way to gain valuable knowledge and

experience.

evertheless, the most efficient way to develop the capacity of instructors and researchers is to form a research group which is comprised of experienced researchers, mid-level researchers, post-doctoral researchers or students, graduate students, and research assistants. This combination enables the group to conduct ongoing insightful research.

3.3 The instructors and researchers are educated regarding the code of conduct for researchers and other relevant codes of conduct. In addition, the institution must devise a system to ensure that the researchers strictly conform to these codes.

3.4 The institution should provide incentives for researchers such as commendation, rewards, or awards for researchers with outstanding achievements. The institution should create a suitable atmosphere and provide support services and motivation for conducting research and creative work.

4. An institutional budget is allocated for research or creative work.

It may be difficult for new researchers to obtain research funds from external sources. Therefore, the institution should allocate startup funds to these researchers so that they have an opportunity to conduct some productive research or creative work which can be used to apply for research funds from external sources in the future.

In regards to applications for external funds, the institution may set up a support system, for example, by providing information, details, and conditions about research funding from sources inside and outside of the country. This information should be readily accessible to instructors and researchers. Additionally, the institution may appoint a group of experts as mentors to check and help improve research project proposals before instructors and researchers apply for research funds so as to increase the possibility of receiving funds.

5. The research or creative work mission is supported in accordance with the institution's identity.

The institution should provide sufficient resources such as research funds, laboratories, academic research sources, and information systems for research as well as other supplementary activities. The details are as follows:

5.1 The research funds should cover these aspects: 1) funds to support the administration of research groups or laboratories or centers so that they can continuously create work which is recognized internationally or meets the demand of the nation or local communities, 2) funds to support the publication of research or creative work in various formats, 3) funds to support the research and creative work of graduate students and post-doctoral researchers, 4) funds to support visiting professors, etc.

5.2 The research laboratories should be suitable for the type of research which is emphasized by the institution. The health protection and safety systems used in the laboratories must meet acceptable standards. There may be an instrument center which provides advanced tools necessary for research units, groups, and centers. If there is no such center, the institution should set up a network system so that researchers can gain access to the instruments of organizations inside and outside of the country.

5.3 Academic learning sources encompass not only books and journals in hard copy and electronic formats, but also support for organizing academic conferences, visiting professors, research/creative work cooperation with renowned organizations inside and outside the country, and sabbatical leaves for instructors in research universities.

5.4 The information system for research should provide at least the 5 following types of information: 1) internal and external funding sources for research and creative work, 2) current and past research and creative work of the institution, 3) publication sources for research and creative work, including journals, academic conferences, creative work exhibitions, as well as support from the institution for publication of findings, 4) an institutional system and mechanism to support the beneficial utilization of research and creative work, applications for patents and petty patents, and the purchase/sale of intellectual property, 5) institutional

regulations, criteria, and other guidelines related to research and creative work.

6. Monitoring and assessment of each support item specified in items 4 and 5 is carried out.

The institution sets up a system to regularly evaluate the success of all aspects of the support provided, and the instructors and researchers participate in this evaluation. For example, 'evaluating the accomplishments of research funding' should cover the following issues: whether research is finished on time, its quality meets the established criteria, and fund recipients are able to obtain further funding from external sources. Or 'evaluation of information sources to support research' may assess the suitability and adequacy of sources as compared with faculty and researchers' current work. Or 'evaluation of information systems' may assess whether the systems satisfy the needs of the instructors and researchers, etc.

7. The assessment results are used as feedback to improve support for the research and creative work mission.

The institution uses the assessment results to devise an improvement plan, determining activities required for these improvements, appointing individuals or units in charge, setting up budgets if necessary, specifying the timeframe in which the improvements must be completed, and then implementing the planned improvements.

8. The institution sets up a system and mechanism for research and creative work that is based on local wisdom or social problems in order to meet the needs of local communities and society, and operates in accordance with this system. (only for groups B and C2)

The institution or faculty adopts guidelines and steps, and appoints persons to be responsible for cooperation with external organizations in various ways. For example, one method may start with finding out information about a target group, then discussions with this focus group, building connections with external organizations, and using the feedback obtained through previous cooperation.

The objectives of this cooperation should cover research and creative work which is based on local wisdom or tries to answer the questions of external organizations or communities, as well as sharing resources such as a physical plant, personnel, equipment, or other resources.

● **Indicator 4.2 System and mechanism to manage the knowledge gained from research or creative work**

1. The institution sets up a system and mechanisms to support the presentation of research or creative work in academic conferences, or its publication in national or international journals, and this system effectively disseminates research results.

An institution devises an approach, steps, and criteria and appoints persons to be responsible for supporting the publication and presentation of research or creative work in journals or academic conferences which have a peer review system. The support should encompass the following aspects: 1) provide young researchers with mentors to assist them in writing research reports for presentation at academic conferences or publication in journals, 2) provide proof-reading service for instructors' or researchers' English research articles before publication in international academic journals, 3) allocate budgets for attending conferences to present research or creative work, 4) furnish rewards for research or creative work being published or publicized, 5) pay for journal publication fees (if any), etc. Nevertheless, the support may vary depending on the status and emphases of each institution.

2. The institution sets up a system and mechanisms to collect, select, analyze, and synthesize the knowledge gained from research or creative work in order to make the insights understandable to lay people, and operations are carried out in accordance with this system.

An institution devises an approach, steps, and criteria and appoints persons to be responsible for collecting, selecting, analyzing, and synthesizing the knowledge gained from research or creative work. The process must take the needs of target groups into account and provide academically reliable and up-to-date information. For example, individuals are put in

charge of monitoring the research or creative work of instructors and researchers, selecting the findings which may be of public interest, arranging interviews with those who produced this work, analyzing and synthesizing the information in an interesting format that is understandable to the public, and categorizing the knowledge for later publication.

3. The knowledge from research or creative work in item 2 is publicized to the public and other relevant audiences.

An institution publicizes the body of knowledge acquired from the analysis and synthesis of research or creative work in item 2 via various types of media, using dissemination strategies. The process starts with planning for appropriate publication among the target groups, and then implementing this plan and collecting feedback. Apart from publication, an institution may create networks for disseminating research and creative work consisting of alumni, communities, external government and private organizations, and especially target groups which may potentially be able to support, cooperate with, or utilize the research or creative work in beneficial ways.

4. The outcomes of research or creative work are utilized in beneficial ways, and there is confirmation of this utilization by external or community organizations.

An institution supports the beneficial use of research and creative work. For example, 1) an institution determines steps, methods, and persons to serve as intermediaries who are in charge of technology transfers between instructors and researchers and external organizations, which have the potential to utilize research and creative work. 2) the persons in charge search for research work in the public and private sectors, both industrial and service sectors, where organizations wish to receive specific research services or consultancies from an institution and inform the researchers. 3) the persons in charge initiate, coordinate, or support the commercial utilization of research or creative work, for example, as a start-up company.

5. The institution establishes a system and mechanism to protect the rights of research or creative work that is used in beneficial ways, and operations are carried out in accordance with this system.

An institution or faculty devises an approach, steps, and criteria and appoints persons to be in charge of helping arrange contract negotiations and agreements, or assisting instructors, researchers, and the institution regarding regulations and laws related to business negotiations and the purchase or sale of research/creative work, as well as the subsequent formation of business alliances that arise from the results of research or creative work.

Furthermore, an institution should devise regulations and methods for protecting the rights and benefits of instructors, researchers, and the institution from the purchase/sale of research output and consequent business activities. These regulations must be transparent and accepted by all parties.

6. The institution sets up a system and mechanism to support patent/petty patent applications, and there are applications for patents or petty patents. (only for groups C I and D)

An institution devises an approach and steps, as well as appoints persons to be responsible for providing instructors and researchers with information and assistance in filing patent/petty patent applications in various matters e.g. 1) providing information and advice about intellectual property by means of training programs, seminars, or a counseling clinic, 2) assisting with drafting and filing applications for patents or petty patents from the Department of Intellectual Property or equivalent offices in foreign countries, 3) coordinating receiving permission to use the patent or petty patent rights in commercial applications, etc.

● Indicator 5.1 System and mechanism for academic services to community

1. The institution sets up a system and mechanism for providing academic services to community, and operates in accordance with this system.

The institution devises an approach, steps, and criteria for various kinds of academic services that are related to the institutional missions. The instructors and personnel at all levels are encouraged and motivated to become knowledgeable and experienced in the provision of academic services to internal units and external organizations. They should have a service mind and be willing to volunteer their time. In addition, budgets must be allocated, rules for service provision must be established, and the workloads of instructors and personnel must be clearly specified. There should be a system for comparing and substituting different types of tasks to inspire the personnel to serve local communities and society according to the institution's specialties and emphases.

The provision of academic services should include regular planning, inspecting, monitoring, and assessment, which will lead to continuous quality improvements and achievement of the specified goals.

2. Academic services to community are integrated with teaching and learning.

Academic services work is integrated with the instructional management process and other routine duties of the instructors and personnel. For instance, students are required to use their knowledge to create projects or activities that benefit local communities.

3. Academic services to community are integrated with research.

The institution integrates academic services with its research in a systematic manner. For example, 1) research outcomes are utilized in response to the needs of all parties at all levels, 2) the knowledge and experience gained from service provision are used to further develop the body of knowledge through research processes, etc.

4. The effectiveness of efforts to integrate academic services to community with teaching, learning, and research is assessed.

A system is established to monitor and evaluate the success of efforts to integrate academic services to community with the instructional and research missions. Service providers, service recipients, and students who are both service providers and clients should take part in this process.

The assessment concerns the operational plans, institutional targets, cooperation and quality of the personnel, along with the quality and actual usefulness of the services based on the criteria adopted by the institution.

5. The assessment results are used as feedback to improve the integration of academic services to community with teaching, learning, and research.

The institution uses the assessment results to regularly and concretely develop academic service plans, procedures, and achievement outcomes.

● Indicator 5.2 Process of academic service benefits community

1. The needs of communities, the public or private sector, or professional organizations are surveyed in order to set the direction and devise plans for academic services according to the institution's emphases.

Communities, the public or private sector, or professional organizations are surveyed about their needs in order to establish policies, strategies, a direction, and operational plans for academic services in accordance with the institution's emphases and specialties.

2. There is cooperation in providing academic services in order to learn about and enhance the strengths of communities, the public or private sector, or professional organizations.

The institution invites or provides an opportunity for contributors from communities, the public or private sector, or professional organization-involved in the provision of services to collaborate and create networks between individuals or organizations in various forms. For example, the institution may collaborate with a business company to utilize research results to address a problem or develop the firm's staff or production sector. The institution shares its knowledge, offers advice, and builds a communication channel to create common understanding with the industrial sector or initiate projects or activities in communities.

3. The benefits or impacts of academic services to community are assessed.

The benefits or effects of academic services to community are evaluated to see whether they correspond to the direct and indirect service needs of clients. The institution assesses the results that occur among students, instructors, and personnel who are service providers about the beneficial utilization of their knowledge and expertise, communication, explanations, and advice provided to service recipients and the people.

4. The assessment results in item 3 are used to improve the system and mechanism or academic service activities.

The assessment results from the provision of academic services are used to develop the quality, standards, and system and mechanisms for service provision, including their formats, scope, costs, timeframe, and service contracts. The quality of service provision must be controlled and monitored by using an information system which is accurate, fair, transparent, and verifiable.

5. The knowledge gained from provision of academic services is developed and transferred to institutional personnel as well as disseminated to the public.

The institution develops the knowledge received from the provision of academic services, and encourages the process of transmitting this knowledge to internal personnel and students. It arranges opportunities for them to exchange their opinions and share their service provision experiences via various learning media, and sets up a database system to disseminate information about its academic services to the public.

● Indicator 6.1 System and mechanism for the preservation of arts and culture

1. The institution sets up a system and mechanism for the preservation of arts and culture and operates in accordance with this system.

The higher education institution establishes a system and mechanisms for the preservation of arts and culture. The system should

encourage personnel to organize art and cultural activities with concrete results according to the proposed plans. For example, the institution may formulate policies for the preservation of arts and culture, appoint persons in charge, set aside project budgets, specify assessment indicators, and carry out arts and culture work in a practical and concrete manner. Everyone should take part in this process, and the implementation should be systematically monitored, which will lead to ongoing development.

2. The preservation of arts and culture is integrated into teaching and learning and student activities.

The institution supports the integration of preservation of arts and culture with the teaching and learning and student activities. In other words, the preservation of arts and culture is blended with teaching and learning activities or extra curricular activities organized by the institution or a student organization.

3. The institution publicizes its activities or services to preserve arts and culture to the public.

3.1 The institution has a place to provide for and publicize its arts and cultural services, such as an art gallery, memorial hall, museum, or performance stage which is administered by an expert in arts or culture. There are regular activities held on an ongoing basis, and the institution allocates a budget for the arts and culture mission.

3.2 The institution publishes arts and culture journals at different levels such as at the organizational unit or national level on an ongoing basis.

3.3 The institution provides arts and cultural academic services by cooperation with other units or organizations, creates networks, specifies performance indicators, and operates on an ongoing and systematic basis.

4. The success of efforts to integrate the preservation of arts and culture with teaching and learning and student activities is assessed.

The institution monitors the results of integrating the preservation of arts and culture with teaching and learning management and

student activities. It also specifies performance indicators and systematically monitors operational results.

5. The assessment results are used as feedback to improve the integration of the preservation of arts and culture with teaching and learning and student activities.

5.1 The institution uses the assessment results to develop the process of integrating the preservation of arts and culture with teaching and learning management and student activities, using the PDCA principles.

5.2 The institution prepares an improvement and development plan for integrating the preservation of arts and culture, and implements the plan on an ongoing basis.

5.3 Implementation of the improvement and development plan gives rise to concrete achievements.

6. The institution establishes or defines quality standards for arts and culture, and creates works that are accepted at the national level.

6.1 The institution sets/creates standards for arts and culture in cooperation with experts, and publicizes these standards to the public.

6.2 The institution is recognized by society. For example, it may have National Artists, in the year of assessment.

6.3 The institution produces research or creative work regarding arts and culture which is publicized at the national, regional, or international level, or is awarded, referenced, or acknowledged.

● Indicator 7.1 Leadership of the institution council and administrators at all levels of the institution

I. The institution council performs all its duties as prescribed by law and assesses itself according to predetermined criteria.

I.1 All the institution council members should be informed of and understand all the laws and regulations that concern the institution, especially the Institution's Act and the Regulations regarding the Administration of Individuals and Administrators. They should also be aware of the direction of national education quality development, developmental

framework for the institution, and institutional identity. This knowledge is essential to a realization of their role and responsibilities towards the institution prior to the fulfillment of their duties.

1.2 The institution council oversees the institution's development direction, which is jointly determined by the institution's administrators and the institution council, and this direction is consistent with the direction of national education quality development, as well as keeping up with global changes.

1.3 The background and personal information of the institution council members and self assessment reports must be disclosed and reported to the public.

2. The administrators have vision, set an operational direction, and transmit it to the personnel at all levels, devise strategic plans, and use information systems as a basis for the operations and institutional development.

2.1 The administrators and institution council collaborate to establish policies, formulate a vision, missions, strategic plans, and use them for actual operations in a systematic manner. The key performance indicators (KPI) for operations should be specified by taking the following dimensions into consideration: 1) organizational development, e.g. providing instructors and personnel with a opportunity to study, learn, and develop themselves on an ongoing basis, or developing information systems for learning; 2) development or improvement of the main institutional processes, e.g. developing or improving the curricula, student learning processes, the direction of research support, academic and social services, preservation of arts and culture; 3) service clients or stakeholders, e.g. satisfaction of graduate employers, taking the cost-effective use of budgets into account and ensuring that this is done in a suitable manner that is in harmony with the institution's strategic goals or strategic objectives. In addition, the costs and benefits of data storage and reporting must be considered as well.

2.2 The administrators formulate a system and mechanism to transfer the policies, vision, and strategic plans to units and personnel at all levels so as to create a common understanding.

2.3 The institution should develop a database system and update it regularly. This system is used to monitor information administration and report performance results based on the indicators specified in the strategic plans at least twice a year. That way this information can be in decision-making, and strategic plan adjustments can be made in a timely manner.

3. The administrators supervise, monitor, and assess the performance of employees' assigned work, and communicate institutional plans and performance results to the internal personnel.

3.1 The administrators oversee and monitor the results of implementing policies and strategic plans at administrative meetings at least 1 – 2 times per year so that targets may be revised or implementation plans may be adjusted according to current situations. Furthermore, the administration must create a system and mechanisms to communicate implementation plans to target groups of personnel at all relevant levels.

3.2 The administrators assess the performance results of all the main missions of the institution, and monitor the achievements at least once a year in order to revise the targets or adjust the implementation plans in the next yearly cycle. The assessment results are circulated among personnel at all levels via internal channels, with various media used for this purpose that correspond to the target group.

4. Administrators encourage the personnel to participate in administration and delegate decision-making authority to them as appropriate.

4.1 The administration should have a two-way communication system to listen to the opinions and suggestions of personnel, so as to receive information necessary for the continuous improvement of the operational system.

4.2 The administration minimizes administrative procedures by delegating decision-making authority to managers or those who perform tasks at the next level to create a leaner system. The system needs to be monitored and inspected to ensure its effectiveness, efficiency, and cost effectiveness, and to limit risk to an acceptable level.

4.3 The administration provides morale-boosting activities for the personnel regularly and on an ongoing basis, such as a quality award and service efficiency development project, a lean organization development project, etc.

5. The administrators pass on knowledge and support the development of their colleagues so that the institution may achieve its objectives and reach its full potential.

5.1 Administrators transmit knowledge to their colleagues by focusing on ongoing development of a higher level of operational skills or potential so as to attain the objectives. For example, administrators may offer on-the-job training, prepare an operational manual, etc.

5.2 Administrators at different levels should apply knowledge management principles to encourage exchange and sharing of knowledge and experience among the personnel, for instance, meetings to exchange knowledge, formation of communities of practices, etc.

6. Administrators use the good governance principles in their administration and take institutional and stakeholder benefits into consideration.

6.1 Administrators should follow good governance principles and use them as administrative tools to direct the institution's operations in the direction which has been jointly determined by the institution's administrators and the institution council, and is consistent with the direction of national education quality development, as well as keeping up with global changes.

6.2 The administrators carry out operations in accordance with good governance principles, especially in regards to protection of stakeholders' benefits, academic quality, and participation of all related parties in the operations.

6.3 The administrators disclose their background and personal information, prepare self assessment and operational summary reports, and prepare institutional financial statements for presentation to the institution council every year.

6.4 Internal control, risk management, and the educational institution's internal audit findings are monitored by the administration, and the institution's financial statements are presented to the institution council every year.

7. The institutional council assesses the administrative performance of the institution, and administrators use the assessment results as feedback to improve their administration in a concrete manner.

7.1 The institution council assesses the administrative performance of the institution and its administrators as specified by law or the Institution's Act, University Regulations regarding the Administration of Individuals and Administrators, other assessment-related regulations, or in accordance with contracts between the institution council and the administrators.

7.2 The institution council should adhere to the principle of acting like a helpful friend when assessing administrative performance. In other words, it should offer constructive suggestions and use the assessment results to develop or improve the institution on an ongoing basis.

7.3 The administrators use the assessment results from the institution council to improve their administration, e.g. formulate administrative plans, and report the operational results to the institution council at an appropriate occasion.

● Indicator 7.2 Institutional development towards becoming a learning institution

1. The institution identifies knowledge elements and targets for knowledge management according to the institution's strategic plans, at least for the missions of graduate production and research.

1.1 The institution should study the goals of its strategies or strategic objectives to determine the issues on which it should be focused, or the identity that it wishes to assume. The findings are then used to formulate the institution's strategic or action plans regarding knowledge management. The plans must comply with the institution's strategies and

cover at least the graduate production and research missions.

1.2 The personnel involved in the determination of knowledge issues may be comprised of a vice president(s), assistant to the president, dean(s), deputy dean(s), assistant dean(s), director(s), or supervisor(s) who are involved with the strategies of graduate production, research, and other missions according to the institution's identity.

1.3 The institution should set targets for knowledge management by emphasizing the development of its internal personnel's skills and abilities. The targets must cover at least the graduate production and research missions. In addition, the institution should identify the knowledge management issues on which it must focus based on its identity, e.g. curriculum improvement techniques, learning-outcome-based learning methods, techniques for increasing institutional research productivity, etc.

2. The targeted groups of personnel whose knowledge of and skills in graduate production and research are to be developed are clearly specified, in accordance with the knowledge elements stipulated in item 1.

2.1 The target groups whose knowledge of and skills in graduate production and research are to be developed should be those responsible for these two missions—for example, instructors or researchers working on specified knowledge issues, or others that the institution emphasizes.

2.2 The institution should have a policy to scrutinize the strong points in the performance of the instructors or students in each faculty or field of study, especially in regard to instruction and research which are reflective of the discipline's identity. Then, the findings may be used to identify knowledge management issues so that knowledge may be gained which is beneficial in developing the quality of education management.

3. Those who have tacit knowledge and skills share and exchange them in order to discover best practices related to the knowledge elements in item 1, and these practices are disseminated to the target groups of personnel.

3.1 The institution should invite internal personnel or external individuals who have excellent academic, research, or other work results that the institution emphasizes to share their knowledge, secrets, or innova-

tion in various venues on a regular basis. These activities may be in the form of seminars to exchange knowledge, secrets, or innovation with experts.

3.2 The institution should create a learning atmosphere and culture within itself by, for instance, supporting the establishment of communities of practice and knowledge management networks within the institution and with external organizations. It should allocate resources, i.e. budgets, time, and venues, appropriately in order to create a culture of knowledge exchange and learning on an ongoing basis.

4. Knowledge consisting of best practices related to the knowledge elements in item 1 is collected from individuals and other sources, developed, systematically stored, and circulated as explicit knowledge.

4.1 Individuals are appointed to be in charge of analyzing, synthesizing, developing, and categorizing knowledge which consists of best practices gathered from individuals and other learning sources so that it is readily accessible to the target personnel groups who wish to increase their knowledge and skills.

4.2 The institution should take advantage of information technology to increase the effectiveness of its knowledge management and distribution within the organization, which leads to cost efficiencies and optimal benefits.

4.3 The institution should publish journals or printed materials as a medium for exchanging knowledge and honoring the persons responsible for knowledge, secrets, or innovations.

5. Best practices in the forms of explicit and tacit knowledge and skills gained from knowledge management in the current or previous academic years are applied to improve actual operations.

5.1 The persons in charge should analyze best practices from different sources – for example, innovations resulting from knowledge management, and use this knowledge to create benefits for the institution and community. It should also be aptly applied based on the context of those units which are the target groups.

5.2 Those in charge should further apply this knowledge to other units and measure the results based on knowledge issues and

knowledge management targets which are consistent with the graduate production and research strategies.

5.3 A mechanism is established to use the results of internal and external quality assessment concerning knowledge management to improve and develop the institution's knowledge management system and mechanisms.

5.4 Those in charge should summarize the knowledge management achievements based on the institution's goals or strategies.

● **Indicator 7.3 Information systems for management and decision-making**

1. There is an information system plan.

1.1 The institution should appoint a committee to prepare an information system plan consisting of the information system administrator and other administrators who use the information systems.

1.2 The information system plan should correspond with the institution's strategic plans.

1.3 The information system presented in the plan should include details regarding at least the following aspects:

- Objectives and capabilities of each system
- Correspondence between each system and institutional strategy
- Relationship between newly proposed and current systems
- Information resources necessary for each system, i.e. hardware, software (systemsoftware and application software), databases, people ware and other facilities
- Budget required for each system
- Cost effectiveness evaluation of the information systems
- Priority list of the information systems

2. There are information systems for management and decision-making according to the missions of the institution. They must cover at least the teaching and learning, research, administration and management,

and finance missions, and can also be used for quality assurance operations.

Information systems for administration and decision-making are information systems which a mass information from normal operational information systems, such as the accounting system, student registration system, biographical records system, etc., and provide this information for administrators to use in administration and decision-making regarding all the institution's missions, including teaching and learning, research, finance, and others. The information is also used for educational quality assurance operations.

3. The satisfaction of the information system users is assessed.

3.1 The persons in charge prepare a satisfaction assessment form for system users and determine the assessment timeframe according to the system utilization conditions. For example, satisfaction assessment may be conducted after every utilization session, or every month, semester/ trimester, or academic year.

3.2 The persons in charge of the institution's information systems should conduct regular satisfaction assessment of information system users, at least once a year.

4. The satisfaction assessment results of information system users are used as feedback to improve the information systems.

4.1 The institution appoints persons in charge of analyzing the satisfaction assessment results of information system users.

4.2 The institution uses the satisfaction assessment results to make an information system improvement plan.

4.3 The information system improvement plan should be approved by the administrators.

4.4 The institution implements the information system improvement plan according to the specified timeframe.

5. The institution transmits specified information via the network systems of related external organizations.

The institution sends requested information to OHEC via its network systems which include the Commission on Higher Education

Quality Assurance database system (CHE QA online), individual database system for students, personnel, and higher education curricula, etc.

● **Indicator 7.4 Risk management system**

1. The institution appoints a risk management committee which has top administrators and representatives who are responsible for the main institutional missions as its members.

1.1 The institution appoints a committee or working group consisting of a top administrator and representatives in charge of each main mission of the institution.

1.2 The institution specifies the operational details of the committee or working group, such as the operational policies or guidelines and responsibilities, and fixes a schedule for committee or working group meetings on a regular basis.

2. There is an analysis and identification of at least 3 areas of risk and risk factors based on the context of the institution.

The factors which may cause risk are:

- Resources (financial, budgetary, information technology system, physical plant)
- Institutional strategies
- Policies, laws, regulations, rules
- Operations such as curriculum administration, research administration, work systems, and the quality assurance system
- Personnel and good governance, especially related to the code of conduct for instructors and personnel
- External events
- Others according to the context of the institution

2.1 The institution analyzes and identifies the risks and risk factors which may result in an impact on, damage to, failure of, or possible reduction in the attainment of the education administration goals.

2.2 The important risk issues to be considered should encompass possible future events which may affect the institution in terms

of its reputation, education quality, loss of personnel lives and institutional properties.

2.3 The risk factors or factors that may cause risks may be classified as those related to people, buildings and physical plant, equipment, operational methods, internal and external environment, etc.

2.4 The risk factors are prioritized based on their possibility of occurrence and severity of their effects.

3. The possibilities and effects of the risks in item 2 are assessed and prioritized.

3.1 The degree of risk may be specified either quantitatively or qualitatively; however, qualitative descriptions should reflect the degree of risk as high, medium, or low.

3.2 The institution should formulate risk evaluation criteria for both the possibility of occurrence and severity of impact aspects.

3.3 Evaluation of the possibility of occurrence of a risk is based on the frequency of the risk event's incidence in the past, or the future possibility of occurrence predicted from past data and the current environment relative to the control of risk factors.

3.4 The evaluation of risk effects is based on their severity. For example, if one of the following risk events occurs, its effects will be very severe if it affects confidence in the institution's education quality, its financial status, or the morale and safety of its personnel.

4. The institution prepares a risk management plan for the high-priority risks and operates according to the plan.

4.1 The institution prepares a risk management plan in order to achieve its goals. The plan must specify concrete measures or operational methods to create a knowledge and understanding of risk issues among institutional personnel, and actions to resolve, reduce the possibility, or prevent the occurrence of risk events.

4.2 The institution constructs measures to control risks by using the 4T technique, i.e. Take: accept risk, Treat: reduce or control risk, Transfer: transfer or diversify risk, and Terminate: prevent or avoid risk, in order to mitigate the causes of each possible risk event which may cause

damage to the institution (either in monetary or non-monetary form such as reputation, prosecution for violating laws, regulations, or rules, effectiveness, efficiency, or cost and value effectiveness).

5. The plan's implementation is monitored and assessed, and the results are reported to the institution council for consideration at least once a year.

5.1 The progress or performance results of the plan are reported to the institution council.

5.2 The report submitted to the institution council includes a summary of the performance results, an evaluation of operational success, problems and obstacles together with guidelines for resolving them, and suggestions for improvement of the operational plan.

6. The assessment results and suggestions from the institution council are used as feedback to modify the plan or analyze the risks during the next assessment cycle.

The risk management plan for the next yearly cycle should take into account the remaining level of risk after risk management efforts, suggestions from the institution council, as well as new risks arising from policy changes or changes in the institutional environment and governing organization.

● **Indicator 8.1 System and mechanism for finance and budgeting**

1. There is a financial strategic plan that is aligned with the institution's strategic plan.

1.1 A financial strategic plan is a plan which indicates the sources and uses of the money required to implement the strategic plan.

1.2 The institution should appoint a committee in charge of analyzing the resources required for implementing the institution's strategic plans, appraising the costs of essential resources which will become budgets to implement the plan. It should also specify the sources of the budgets, which may be from the national budget, institutional revenue, donations,

or fundraising activities. Then, this information will be used to prepare the annual budget with respect to the financial sources.

2. There are guidelines for acquiring financial resources, allocation criteria, and an expenditure plan which are efficient, transparent, and verifiable.

2.1 There are methods for obtaining funding sources which are suitable and sufficient for the types of expense or investment funds that are needed so that all of the institution's missions may achieve their targets.

2.2 There are methods for allocating resources according to predetermined criteria that are generally accepted by the institutional community. In case the institution already has criteria for allocating resources, their suitability should be reviewed in line with the current situation.

2.3 There is a plan for acquiring sufficient financial resources for the administration of all institutional missions so as to achieve the specified goals. In addition, an effective financial plan is needed to appropriately balance revenues and expenditures.

3. The annual budget is aligned with the implementation plan for each mission and the institutional and personnel development plans.

Each educational institution may employ different methods and principles in the preparation of its annual budget. Nevertheless, after preparation of the annual budget and before its submission to the institution council, the institution should analyze the budgetary disbursements according to the following aspects:

- To what extent the annual budget is in harmony with the operation plans stipulated for each year.
- After analyzing the institution's missions, to what extent is the annual budget sufficient for each mission.
- After analyzing the institutional development plan, to what extent does the annual budget for personnel development correspond to this policy.

4. Financial reports are systematically prepared and submitted to the institution council at least twice a year.

The institution systematically prepares financial statements which include at least reports of the income, expenses, and a balance sheet at least every 6 months, twice a year, that make known the institution's financial status. These statements disclose whether the institution has enough funds for activities in the next period after the expenses are deducted from the revenues. The financial statements are presented to the institution's administrators and the institution council.

5. Financial information is used to continuously analyze the expenses, the financial status, and the financial stability of the institution.

5.1 The institution prepares a budget disbursement report based on its annual operational plans and presents it to the administrators. This report informs administrators whether disbursements are in line with the plans, which activities have been subsidized, what are the operational outcomes, and how much funds remain for each plan.

5.2 The institution prepares the expenditure per student.

5.3 The institution prepares its investment report.

5.4 The institution prepares an analysis to forecast its future income and expenses.

6. There are internal and external units to monitor and audit the disbursement of funds to ensure that it is in accordance with the rules and regulations established by the institution.

6.1 For any educational institution which does not have the Office of the Auditor General of Thailand as its external auditor, it should appoint external auditors to perform an audit every year. In the case of a public educational institution, which has the Office of the Auditor General of Thailand as its external auditor, if the Office of the Auditor General of Thailand does not perform an annual audit, then it should appoint external auditors to conduct an audit every year.

6.2 The institution officially appoints an audit committee or internal auditors in addition to this.

7. The senior administrators pay attention to the use of funds so that financial goals are met, and use the information from the financial

reports for planning and decision-making.

7.1 The administrators are able to use information systems for financial administration and decision-making. These systems help them keep up with disbursements, prepare reports containing essential information for the administrators, and use this information to analyze the financial status of each unit.

7.2 The financial statements are presented to the institution council according to the planned schedule.

● Indicator 9.1 System and mechanism for internal quality assurance

1. The institution sets up a system and mechanisms for internal quality assurance which are appropriate and correspond to the missions and developmental level of the institution from the department level or its equivalent on up, and operations are conducted in harmony with this system.

1.1 The higher education institution should develop a quality assurance system which is suitable for its level of development. The institution may adopt a quality assurance system which is widely used at the national or international level or develop a specific one itself.

1.2 The quality assurance used must be part of the education administration process which is implemented on a regular basis. It must start with planning, operating according to the plans, auditing, assessing, and improving/developing to ensure that all the missions attain their goals and have ongoing development.

1.3 The institution appoints persons to be in charge of and coordinate the quality assurance work. They are responsible for propelling the quality assurance on an ongoing basis, from the institutional, faculty, and department/discipline levels to the individual performer level.

2. Policy-making committees and senior institutional administrators formulate policies and play importance role on internal quality

assurance.

2.1 Policy-making committees and senior institutional administrators must place importance on educational quality assurance, and devise clear quality assurance policies with the participation of all internal and external parties.

2.2 There is a unit or committee responsible for setting up the quality assurance system and specifying appropriate standards, indicators, and scoring criteria.

2.3 There are mechanisms for connecting operations at the individual level, department or discipline level, faculty level, and the institutional level together so as to ensure the quality of operations in accordance with the standards set by the institution or faculty.

2.4 There is a quality manual for each level to direct implementation plans in a concrete manner.

2.5 There is a mechanism for monitoring, auditing, assessing, and stimulating quality development on an ongoing basis.

3. Additional indicators are specified based on the institution's identity.

3.1 The institution may specify additional standards and indicators to use as an operational framework in accordance with its identity. Nonetheless, they must not contradict the Higher Education Standards or other relevant standards and criteria.

3.2 The additional indicators based on the institution's identity should reflect desirable qualities for all input, process, and output/outcome factors.

3.3 The criteria or best practices used for each indicator must be able to measure quality according to the indicator's target, and lead to ongoing improvement and development.

4. The implementation of the internal quality assurance covers all of the following aspects: 1) control, monitoring, and assessing quality system, 2) the submission of an annual quality assessment report to the institution council and OHEC within the specified timeframe; the report must contain all the information requested by OHEC as indicated in

the CHE QA Online system, and 3) The quality assessment results are used to formulate plans to develop the institution's educational quality.

4.1 The institution carries out all its obligations according to the internal educational quality assurance system, i.e. specifying quality controls, monitoring operations, and evaluating the quality.

4.2 The PDCA cycle is applied to the implementation of the quality system, and to improving the system and mechanism for internal education quality assurance.

4.3 The institution prepares an annual quality assurance report which contains all the information requested by OHEC as indicated in the CHE QA Online system. This report is presented to the institution council for consideration, as well as proposed measures and plans for quality development based on the assessment results of each year. Report results are also submitted to the parent organization, relevant organizations, and disclosed to the public.

5. Internal quality assurance results are used to improve performance, and operations are developed according to all indicators listed in the strategic plans.

The institution or faculty should assign the persons in charge of the strategic plans indicators to analyze the assessment results, measures, and annual development plan. They should cooperate with other committees or relevant units to improve the operations under their direct or joint responsibility. The aim is to improve the performance of every indicator in the strategic plan in comparison with the previous year's performance.

6. There is an information system which provides useful information for all 9 quality components of internal quality assurance.

The institution should set up an information system with the capacity to provide relevant data for the educational quality assurance process. The data must be accurate, up-to-date, cover all the 9 quality components, and be jointly accessible to all at the individual, department, faculty, and institutional levels. Furthermore, the system must be connected with the external organizations involved in the quality assurance

such as OHEC, ONESQA, and OPDC.

7. Stakeholders – especially students, employers of graduates, and service recipients according to the institutional missions – participate in the educational quality process.

The institution should encourage its students, instructors, and personnel to participate in the educational quality assurance process, and provide the same opportunity for other stakeholders, especially employers of graduates and service recipients according to the institution's missions. These may include research service clients or communities who request academic services from the institution. For instance, they may become committee members, jointly determine indicators and targets, provide feedback, or cooperate with the institution to perform quality assurance activities.

8. There are networks and joint activities for exchanging knowledge about the educational quality assurance between institutions.

8.1 The institution constructs quality assurance networks with other institutions at the institution and faculty levels, and networks for student activities and other purposes.

8.2 Institutional networks cooperatively perform quality assurance work, and the results are clearly evident. The institutions in the networks exchange their knowledge, which leads to various types of development.

8.3 The institution monitors and assesses the outcomes of network formation so as to jointly develop the operations on an ongoing basis.

9. The institution develops best practices or researches on internal quality assurance and distributes these materials to other organizations so that it may be used in beneficial ways.

9.1 The institution has a process for selecting best practices for each type of activity in educational quality assurance work.

9.2 The institution disseminates methods which are best practices for educational quality assurance to the public and other

organizations for utilization.

9.3 The institution conducts research on educational quality assurance and uses the outcomes to develop its educational quality assurance work.

CHAPTER 5

Analysis of Indicators by Quality Components, Higher Education Standards, and Management Perspectives



I. Indicators for Quality Assessment by 9 Quality Components

Higher education institutions have 4 main important missions, i.e. Graduate Production, Research, Academic Services to Society, and Preservation of Arts and Culture, and at least 5 other missions which help support and stimulate achievement of the goals of the main missions. The supportive missions include (1) Philosophy, Commitments, Objectives, and Implementation Plans, (2) Student Development Activities, (3) Administration and Management, (4) Finance and Budgeting, and (5) System and Mechanism for Quality Assurance. All the main and supportive missions must be systematically and continuously carried out in an integrated manner so as to guarantee the quality of educational management at higher education institutions. Internal education quality assurance has thus been developed based on the 9 higher education quality components which cover all the main and supportive missions. The quality components are (1) Philosophy, Commitments, Objectives, and Implementation Plans, (2) Graduate Production, (3) Student Development Activities, (4) Research, (5) Academic Services to the Society, (6) Preservation of Arts and Culture, (7) Administration and Management, (8) Finance and Budgeting, and (9) System and Mechanism for Quality Assurance.

Therefore, for educational quality assurance to develop education quality and standards, indicators for the 9 higher education quality components have been formulated. They are discussed in detail in Chapter

3 so that every higher education institution can use them as guidelines for supervising, auditing, and assessing its quality internally. They can be summarized as shown in Table 5.1.

Table 5.1 9 Quality Components and their Quality Assessment Indicators

Quality Component	Number of Indicators			
	Input	Process	Output or Outcome	Total
1. Philosophy, Commitments, Objectives, and Implementation Plans	-	Indicator 1.1	ONESQA indicators 16 and 17	1+2
2. Graduate Production	Indicators 2.2, 2.3 and 2.5	Indicators 2.1, 2.4, 2.6 and 2.7	Indicator 2.8 and ONESQA indicators 1, 2, 3, 4 and 14	8+5
3. Student Development Activities	-	Indicators 3.1 and 3.2	-	2
4. Research	Indicator 4.3	Indicators 4.1 and 4.2	ONESQA indicators 5, 6 and 7	3+3
5. Academic Services to Society	-	Indicators 5.1 and 5.2	ONESQA indicators 8, 9 and 18	2+3
6. Preservation of Arts and Culture	-	Indicator 6.1	ONESQA indicators 10 and 11	1+2
7. Administration and Management	-	Indicators 7.1, 7.2, 7.3 and 7.4	ONESQA indicators 12 and 13	4+2
8. Finance and Budgeting	-	Indicator 8.1	-	1
9. System and Mechanism for Quality Assurance	-	Indicator 9.1	ONESQA indicator 15	1+1
Total	4	18	1+18	23+18

2. Indicators for Quality Assessment by Higher Education Standards

Article 34 of the National Education Act of 1999 (2nd Amendment in 2002) indicates that the Commission on Higher Education has the responsibility for proposing higher education standards which are consistent with the intent of the National Economic and Social Development Plan and the National Education Standards. Thus, the Commission on Higher Education promulgated the Announcement of the Ministry of Education, regarding Higher Education Standards on August 7, 2006. They were the first higher education standards enacted in Thailand, and consist of 3 elements, which are a) a Standard for the Quality of Graduates, b) Standards for Higher Education Administration, and c) a Standard for Establishing and Developing a Knowledge-based and Learning-based Society. The details are as follows:

I. Standard for the Quality of Graduates

Higher education graduates are knowledgeable, have a moral and ethical sense, are able to learn and improve themselves, can apply knowledge to their daily lives so that they enjoy physical and mental happiness in society, and understand their responsibilities as citizens and world citizens. The indicators of this standard are:

1) Graduates have knowledge and skills in their field of study, are able to learn, synthesize and apply knowledge in order to develop themselves, and can work and innovate so as to develop society and make it internationally competitive.

2) Graduates have a moral sense, live and work responsibly by adhering to moral and ethical principles.

3) Graduates are physically and mentally healthy. They pay attention to and take proper care of their health.

2. Standards for Higher Education Administration

Higher education administration follows good governance principles and keeps a balance between each higher education mission.

A. Standard for Good Governance of Higher Education

Administration: Higher education administration complies with good governance principles and, at the same time, takes both academic diversity and freedom into account. The indicators of this standard are:

1) Human resource management is effective and efficient, flexible, and meets the diverse needs of society placed upon each type of institution, with an aim to increase performance potential while maintaining academic freedom.

2) Information and communication technology resource management is effective and efficient, elastic, transparent, and accountable. Various suitable and cost-effective systems and methods are used for education management.

3) There is a quality assurance system which helps develop the quality and standards of higher education on an ongoing basis.

B. Standard for Missions of Higher Education Administration:

Implementation of the 4 missions of higher education is balanced, and knowledge management is carried out with the collaboration of all parties in communities and society. The main indicators of this standard are:

1) Curricula and teaching methods are up-to-date, flexible, correspond to the varied demands of society placed upon each type of institution, and place importance on developing the quality of learners (student-centred learning approach). They also emphasize self-directed learning and innovation according to actual conditions, are based on research, include assessment, and use the assessment results to develop the learners and improve curricular management. Student affairs are suitably administered in harmony with the curricula and teaching and learning.

2) There is research which creates and applies new knowledge, expanding the boundaries of knowledge and intellectual property. Such research is connected to the economic, social, cultural, and environmental conditions and aligned with the potential of each type of institution. Cooperative networks are established with Thai and foreign higher education institutions in order to increase social and national competitiveness to an international level.

3) Academic services provided are up-to-date, suitable, and responsive to the demands of society in accordance with the special expertise of each type of institution. There is cooperation between higher education institutions and Thai and foreign industrial business sectors so as to enhance the strength and resilience of society and the nation.

4) Local culture and wisdom are preserved, revived, carried on, developed, and publicized in order to build a common awareness, understanding, and pride in being Thai. Foreign arts and culture are appropriately adapted and applied to benefit the development of society and the nation.

3. Standard for Establishing and Developing a Knowledge-based and Learning-based Society

Knowledge is sought, created, and managed by applying methods/principles that would lead to a knowledge-based society and learning-based society. The main indicators for this standard are:

1) Knowledge, including local and foreign wisdom, is sought, created, and utilized in order to build a knowledge-based society.

2) Knowledge is managed systematically by using the principles of integrated research, knowledge exchange, network formation, and collaboration to move towards a learning-based society.

Thus, for educational quality assurance to develop the quality and standards of education, the indicators for the 9 quality components may be categorized by each higher education standard. They serve as guidelines so that each higher education institution can supervise, audit, and assess its quality internally. This categorization is shown in Table 5.2.

Table 5.2 Higher Education Standards and their Quality Assessment Indicators

Standard	Input Indicator	Process Indicator	Output or Outcome Indicator	Total
1. Standard for the Quality of Graduates	-	-	Indicator 2.8 and ONESQA indicators 1, 2, 3 and 4	1+4
2. Standards for Higher Education Administration A. Standard for Good Governance of Higher Education Administration	-	Indicators 1.1, 2.4, 7.1, 7.3, 7.4, 8.1 and 9.1	ONESQA indicators 12 and 13	7+2
B. Standard for Missions of Higher Education Administration	Indicators 2.2, 2.3, 2.5 and 4.3	Indicators 2.1, 2.6, 2.7, 3.1, 3.2, 4.1, 5.1, 5.2 and 6.1	ONESQA indicators 8, 9, 10, 11, 14, 15, 16, 17 and 18	13+9
3. Standard for Establishing and Developing a Knowledge-based and Learning-based Society	-	Indicators 4.2 and 7.2	ONESQA indicators 5, 6 and 7	2+3
Total	4	18	1+18	23+18

3. Indicators by Management Perspective

For internal education quality assurance to monitor, audit, and assess performance comprehensively and maintain a balance between the 4 management perspectives, i.e. (1) students and stakeholders, (2) internal processes, (3) finance, and (4) human resources, learning, and innovation, the indicators for the 9 quality components may be distributed among these perspectives as illustrated in Table 5.3.

Table 5.3 A Summary of indicators for Internal Quality Assurance in Higher Education Institutions Classified by Management Perspectives

Table 5.3 A Summary of indicators for Internal Quality Assurance in Higher Education Institutions Classified by Management Perspectives

Management Perspectives	Input	Process	Output or Outcome	Total
1. Students and Stakeholders	-	Indicators 2.6, 2.7, 3.1, 3.2, 5.1, and 5.2	Indicator 2.8 and ONESQA indicators 1, 2, 3, 4, 8, 9 and 18	7+7
2. Internal Processes	Indicator 2.5	Indicators 1.1, 2.1, 2.4, 4.1, 6.1, 7.1, 7.3, 7.4 and 9.1	ONESQA indicators 10, 11, 12, 13, 15, 16 and 17	10+7
3. Finance	Indicator 4.3	Indicator 8.1	-	2
4. Human Resources Learning and Innovation	Indicators 2.2 and 2.3	Indicators 4.2 and 7.2	ONESQA indicators 5, 6, 7 and 14	4+4
Total	4	18	1+18	23+18

4. Indicators for Quality Assessment by Higher Education Institution Standards

The Commission on Higher Education has formulated Higher Education Institution Standards found in the Ministerial Announcement (November 12, 2008) with an aim to effectively and efficiently develop higher education institutions based on institution groups which have different philosophies, objectives, and missions. These Standards consist of 2 main standards, which are (1) a Standard for the Potential and Readiness of Education Management, and (2) a Standard for the Implementation of Higher Education Institutional Missions. In addition, higher education institutions are divided into 4 groups, as detailed in Chapter 1, i.e. group A: community colleges, group B: institutions focusing on Bachelor degrees,

group C: specialized institutions, and group D: institutions focusing on advanced research and production of graduates at the graduate studies levels, especially the doctoral level.

The Higher Education Institution Standards consist of 2 main standards, each of which has 4 sub-standards as follows:

1) Standard for the Potential and Readiness of Education Management, which is comprised of 4 sub-standards:

1.1) Physical plant aspect

A higher education institution has buildings with important features of good education buildings, all types of rooms, and sufficient space for teaching, learning, and all kinds of activities according to the number of instructors and students in each program, and the numbers specified in the matriculation plans. The size of the space should be roughly consistent with the building space criteria. In addition, there must be a library that meets the standard criteria, equipment for the buildings, educational equipment, and enough computers for teaching and learning activities.

Furthermore, the buildings and surrounding areas must be sturdily constructed, safe, and hygienic, and meet other requirements set by law.

1.2) Academic aspect

A higher education institution possesses potential and readiness to carry out its academic obligations according to its vision and missions. The institution also has a graduate production plan which is responsive to the general needs of the nation and employers of graduates. It must guarantee that students receive good educational services and can obtain quality knowledge. The academic administration of the institution must be high-quality, effective, and efficient in terms of student matriculation and graduate production planning, organization of teaching and learning activities, assessment, learning, instructional quality assurance, and academic administrative development and improvement.

1.3) Financial aspect

A higher education institution demonstrates financial readiness in terms of both its overall financial position and resources allocated to various funds. Its financial plan is stable and offers assurance that the institution will be able to provide education in accordance with its established missions and goals as well as fulfill its future development plans. These factors ensure that learners and higher education service recipients receive optimal benefits. The institution prepares financial reports which clearly indicate the sources of income and revenue, as well as allocations and disbursements which are efficient, complete, and accurate. Some of the income is invested after a risk evaluation and analysis. There is a parallel system to monitor, audit, and assess the performance of every kind of expenditure, and a system to detect and investigate conflicts of interests for personnel at all levels.

1.4) Management aspect

A higher education institution has a management system which efficiently transmits its vision and values so that its operations conducted in harmony with them. This helps to accomplish the objectives and missions which have been adopted. The institutional council is responsible for overseeing policies, the implementation of plans, human resource management, budget and asset administration, and provision of benefits for students and personnel at all levels. Additionally, it is in charge of overseeing, monitoring, auditing, and assessing operations in accordance with established rules, regulations, and laws. The institutional council's performance in overseeing operations and administrative work at all levels is to be publicized among internal and external communities, based on the good governance principles of transparency, responsibility, accountability, participation, and cost effectiveness.

2) Standard for the Implementation of Higher Education Institutional Missions, which is comprised of 4 sub-standards:

2.1) Graduate production

A higher education institution admits students with the characteristics and in the numbers specified by the matriculation plans

and in harmony with the targets for production of quality graduates. The institution produces graduates whose attributes meet the institution's emphases and established goals. Clear information about the curricula, teaching and learning management, faculty who organize activities, and curricular and extracurricular learning development is publicized to the public and meets student needs.

2.2) Research

A higher education institution carries out its research mission with quality and efficiency based on its specific emphases. The operations conform to its policies, plans, and budgets. The administration supports and encourages the faculty, researchers, and personnel with research capability, and assists in building research networks with external organizations. This is to ensure that the research, inventions, and creative work are of high quality, useful, consistent with the national development strategies, and able to widely serve the needs of society and benefit the public.

2.3) Academic services to the community

A higher education institution provides academic services which cover a wide range of target groups as well as particular specified groups both inside and outside of the country. The services may rely on joint use of resources at the institutional and individual levels, and can take various forms, e.g. counseling, research studies, investigations that provide answers to community, short-term training programs, and continuing education for the public. These academic services may be furnished free-of-charge or in a commercial format, with returns in the form of revenue or feedback that can be used to further develop and improve services and create new knowledge.

2.4) Preservation of arts and culture

A higher education institution implements the mission of preserving the national arts and culture at both the organizational unit and institutional levels. There is a system and mechanism to support and help make arts and culture become a direct or indirect part of teaching and learning management. This is so that a knowledge, awareness of the value,

and appreciation of national arts and culture are instilled in learners and institutional personnel. In consequence, they will be able to use these fine notions to support an attractive way of living and working, adopt desirable lifestyles, and learn how to manage culture and deal with undesirable lifestyles. The institution supervises the implementation of this mission effectively and efficiently according to the targets of its strategic plan for the preservation of arts and culture.

Accordingly, for educational quality assurance to develop educational quality and standards, the indicators for the 9 quality components may be grouped by institutional standard as guidelines for each higher education institution to supervise, audit, and assess its quality internally. This classification is shown in Table 5.4.

Table 5.4 A Summary of Indicators for Internal Quality Assurance in Higher Education Institutions Classified by Institution Standards of Higher education

Higher Education Institutional Standard	Input	Process	Output or Outcome	Total
1. Standard for the Potential and Readiness of Education Management				
1) Physical plant aspect	Indicator 2.5		-	1
2) Academic aspect	Indicators 2.2 and 2.3	Indicators 2.1,2.4 and 2.6	ONESQA indicator 14	5+1
3) Financial aspect		Indicator 8.1	-	1
4) Management aspect		Indicators 1.1, 7.1, 7.2, 7.3, 7.4 and 9.1	ONESQA indicators 12, 13, 15, 16 and 17	6+5
2. Standard for the Implementation of Higher Education Institutional Missions				
1) Graduate Production		Indicators 2.7, 3.1 and 3.2	Indicator 2.8 and ONESQA indicators 1, 2, 3 and 4	4+4
2) Research	Indicator 4.3	Indicators 4.1 and 4.2	ONESQA indicators 5, 6 and 7	3+3
3) Academic Services to Community		Indicators 5.1 and 5.2	ONESQA indicators 8, 9 and 18	2+3
4) Preservation of Arts and Culture		Indicator 6.1	ONESQA indicators 10 and 11	1+2
Total	4	18	1+18	23+18

References

Thai Language

- กระทรวงศึกษาธิการ. 2551. กฎกระทรวงว่าด้วยการขอให้รับรองและการรับรอง
วิทยฐานะของสถาบันอุดมศึกษาเอกชน พ.ศ. 2551.
- กระทรวงศึกษาธิการ. 2553. กฎกระทรวงว่าด้วยระบบ หลักเกณฑ์ และวิธีการ
ประกันคุณภาพการศึกษา พ.ศ. 2553. ราชกิจจานุเบกษา เล่ม 127 ตอนที่
23 ก วันที่ 2 เมษายน 2553. หน้า 22-35
- กระทรวงศึกษาธิการ. 2552. ประกาศกระทรวงศึกษาธิการ เรื่อง กรอบมาตรฐาน
คุณวุฒิระดับอุดมศึกษาแห่งชาติ พ.ศ. 2552.
- กระทรวงศึกษาธิการ. 2549. ประกาศกระทรวงศึกษาธิการ เรื่อง มาตรฐานการ
อุดมศึกษา พ.ศ. 2549.
- กระทรวงศึกษาธิการ. 2551. ประกาศกระทรวงศึกษาธิการ เรื่อง มาตรฐานสถาบัน
อุดมศึกษา พ.ศ. 2551.
- กองบริการการศึกษา, สำนักงานปลัดทบวงมหาวิทยาลัย. 2543. มาตรฐานกิจการ
นักศึกษา.
- เกรียงศักดิ์ เจริญวงศ์ศักดิ์และคณะ. 2548. รายงานการวิจัย การสังเคราะห์องค์ความรู้
เกี่ยวกับการจัดการเรียนรู้ที่เน้นตัวผู้เรียนเป็นสำคัญ ตั้งแต่ พ.ศ. 2542-2547
รายงานการวิจัยเสนอต่อสำนักงานเลขาธิการสภาการศึกษา. กรุงเทพฯ :
ชุมนุมสหกรณ์การเกษตรแห่งประเทศไทย.
- ชาญณรงค์ พรุ่งโรจน์และคณะ. 2548. ดัชนีบ่งชี้และเกณฑ์ประเมินคุณภาพด้านการ
ทำนุบำรุงศิลปวัฒนธรรม : รายงานการวิจัยเสนอต่อสำนักงานรับรอง
มาตรฐานและประเมินคุณภาพการศึกษา (องค์การมหาชน). กรุงเทพฯ :
โรงพิมพ์สแควร์ปริ้นซ์ 93 จำกัด.
- ไพฑูริย์ สีนลารัตน์. 2549. กรอบมาตรฐานคุณวุฒิระดับอุดมศึกษาของประเทศไทย.
รายงานการวิจัยเสนอต่อสำนักงานคณะกรรมการการอุดมศึกษา.

วิจิตร ศรีสอ้าน. 2518. **หลักการอุดมศึกษา**. กรุงเทพฯ : วัฒนาพานิช.

สำนักงานคณะกรรมการการศึกษาแห่งชาติ, สำนักนายกรัฐมนตรี. 2542. **พระราชบัญญัติการศึกษาแห่งชาติ พ.ศ.2542 แก้ไขเพิ่มเติม (ฉบับที่ 2) พ.ศ.2545**.

สำนักงานคณะกรรมการการอุดมศึกษา, กระทรวงศึกษาธิการ. 2550. **กรอบแผนอุดมศึกษาระยะยาว 15 ปี ฉบับที่ 2 (พ.ศ.2551-2565)**. กรุงเทพฯ : โรงพิมพ์แห่งจุฬาลงกรณ์มหาวิทยาลัย

สำนักงานคณะกรรมการพัฒนาระบบราชการ. 2552. **คู่มือการจัดระดับการกำกับดูแลองค์การภาครัฐตามหลักธรรมาภิบาลของการบริหารกิจการบ้านเมืองที่ดี (Good Governance Rating)**. กรุงเทพฯ : บริษัท พรีเมียร์ โพร จำกัด.

สำนักงานคณะกรรมการพัฒนาระบบราชการ. 2552. **คู่มือนโยบายการกำกับดูแลองค์การที่ดี**.

สำนักงานคณะกรรมการวิจัยแห่งชาติ. 2541. **แนวทางปฏิบัติจรรยาบรรณนักวิจัย**.

สำนักงานคณะกรรมการวิจัยแห่งชาติ. 2552. **นโยบายและยุทธศาสตร์การวิจัยของชาติ (พ.ศ. 2551-2554)**.

สำนักงานรับรองมาตรฐานและประเมินคุณภาพการศึกษา (องค์การมหาชน). 2549. **คู่มือการประเมินคุณภาพภายนอกระดับอุดมศึกษา**. กรุงเทพฯ : บริษัทจุดทอง จำกัด.

สำนักงานเลขาธิการสภาการศึกษา, กระทรวงศึกษาธิการ. 2548. **มาตรฐานการศึกษาของชาติ**. กรุงเทพฯ : ห้างหุ้นส่วนจำกัด สหยาบบล็อกและการพิมพ์.

สำนักมาตรฐานและประเมินผลอุดมศึกษา, สำนักงานคณะกรรมการการอุดมศึกษา. 2549. **มาตรฐานการอุดมศึกษาและเกณฑ์มาตรฐานที่เกี่ยวข้อง**. กรุงเทพฯ : ห้างหุ้นส่วนจำกัด ภาพพิมพ์.

English Language

McKinnon, K.R., S. H. Walker & D. Davis. 2000. **Benchmarking: a Manual for Australian Universities**, Higher Education Division, Department of Education. Training and Youth Affairs.



APPENDICES



Appendix A

Indicators of Overall Operational Results According to the Thai Qualification Framework for Higher Education

Performance Indicators
(1) At least 80 percent of the instructors responsible for the curriculum attend meetings to plan, follow up, and review the operation of the study program.
(2) The details of the curriculum follow form TQF.2 and conform to the Thai Qualification Framework for Higher Education or qualification standards of the discipline (if applicable).
(3) The details of every course and field experience (if applicable) follow forms TQF.3 and TQF.4 and are available before the start of each course in each semester/trimester at the latest.
(4) The performance reports of all courses and field experience (if applicable) are finished, using forms TQF.5 and TQF.6, within 30 days after the end of the semester/trimester in which the courses are taught.
(5) The performance report of the program is finished, using form TQF.7, within 60 days after the end of each academic year.
(6) Student achievements are verified based on the learning outcome standards specified in forms TQF.3 and TQF.4 (if applicable) for at least 25 percent of the courses taught in each academic year.
(7) The teaching and learning, teaching strategies, or learning outcome evaluation is developed/improved based on the performance assessment report (TQF.7) of the previous year.
(8) All new instructors (if any) receive orientation or advice on teaching and learning management.

Performance Indicators

(9) All full-time instructors receive training in academic and/or professional development at least once a year.

(10) Not less than 50 percent of the personnel who support the teaching and learning (if applicable) receive training in academic and/or professional development every year.

(11) The average level of satisfaction of the senior students or new graduates towards the quality of the study program is not less than 3.5 out of 5.0.

(12) The average satisfaction level of employers towards the new graduates is not less than 3.5 out of 5.0.

Notes

1. The higher education institution may devise additional indicators according to its missions and objectives or opt for higher operational targets in order to raise its standards. These adjustments are to be presented in the description of each curriculum that is affected. Nonetheless, institutional study programs at all degree levels must achieve operational results of “good” in order for a curriculum to be approved by the Thai Qualification Framework for Higher Education. The passing criteria are that the operations are in accordance with items 1 – 5 and achieve at least 80 percent of the specified performance indicators for each year.

2. In the cases of Sukhothai Thammathirat Open University and Ramkhamhaeng University where remedial exam systems are used, the indicators in items 4 and 5 may be modified as follows

Item 4 The performance reports for all courses and field experience (if applicable) are completed, using forms TQF.5 and TQF.6, within 60 days after remedial exams.

Item 5 The performance report for the study program is completed, using form TQF.7, after the end of each academic year within 90 days after remedial exams.

Appendix B

Assessment Result Form

Table SAR.1 Assessment Results by Quality Component Indicator

- Institution Type Group A: Community colleges
 Group B: Institutions focusing on Bachelor degrees
 Group C: Specialized institutions
 C1: Institutions focusing on the graduate studies levels
 C2: Institutions focusing on the Bachelor degree level
 Group D: Institutions focusing on advanced research and production of graduates at the graduate studies levels, especially doctoral degrees

Quality Indicator	Target	Performance ¹		Assessment Score (OHEC criteria)
		Dividend	Result (% or proportion)	
		Divisor		
Indicator 1.1				
ONESQA indicator 16				
ONESQA indicator 17				
Indicator 2.1				
Indicator 2.2				
Indicator 2.3				
Indicator 2.4				
Indicator 2.5				
Indicator 2.6				
Indicator 2.7				
Indicator 2.8				
ONESQA indicator 1				
ONESQA indicator 2				
ONESQA indicator 3				
ONESQA indicator 4				
ONESQA indicator 14				

¹ Fill in a number according to the criteria used for each indicator; for example, fill in a percentage, proportion, score, amount, number or iter

Table SAR.1 Assessment Results by Quality Component Indicator (cont.)

Quality Indicator	Target	Performance ¹		Assessment Score (OHEC criteria)
		Dividend	Result	
		Divisor	(% or proportion)	
Indicator 3.1				
Indicator 3.2				
Indicator 4.1				
Indicator 4.2				
Indicator 4.3				
ONESQA indicator 5				
ONESQA indicator 6				
ONESQA indicator 7				
Indicator 5.1				
Indicator 5.2				
ONESQA indicator 8				
ONESQA indicator 9				
ONESQA indicator 18				
Indicator 6.1				
ONESQA Indicator 10				
ONESQA Indicator 11				
Indicator 7.1				
Indicator 7.2				
Indicator 7.3				
Indicator 7.4				
ONESQA indicator 12				
ONESQA indicator 13				

¹ Fill in a number according to the criteria of each indicator, for example as a percentage, proportion, score, amount, or item number.

Table SAR. 1 Assessment Results by Quality Component Indicator (cont.)

Quality Indicator	Target	Performance ¹		Assessment Score (OHEC criteria)
		Dividend	Result (% or proportion)	
		Divisor		
Indicator 8.1				
Indicator 9.1				
ONESQA indicator 15				Fill in the average of the scores of all indicators of all components here

¹ Fill in a number according to the criteria of each indicator, for example as a percentage, proportion, score, amount, or item number.

Table SAR. 2. Self Assessment Results by Quality Component

- Institution Type Group A: Community colleges Group B: Institutions focusing on Bachelor degrees
 Group C: Specialized institutions
 C1: Institutions focusing on the graduate studies levels
 C2: Institutions focusing on the Bachelor degree level
 Group D: Institutions focusing on advanced research and production of graduates at the graduate studies levels, especially doctoral degrees

Component	Average Assessment Score				Assessment Result	Comments
	I	P	O	Total		
Component 1					0.00 - 1.50 Performance requiring urgent improvement 1.51 - 2.50 Performance requiring improvement 2.51 - 3.50 Fair performance 3.51 - 4.50 Good performance 4.51 - 5.00 Very good performance	
Component 2						
Component 3						
Component 4						
Component 5						
Component 6						
Component 7						
Component 8						
Component 9						
Average of all indicators for all components						
Assessment Result						

Table SAR. 3. Self Assessment Results by Higher Education Standard

- Institution Type
 Group A: Community colleges
 Group B: Institutions focusing on Bachelor degrees
 Group C: Specialized institutions
 C1: Institutions focusing on the graduate studies levels
 C2: Institutions focusing on the Bachelor degree level
 Group D: Institutions focusing on advanced research and production of graduates at the graduate studies levels, especially doctoral degree

Higher Education Standard	Average Assessment Score				Assessment Result	Comments
	I	P	O	Total		
Standard 1						
Standard 2 Standard 2 A Standard 2 B						ONESQA indicator 15 not included in calculation
Standard 3						
Average of all indicators for all standards						
Assessment Result						

Table SAR. 4. Self Assessment Results by Administrative Perspective

- Institution Type
 Group A: Community colleges
 Group B: Institutions focusing on Bachelor degrees
 Group C: Specialized institutions
 C1: Institutions focusing on the graduate studies levels
 C2: Institutions focusing on the Bachelor degree level
 Group D: Institutions focusing on advanced research and production of graduates at the graduate studies levels, especially doctoral degrees

Administrative Perspective	Average Assessment Score				Assessment Result	Comments
	I	P	O	Total		
Students and Stakeholders						
Internal Process						
Finance						
HR, Learning, and Innovation						
Average of all indicators for all perspectives						
Assessment Result						ONESQA indicator 15 not included in calculation

Table SAR. 5. Self Assessment Results by Higher Education Institution Standard

- Institution Type
- Group A: Community colleges
 - Group B: Institutions focusing on Bachelor degrees
 - Group C: Specialized institutions
 - C1: Institutions focusing on the graduate studies levels
 - C2: Institutions focusing on the Bachelor degree level
 - Group D: Institutions focusing on advanced research and production of graduates at the graduate studies levels, especially doctoral degrees

Higher Education Institutional Standard	Average Assessment Score				Assessment Result 0.00 - 1.50 Performance requiring improvement 1.51 - 2.50 Performance requiring improvement 2.51 - 3.50 Fair performance 3.51 - 4.50 Good performance 4.51 - 5.00 Very good performance	Comments
	I	P	O	Total		
1. Standard for the Potential and Readiness of Education Management						
(1) Physical plant (Facilities) aspect						
(2) Academic aspect						
(3) Financial aspect						
(4) Administrative aspect						ONESQA indicator 15 not included in calculation
Average of all indicators of Standard 1						
2. Standard for the Implementation of the Mission of the Higher Education Institutions						
(1) Graduate Production						
(2) Research						
(3) Academic Services to Society						
(4) Preservation of Arts and Culture						
Average of all indicators of Standard 2						
Average of all indicators for all standards						
Assessment Result						

Table CAR.1 Assessment Results for Office of the Higher Education Commission Indicators

Quality Indicator	Target	Performance ¹		Assessment Score by Committee (OHEC criteria)	Comments (reasons assessment differs from that indicated in SAR)
		Dividend Divisor	Result (% or proportion)		
Indicator 1.1					
ONESQA indicator 16					
ONESQA indicator 17					
Indicator 2.1					
Indicator 2.2					
Indicator 2.3					
Indicator 2.4					
Indicator 2.5					
Indicator 2.6					
Indicator 2.7					
Indicator 2.8					
ONESQA indicator 1					
ONESQA indicator 2					

¹ Fill in a number according to the criteria used for each indicator: for example, fill in a percentage, proportion, score, amount, number or item.

Table CAR.1 Assessment Results for Office of the Higher Education Commission Indicators (cont.)

Quality Indicator	Target	Performance ¹		Assessment Score by Committee (OHEC criteria)	Comments (reasons assessment differs from that indicated in SAR)
		Dividend	Result (% or proportion)		
ONESQA indicator 3					
ONESQA indicator 4					
ONESQA indicator 14					
Indicator 3.1					
Indicator 3.2					
Indicator 4.1					
Indicator 4.2					
Indicator 4.3					
ONESQA indicator 5					
ONESQA indicator 6					

¹ Fill in a number according to the criteria of each indicator, for example as a percentage, proportion, score, amount, or item number.

Table CAR.1 Assessment Results for Office of the Higher Education Commission Indicators (cont.)

Quality Indicator	Target	Performance ¹		Assessment Score by Committee (OHEC criteria)	Comments (reasons assessment differs from that indicated in SAR)
		Dividend Divisor	Result (% or proportion)		
ONESQA indicator 7					
Indicator 5.1					
Indicator 5.2					
ONESQA indicator 8					
ONESQA indicator 9					
ONESQA indicator 18					
Indicator 6.1					
ONESQA indicator 10					
ONESQA indicator 11					
Indicator 7.1					
Indicator 7.2					
Indicator 7.3					
Indicator 7.4					
ONESQA indicator 12					
ONESQA indicator 13					

¹ Fill in a number according to the criteria of each indicator, for example as a percentage, proportion, score, amount, or item number.

Table CAR.1 Assessment Results for Office of the Higher Education Commission Indicators (cont.)

Quality Indicator	Target	Performance ¹		Assessment Score by Committee (OHEC criteria)	Comments (reasons assessment differs from that indicated in SAR)
		Dividend	Result		
		Divisor	(% or proportion)		
Indicator 8.1					
Indicator 9.1					
ONESQA indicator 15					Take the scores received for all 23 OHEC indicators, compute the average, and record it here

Table CAR.2 Assessment Results by Quality Component

Quality Component	Average Assessment Score				Assessment Result 0.00 - 1.50 Performance requiring urgent improvement 1.51 - 2.50 Performance requiring improvement 2.51 - 3.50 Fair performance 3.51 - 4.50 Good performance 4.51 - 5.00 Very good performance	Comments
	I	P	O	Total		
Component 1						
Component 2						
Component 3						
Component 4						
Component 5						
Component 6						
Component 7						
Component 8						
Component 9						ONESQA indicator 15 not included in calculation
Average of all indicators for all components						
Assessment Result						

Table CAR.3 Assessment Results by Higher Education Standard

Higher Education Standard	Average Assessment Score				Assessment Result 0.00 - 1.50 Performance requiring urgent improvement 1.51 - 2.50 Performance requiring improvement 2.51 - 3.50 Fair performance 3.51 - 4.50 Good performance 4.51 - 5.00 Very good performance	Comments
	I	P	O	Total		
Standard 1						
Standard 2 A						
Standard 2 B						ONESQA indicator 15 not included in calculation
Standard 3						
Average of all indicators for all components						
Assessment Result						

Table CAR.4 Assessment Results by Administrative Perspective

Administrative Perspective	Average Assessment Score				Assessment Result 0.00 - 1.50 Performance requiring urgent improvement 1.51 - 2.50 Performance requiring improvement 2.51 - 3.50 Fair performance 3.51 - 4.50 Good performance 4.51 - 5.00 Very good performance	Comments
	I	P	O	Total		
1. Students and Stakeholders						
2. Internal Process						ONESQA indicator 15 not included in calculation
3. Finance						
4. HR, Learning, and Innovation						
Average of all indicators for all perspectives						
Assessment Result						

Table CAR.5 Assessment Results by Higher Education Institutional Standard

Higher Education Institutional Standard	Average Assessment Score				Assessment Result 0.00 - 1.50 Performance requiring urgent improvement 1.51 - 2.50 Performance requiring improvement 2.51 - 3.50 Fair performance 3.51 - 4.50 Good performance 4.51 - 5.00 Very good performance	Comments
	I	P	O	Total		
1. Standard for Potential and Readiness of Education Management						
(1) Physical plant (Facilities) aspect						
(2) Academic aspect						
(3) Financial aspect						
(4) Administrative aspect						ONESQA indicator 15 not included in calculation
Average of all indicators of Standard 1						
2. Standard for the Implementation of the Mission of the Higher Education Institutions						
(1) Graduate Production						
(2) Research						
(3) Academic Services to Society						
(4) Preservation of Arts and Culture						
Average of all indicators of Standard 2						
Average of all indicators for all standards						
Assessment Result						

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