Report of Project Group 3,
Asia Pacific Quality Network

Quality Assurance of Distance Education/ e-Learning

(Revised)

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Forward

This is the final report of the project group 3 of Asia Pacific Quality Network (APQN), Quality Assurance of Distance Education and e-Learning. This project was subjected at the APQN meeting in Hong Kong, 2003, and the Japan University Accreditation Association (JUAA) was received the proposal. In 2004 it was passed to the National Institution of Academic Degrees and University Evaluation, Japan, and two questionnaire surveys on quality assurance systems for higher education institutions using DE/e-Learning were carried out. Through a lot of discussions among project members and with agencies at occasions of APQN meetings this final conclusion was published on May 2008. The report was revised on February 2009 for minor corrections.

This project was implemented from the standpoint of quality assurance agencies and other related organizations in higher education. It is hoped that the outcomes of this project would support APQN members, other quality assurance agencies and various stakeholders in adjusting their activities to the rapidly developing DE/e-Learning environment.

This project activity was supported by Prof. Sanae Maeda (Chiba University, former Director of Division of Accreditation and Higher Education Studies, JUAA), Prof. Kenji Hirata (Toyo University), Prof. Insung Jung (International Christian University), and Ms. SoungHee Kim (Tokyo Institute of Technology). Moreover, some agencies contributed to this report by providing quality assurance standards for distance education and e-learning in which they have relations. We would like to acknowledge the Shanghai Educational Evaluation Institute, China and the Commission on Higher Education, Thailand and the Japan University Accreditation Association for their important contributions. We also thank all the respondents to the questionnaire surveys of this project.

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Appendix

I. Introduction

The past decade has seen a rapid growth in e-Learning systems against a background of remarkable development in Information and Communication Technology (ICT) and the diversification of student needs. Higher education has not been an exception and many universities are introducing e-Learning for purposes of quality enhancement. There is no doubt that e-Learning holds significant potential. For example, peoples unable to enroll in traditional, face-to-face university courses can study at universities without any physical or time restrictions by means of e-Learning systems. Traditional university students are benefiting by means of e-Learning support on/off-campus. The spread of e-Learning is thus expected to have a positive influence on students.

However, from the perspective of quality assurance in higher education, there is a concern that low–quality education is starting to appear. Under the recent harsh economic conditions, certain universities are trying to employ distance e-Learning systems as cost-efficient delivery methods in order to reduce education costs, increase student numbers and survive in the competitive worldwide higher education market.

Existing quality assurance systems in higher education were established for the traditional modes of face-to-face education delivery. Institutional level quality assurance, in particular, tends to treat distance education (DE) and e-Learning as just one method among several existing teaching modes. This negligence increases the risk of poor qualities in terms both of education delivery systems and higher education institutions themselves occurring due to the distinctive features of DE/e-Learning.

The means by which education is offered via the DE/e-Learning system differs from the traditional mode of education usually offered in a classroom. When quality assurance reviews are conducted of an institution/program that uses a DE/e-Learning mode, some distinctive characteristics of DE/e-Learning must be borne in mind, so that the quality assurance agency can account for the real situation. Then the quality assurance agencies must identify the most important criteria for the appropriate review of the DE/e-Learning programs.

Moreover, in considering the international trade in higher education, it is noticed that most countries in the Asia-Pacific region can be categorized as importing countries. DE/e-Learning does not impose restrictions on the students in terms of their location and schedule, and the students can acquire foreign education easily from the comfort of their homes. However, because of the borderless nature of such forms of higher education, the importers may encounter several problems regarding the quality of DE/e-Learning. Protecting the students and institutions from the low-quality higher education provision is crucially important for the healthy development of the Asia-Pacific higher education.

The members of the Asia Pacific Quality Network (APQN), that is, quality assurance agencies and organizations associated with the quality assurance of higher education in this region, are expected to play a key role regarding such problems. Conducting quality assurance reviews of programs/institutions employing DE/e-Learning requires common understanding of DE/e-Learning in order to protect prospective students, educational institutions, and domestic higher education systems as well as those in the Asia-Pacific region.

II. Objectives

Project Group 3 targeted the issue of the quality assurance of DE/e-Learning and entailed for the following purposes: (1) sharing information on the latest quality assurance systems of DE/e-Learning among quality assurance agencies, (2) building a list/matrix of DE/e-Learning qualities in the Asia-pacific to easily understand the multidimensionality and multiple perspectives of DE/e-Learning quality assurance, and (3) promoting the development of DE/e-Learning quality assurance capabilities of each agency.

It is important to note that this project was implemented from the standpoint of quality assurance agencies and other related organizations in higher education. It is hoped that the outcomes of this project can support quality assurance agencies and various stakeholders in adjusting their activities to the rapidly developing DE/e-Learning environment.

III. Survey

1. Methodology

During the first phase of the project, questionnaire sheets were distributed to APQN members. The idea was that if most member agencies developed quality standards for DE/e-Learning, a standardized list/matrix for DE/e-Learning could easily be produced. The survey results are discussed in the following section. During the second phase, the quality items for DE/e-Learning were collected via literature surveys in order to reinforce the results of the questionnaire survey, and thus develop a reference point for the quality assurance of DE/e-Learning.

Two questionnaire surveys were carried out via e-mail. The first survey was conducted from October 2004 to March 2005 and only five members were responded to it (see Appendix V). In October 2006, the second survey was conducted as per the advice of the e-Learning experts, in order to account for the changing environment of DE/e-Learning over the previous two years, as well as an understanding of the present governmental regulations and hidden rules (see Appendix VI). While the new questions about formal and informal/hidden regulations concerning DE/e-Learning were added, the number of questions was reduced and native languages were allowed to be used when filling in the blanks for ensuring that the questionnaire was completed easily. The targets comprised seventeen full members, seven intermediate members, and one governmental associate member of APQN, who represented a total eighteen countries/areas. The number of responses to this survey increased to fifteen.

2. Results of the questionnaire survey

The results of the two questionnaire surveys and their implications are as follows:

・ Most of quality assurance agencies are inexperienced in matters of quality assurance of DE/e-Learning, but plan to conduct quality assurance reviews of programs/universities using DE/e-Learning in the near future.

Some quality assurance agencies were experienced in conducting quality assurance reviews of DE/e-Learning. However, these agencies applied their existing standards or quality items, developed for traditional face-to-face mode of learning to the DE/e-Learning systems, either directly or with minor modifications. Most quality assurance agencies have not assigned such programs delivered by DE/e-Learning, but plan to conduct their quality assurance in the near future. Only one organization indicated that programs with DE/e-Learning were not available in its coverage area.

- DE/e-Learning is viewed differently from traditional face-to-face modes of learning: however, in most countries, degrees awarded and credits earned in DE/e-Learning programs are considered to be equivalent to those in traditional programs.

In general, the degree and credits awarded by DE/e-Learning programs are regarded as equivalent to those awarded by their traditional counterparts, even though there are several differences between these delivery modes. Transferring between a DE/e-Learning and a traditional program is not expected to be difficult.

However, in certain countries, the credits earned through DE/e-learning programs/universities are not considered to be equivalent to those in the traditional programs/universities. This may be a result of the differences in credit systems or the way in which educational systems are classified. Prospective students need to be apprised of such information so that they do not encounter problems.

- Quality assurance agencies do not have special quality items (e.g. standards, guidelines, statements) for DE/e-Learning in their quality assurance systems; they regard the quality items for traditional programs to be applicable to DE/e-Learning.

Most agencies indicated that they did not possess specific quality items for DE/e-Learning, except for those prescribed by the Japan University Accreditation Agency (JUAA). They maintained their own standards for correspondence programs (see Appendix I) that partially covered DE/e-learning programs. Moreover, certain

respondents regarded DE/e-Learning as a part of transnational higher education.

・ **Quality assurance agencies, for the most part, entrust the handling of DE/e-Learning with the target program/university's internal quality assurance systems.**

The agencies just expect the target program/university to guarantee the quality of its DE/e-Learning programs in an appropriate manner under the existing circumstances. When the institution has a well-established internal quality assurance system based on well-functioning standards or regulations pertaining to DE/e-Learning, the agencies can entrust their treatment of DE/e-Learning within the university's self-governance. The standards might be established by a professional body or the government.

・ **In some countries, universities with DE/e-Learning are operating according to government regulations.**

In Japan, Thailand, and the People's Republic of China, legal regulations concerning DE/e-Learning modes exist in some shape or form (see Appendix II, III, and IV). They are expected to protect students from low-quality education providers and promote internal quality assurance systems for DE/e-Learning, thereby improving their quality.

At present, the internal quality assurance systems within universities, in accordance with governmental regulations, play an important role in the quality assurance of DE/e-Learning. The educational institutes will establish their own criteria on the basis of governmental regulations, and the external quality assurance agencies can follows the internal process if they do not have their own benchmarks.

The central responsibility for conducting quality assurance should reasonably lie with higher education institutions. However, this can not serve as a justification for the inaction on the part of external agencies, regarding quality assurance in DE/e-Learning. This project group should elucidate the features of DE/e-Learning

and highlight the components relevant to quality assurance. It is hoped that the external agencies can evaluate institutions and/or programs with DE/e-Learning by using the components as reference.

IV. Discussion on DE/e-Learning quality assurance items

1. Concept of Quality Assurance

1.1 Origin of Quality Assurance

In recent years, quality assurance has become an oft-heard term. It is not only quality assurance agencies but also various stakeholders as well who are interested in the future of quality assurance in DE/e-Learning. In a discussion regarding quality assurance in DE/e-Learning, it may be useful to return to the origins of the concept and arrive at a consensus.

There are various ways of defining quality assurance. The International Network for Quality Assurance Agencies in Higher Education (INQAAHE) defines quality assurance in higher education as follows:

> "Assurance of quality in higher education is a process of establishing stakeholder confidence that provision (input, process and outcomes) fulfils expectations or measures up to threshold minimum requirements."

The Council for Higher Education Accreditation (CHEA), an amalgam of American quality assurance institutions, defines it in the following, somewhat broader, terms:

> "Planned and systematic review process of an institution or program to determine that acceptable standards of education, scholarship, and infrastructure are being maintained and enhanced. Usually includes expectations that mechanisms of quality control are in place and effective. Also, [in the United Kingdom] the means through which an institution confirms that the conditions are in place for students to achieve the standards set by the institution or other awarding body."

These are some definitions of the concept of quality assurance used in the field of higher education. The idea of quality assurance has its roots in the concept of quality control that spread throughout the manufacturing sector. It is widely known that Japanese industries have contributed significantly to the development of quality control/assurance methods. Half a century earlier, quality control referred to the inspection of products in order to ensure that no defective goods would be delivered. In other words, it was assumed that manufacturing activities would lead to faulty goods being produced; as a result, the emphasis was placed on the efficiency with which inspections could be conducted. However, an inspection alone will not reduce the proportion of faulty goods or costs. This is where the plan-do-check-act (PDCA) cycle comes in; the PDCA cycle is a process that seeks to manage the factors that lead to disparities in quality at all stages of the production process. This process is generally referred to as "quality control" or "quality management."

1.2 Basis of Internal Quality Assurance

In order to explain the concept of quality assurance, it might be helpful to employ the technical term "quality of design". Quality of design is a means of ensuring quality by incorporating the quality expectations of customers entailed in the concept of the product/service with regard to the technical aspects, retail, and prime costs, before the actual production/service process begins. In order to produce goods/services that will satisfy customers, the actual quality has to be improved until it meets the quality of design. When the actual quality of the goods/services comes in a satisfactory level, updates of the quality of design and improvements of the actual quality will be requested to attain the further customer satisfaction at the following step.

Quality assurance originally entailed the assurance of whether or not the product/service in question had been produced in line with or superior to the stipulations of quality of design. In some cases, it can also be an assurance of the correct functioning of the management cycle (PDCA); in other words, it can include the process of quality improvement. This concept of quality assurance was translated into the education sector with some modifications, and eventually used

in several higher education institutions. The quality of design is usually determined via institutional goals, program objectives, minimum requirements, standards, benchmarks, and so on; moreover, the institutions strive to reach the level of quality of design. Quality assurance agencies refer to it as "internal quality assurance" (in higher education).

In the world of DE/e-Learning, the technical knowledge and the level of skill required by users have risen progressively due to the advancement in technology and the ongoing emergence of educational and other service devices. Therefore, the establishment of a rigid benchmark for quality of design is perhaps meaningful only for the short term and not the long term. Educational institutions offering DE/e-Learning are advised to adopt those student needs and technologies which can be expected to increase (Figure 1).
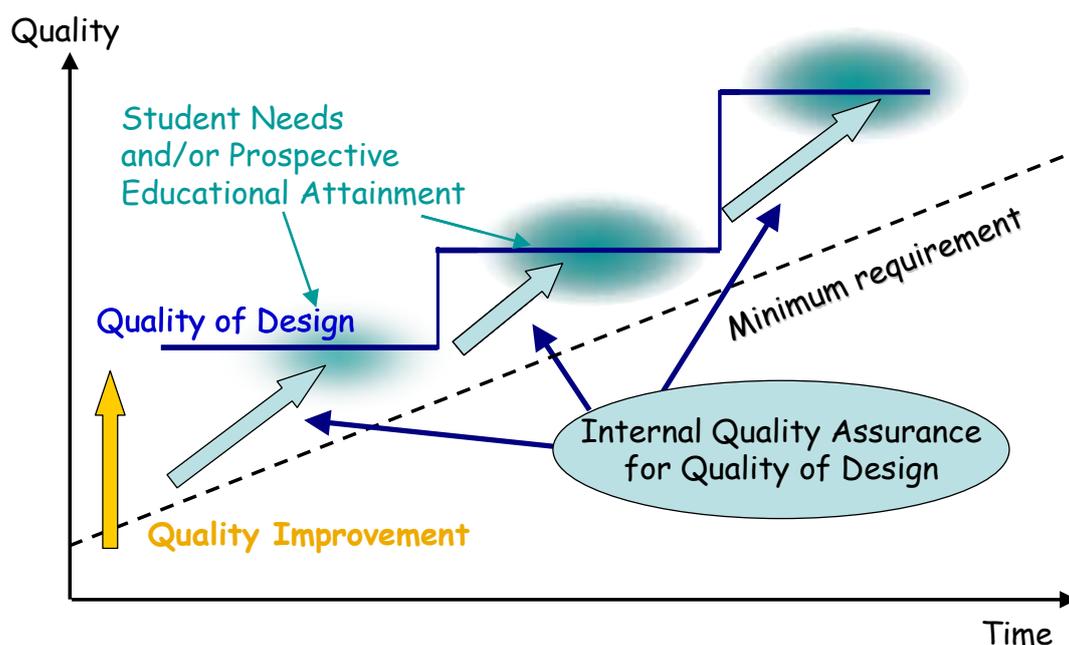

Figure 1 Concept of Quality of Design and Internal Quality Assurance

1.3 Basis of External Quality Assurance

The other form of quality assurance is "external quality assurance." Main task assigned to most quality assurance agencies is this type of work. The benchmarks

used in external quality assurance vary widely because of the differences in their objectives. For example, the reference point can be set to promote their activities toward achievement of their goals and/or to assure the minimum requirement. The reference point can also be determined by the institution itself or by a team of higher education institutions, a quality assurance agency, the government, or an interest group.

The essence of the various external quality assurance systems is the appraisal of the quality of the institution/program from an external standpoint. The other important aspect of external quality assurance is related to information-provision to and information-sharing with stakeholders. In order to enable fair transactions, both the seller and the buyer, irrespective of whether they are individuals, organizations, or governments, must have access to all the relevant information. However, in reality considerable buying and selling is conducted without adequate information regarding quality—and education is one such commodity/service. In the case of education, inevitably, an information gap arises between the seller and the buyer, referred to as "asymmetric information." The asymmetry in information needs to be corrected to protect consumers. This is one of the reasons why a third party organization without a conflict of interest with others assesses the quality of the commodity/service.

The purpose of internal quality assurance is rather simple and includes continuous improvement and quality enhancement in order to attain an organization's missions or to ensure its survival in the competitive market. However, external quality assurance entails various objectives in response to the situation and the policies of the country in which it is conducted; it often entails multiple simultaneous objectives. Therefore, external quality assurance provides a minimum degree of assurance, ensuring accountability, establishing stakeholders' trust, and preventing the market from becoming flooded with inferior commodities/services. Moreover, there are several actors in the external quality assurance processes. Undeniably, the higher education institutions themselves are one of the main actors. However, the group that implements the external quality assurance of the program/university varies: it could be a quality assurance agency as a third party, a representative of higher education institutions, the government, representatives of consumers, or others. Although their functions differ according to the environment, the use of

external quality assurance is commonly expected to lead to improvements in quality.

2. Appropriate style of quality assurance for DE/e-Learning

When DE/e-Learning is handled in the quality assurance process for higher education institutions/programs, the main question asked is "who gives assurance for what and why?" In this paper, quality assurance will be conducted for a certain quality in a program/institution offering DE/e-Learning. The domain and purpose of the quality assurance has to be decided. The quality items for DE/e-Learning can be selected on the basis of the aforementioned definitions.

2.1 Domain of DE/e-Learning quality assurance targeted in this project

As stated earlier, quality assurance can be broadly divided into internal and external quality assurance. A consideration of the different organizations that conduct quality assurance yields the following observations. First, internal quality assurance should be undertaken by the parties that supply the services, namely, the higher education institution or a department related to DE/e-Learning. Second, external quality assurance is the responsibility of independent evaluation agencies. There is also a third actor— the community of DE/e-Learning implementing bodies.

There are various aspects of DE/e-Learning that should be subjected to quality assurance, ranging from the content and system of e-Learning itself to the instructors, student support, and the credits and degrees acquired by students. Internal quality assurance, of course, must target evenly all over these issues. External quality assurance covers these matters as well; however, the items that they emphasize vary depending on the evaluating party. From the standpoint of quality assurance agencies in higher education, it is the quality of the credits and degrees granted by the university that must be emphasized the most and then the process of DE/e-learning is regarded as a way to lead the students to the credits and degrees (Figure 2).

Quality assurance agencies are usually required to assess the overall state of the institution/program. Their interest lies not in the DE/e-Learning system itself but in the

outcomes and process of learning/education via DE/e-Learning. Therefore, specific educational methods such as e-Learning run the risk of being neglected. Moreover, since systems and educational methods such as e-Learning developed so quickly, the evaluators cannot keep up with the changes unless they are experts (see Figure 1). Even if evaluation standards are formulated, they would be nothing more than a superficial 0checklist from the outside.

Internal QA	○Accountability, Assurance of "quality of design" ○Their Own Quality improvement	**Organization offering DE/e-Learning** **DE/e-Learning community**
External QA	○Accountability, Assurance of minimum requirement ○Support for quality improvement of institutes	**Independent, external QA agency for HE**

upstream → e-Learning specialists, e-Learning community → **downstream**

System developer

QA agencies for HE

Administrative for e-learning

Contents developer e-Learning vender Faculty/staff Students

Awarding credits & degrees

Internal Quality Assurance
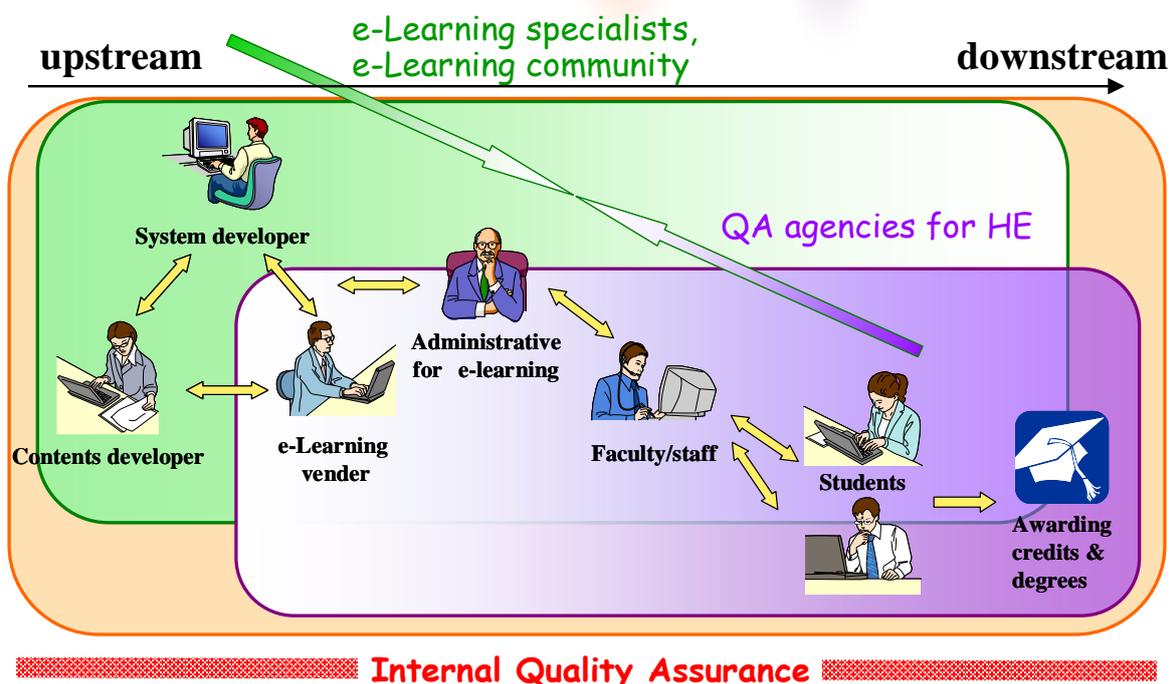
Figure 2 Framework of internal and external quality assurance to e-Learning

* The basic concept of actors/actress in this chart is from 'Asia E-learning Network Japan Quality Assurance/Management Working Group' (2005) (Project leader: Dr. Kenji Hirata, see Chapter V, Figure 1).

Therefore, task sharing is desirable for both the quality assurance agency covering the basic functions that the university should provide (shown in the purple region in the figure) and for the experts handling the quality assurance for special matters relating to the DE/e-Learning system (shown in the green region in the figure). Regarding the latter, it would be possible for an evaluation to be carried out by the community of bodies implementing e-Learning.

At present, standardization is taking place with regard to the content and system of e-Learning, in the form of the Shareable Content Object Reference Model (SCORM), Learning Object Metadata (LOM), Question & Test Interoperability (QTI), and Learner Information Package (LIP). Since standardization means aligning specifications to standards that are stipulated beforehand, it can be regarded as a form of quality assurance. A consensus is also taking shape regarding the process of instructional design. Furthermore, e-Learning implementing communities are accumulating know-how regarding the process of supplying contents to students. To illustrate this, the activities of the Asia e-Learning Network are introduced in **Chapter X**.

2.2 Quality components according to the purpose of the project

On the basis of the project objectives, it was planned that a comprehensive list of quality components for DE/e-Learning would be developed. By collecting all the quality guidelines concerning DE/e-Learning, a complete quality list for quality assurance may be created In this regard, some projects sponsored by the European Commission have been advanced. For example, the SEEQUEL (Sustainable Environment for the Evaluation of Quality in E-Learning) Project developed the "SEEQUEL Core Quality Framework," which is a list covering more than 200 criteria for e-learning. EQO (European Quality Observatory) is also conducting a project regarding quality in e-learning by providing a database of the qualities to interested parties.

However, according to the result of the questionnaire survey responded by the APQN members, the core of DE/e-Learning quality assurance is still in the traditional mode of education. Most quality assurance procedures and standards for DE/e-Learning are variations of those employed for traditional face-to-face learning

processes. In fact, the quality guidelines for distance education developed by Japan University Accreditation Association (JUAA) (see Appendix I) shares several common elements with the guidelines for the traditional mode of learning.

It is a matter of concern that certain aspects of the brand-new education delivery methodology are not covered by the existing quality assurance concepts. Our objective is to establish the appropriate quality assurance system for DE/e-Learning from the viewpoint of external quality assurance, especially in the Asia-Pacific region. The creation of a comprehensive quality assurance system for an institution/program offering DE/e-Learning is useful in that it enables one to understand the institution/program as a whole. It is relatively easy for institutions to establish their own standard for the quality assurance of DE/e-Learning in a specific environment—for example for a single country or by one quality assurance agency. However, it is quite difficult to develop a universal quality assurance system for DE/e-Learning that can be applied to various situations concerning higher education institutions in different countries. We concluded that the best solution applicable to all the members of APQN lies in covering only additional quality components that enable them to arrange their traditional standards with respect to DE/e-Learning.

Another problem lies in determining the size of the domain encompassing the additional qualities associated with external reviews of DE/e-Learning programs. To render the additional qualities applicable to all situations, minimum quality components for DE/e-Learning are established to adjust the existing traditional quality assurance systems to DE/e-Learning. Most quality components for institutions/ programs cannot be covered with the proposed quality items. These items can be accounted for by the existing quality standards for traditional face-to-face instruction.
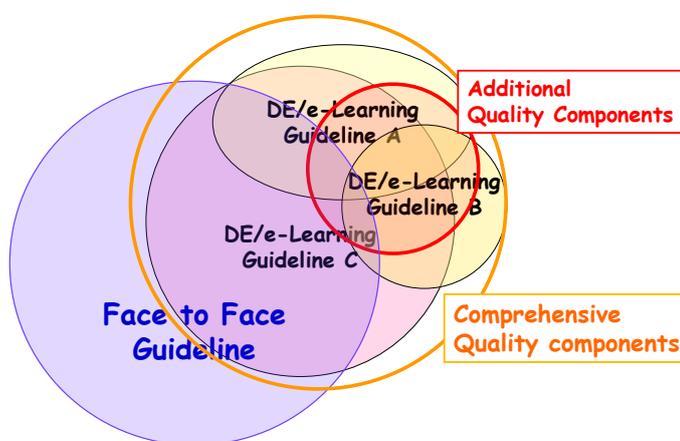
Figure 3   Framework of Additional Quality Components for DE/e-Learning

2.3 Difficulties in the quality assurance of DE/e-Learning

When the additional quality items in the new design of instruction are examined, it is useful to consider the specific difficulties in fully/partially assuring the quality of an institution/program delivered by the DE/e-Learning mode. These additional difficulties arise as a result of the special features of DE/e-Learning.

The Council for Higher Education Accreditation (CHEA) mentioned that assuring quality in DE presents three major challenges to accreditation: "alternative design of instruction," "alternative providers of higher education," and "expanded focus on training."*[1] As examples of such alternative service providers, CHEA pointed out the new online degree-granting institutions, degree-granting and non-degree-granting online consortia of institutions and corporate universities. Organizations offering cross-border higher education are regarded as one of the alternative providers.

Kirkpatrick (2005) suggested that quality assurance in open and distance learning must address the following organizational differences from the conventional education in order to establish their credibility and equivalence: *[2]

- Larger number of stakeholders, specialists or sites involved in development and delivery.
- Separation of learner and institution.
- More separate activities, roles and participants.
- More detailed planning of production and budgets in advance of program presentation.
- More administrative tasks distributed between different sites and partners.
- More diverse target audiences.
- Greater use of the Web and other information and communications technologies (ICTs).
- More delegation of aspects of learning and assessment to local or workplace partners.

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[1] CHEA (2002) "Accreditation and Assuring Quality in Distance Learning", CHEA Monograph Series 2002, Number 1.
http://www.chea.org/Research/Accred-Distance-5-9-02.pdf

[2] Kirkpatrick (2005) "Quality Assurance in Open and Distance Learning" presented by "Commonwealth of Learning" (Canada),
http://www.col.org/colweb/webdav/site/myjahiasite/shared/docs/KS2005_QA.pdf

- Distributed organizational structure for materials creation, teaching or learner support.
- Different interpretation of what constitutes teaching, for example, a learner-based instead of a lecture-based approach.

This list includes many administrative/managerial aspects of open and distance learning to establish an effective management such as "more administrative tasks distributed between different sites and partners," and "distributed organizational structure for materials creation, teaching or learner support." These distinctive aspects associated with the management of organization offering DE/e-Learning are important for their quality assurance. However, whether the quality assurance agency deals with the managerial aspects depends on its particular policy and procedure for the quality assurance. They are sometimes addressed only within the internal quality assurance system.

Moreover, there is a discussion on relations to vocational programs, for-profit universities, and/or cross-border education. It should be pointed out that these problems are not caused only by the DE system. Even though those factors are strongly related to the features of DE/e-Learning, they can be discussed and treated separately from DE/e-Learning in assuring the quality of the institution/program.

This paper concentrates on the unique design of instruction and the special environment affecting students, faculties, and institutions that the new mode of education delivery creates. The managerial aspects are then excluded in order to elucidate the underlying problems of the DE/e-Learning mode. It is hoped that other projects will explore the emergence of new forms of higher education providers and training aspects other than the new mode of education delivery.

It is believed that the adjusted standards can help in overcoming the difficulties of DE/e-Learning quality assurance by adding certain quality items to the existing quality standards or guidelines. The important distinctive features of DE/e-Learning are as follows:
- Physical/psychological distance between faculty/university and students
- Invisible learning/education process
- Novel situation regarding student–teacher ratio: a smaller number of faculty catering to a large number of students

- High technological learning/education environment

The additional quality components concerning the four difficulties associated with DE/e-Learning are discussed in the following section.

V. Recommended quality components for the quality assurance of institutions/programs offering DE/e-Learning

The project group conducted a literature survey on quality assurance systems for DE/e-Learning to define the additional quality components for DE/e-Learning. The essential idea behind the quality components is that the DE/e-Learning program awards the same degree as the traditional face-to-face ones, and that these programs should ensure to provide equivalent to or more learning outcomes than their traditional counterparts. The following are the recommended components as minimum requirements that can be used for quality assurance of DE/e-Learning. The additional qualities can be applied to various situations of higher education institutions/programs involving DE/e-Learning.

Table 1 Recommended quality components for the quality assurance of
institutions/programs offering DE/e-Learning

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1. Physical/psychological distance between faculty/university and students

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1) Appropriate disciplines and subjects for DE/e-Learning

- Distance/e-Learning should be used only in disciplines that can provide equivalent learning outcomes to those of face-to-face traditional educational settings.
- Practice-based learning and improvement, in particular, require extra attention.

2) Appropriate delivery methods

- Delivery methods should be appropriate to the nature of the course, the target students, and the expected learning outcomes. Sometimes, multimedia education, synchronism, and/or interactiveness are required.

- Program delivery should be assured until the education contents and materials reach the student's mailbox and/or display. That is, any delivery failure should be the institution's responsibility. The institution should select a reliable delivery service or prepare an alternative procedure.
- Sometimes, branches and study centers are regulated in terms of facilities and equipment.

3) Resource availability

- Study resources such as books, media, and documents should be available to students. If they are not available in a certain area or circumstance, the institution should make sure that the student can access the study resources.

4) Student support

- Appropriate student support should be available for all students, including those who reside at a considerable distance. The quality of service should be equivalent to that of a traditional campus-based institution. If the equivalent quality cannot be assured, the institution should publish the specifications of student support in terms of response time to a question, frequency of questions to be asked, etc. Moreover, the students' consent should be obtained prior to enrolment.
- Physical/psychological distance between faculty/university and students and among students is likely to decrease motivation for learning and graduating from a course. A system for enhancing student learning motivation needs to be prepared.

5) Faculty-student and student-student interaction

- Faculty–student and student–student interaction should be designed and function well in order to enhance student learning. It is recognized that communication between lecturers and students and the formation of a learning community enhance student learning and positively influence the program/institution.

2. Invisible learning/education process (especially in pure e-Learning)

1) System for rendering the education/learning process visible

   - The institution should ensure that the student learns appropriately and attains a certain level to earn a credit and a certification/degree.

   - The study process of the student such as a log of student learning should be maintained as evidence for quality assurance. Some Learning Management Systems can be used for this purpose.

2) Student identification

   - Student identification should be checked at each stage of the student learning and assessment processes. Impersonation is a critical issue in DE/e-Learning, and the institution should exert the greatest possible effort to prevent impersonation and assure the quality of the credit and certification/degree.

3) Staff identification

   - The Identities of faculty and staff should also be indicated at each stage of the student learning and student support processes. This is particularly relevant to the cyberspace: it is important to clearly show who the instructor is—whether it is faculty staff, a tutor, or an automatic answering machine.

4) Information sharing

   - Current and prospective students should have access to a clear, practical explanation regarding credit recognition, transfer to a conventional university, and other issues concerning credits and the certification/degree.

   - If the credit and/or certification/degree are not regarded as equivalent to those of the traditional university based on face-to-face instruction, the information should be available to the students prior to their enrolment.

3. A smaller number of faculty catering to a large number of students

1) Faculty support

- A support system for education offered by the faculty should be established since a small faculty offers its educational services to a large number of students.

- An appropriate quantity and quality of tutors are needed for implementing the support system for the large number of students. In some cases, a specific qualification may be required of the tutors, if they perform the educational work usually assigned to instructors.

4. High technological learning/education environment

1) Availability of receiving system for students

- Current and prospective students should have access to a clear, practical explanation regarding the facilities and equipment they will need. The explanation should be made available prior to enrolment.

- Both the institution and the students should understand the demands of the ICT infrastructure. Sometimes, the availability is not adequate for the DE/e-Learning system, which can create a bottleneck with regard to participation in developing countries.

2) Adjustment to their delivery system

- Sometimes, training should be provided to faculty and students regarding the use of technology. Both the institution and the student are responsible for a student's ability to access study resources and services. The requirement of skills for technology should be offered to the students prior to enrolment.

In addition to these quality components, other quality items may be required for the quality assurance of DE/e-Learning systems in relation to existing quality assurance systems, regulations, laws, culture, and so on. These may include, for example, the number of staff, total floor area of the headquarters and/or branches,

quality of ICT equipment and infrastructure, study hours, management system of decentralized situation, costs, and financial support. These quality items depend on its particular policy and procedure for the quality assurance in each country/area. When examining these issues, certain existing guidelines may offer solutions (see **Chapter VII**: Useful links).

VI. Quality assurance for student protection

In the market for higher education, most Asian countries are classified as importers. Even within the Asia Pacific area, some countries have higher education institutions possessing a DE/e-Learning system, which can be a strong tool for promoting the export of higher education. On the export side, universities carry out internal quality assurance of their educational services, and quality assurance agencies or other relating organizations conduct external quality assurance. But what can the importing countries do? Even if quality assurance agencies in importing countries want to provide guarantees, although this might be possible in the case of overseas branches of schools, the consumers of e-Learning are individual students, and their activities of individuals cannot be managed completely.

In the end, it is probably necessary to leave matters to the judgment of the students who are the consumers. Students should obtain the disclosed information, thoroughly examine it, and decide whether to enroll in the program. The quality assurance agencies can provide information regarding what students should consider when deciding to enroll in an e-Learning program. Of course, this information is useful not only for international provision but also for domestic provision. Some items in our recommended quality components for the quality assurance of institutions/programs offering DE/e-Learning are derived from the concept, student protection as well as student empowerment. Certain organizations that have relations with DE/e-Learning publish student guides or buyer's guides (CACE, Canada; ODL QC, UK; and SEEQUEL, EU). The student or buyer guides of e-learning can be useful information to establish the new quality items (see **Chapter VII**: Useful links).

VII. Useful links

There are many standards, guidelines and projects about the quality assurance of DE/e-Learning. Here are some linked URLs of the leading activities, in which the information will be useful to understand and perform the quality assurance of institution/program employing DE/e-Learning. The following list contains standards and guidelines mainly for the purpose of quality assurance, including student protection. I would like to comment that the list does not cover all of standards and guidelines concerning quality of DE/e-Learning, and at the last stage we need some approximation of quality items with the other quality frameworks, which have been approached to the problem on quality assurance of DE/e-Learning.

Quality Assurance (cited 04/01/2008)

- Code of practice for the assurance of academic quality and standards in higher education, Section 2: Collaborative provision and flexible and distributed learning (including e-Learning)
  Quality Assurance Agency for Higher Education (QAA), UK
  http://www.qaa.ac.uk/academicinfrastructure/codeOfPractice/section2/

- Principles of Good Practice for Electronically Offered Academic Degree and Certificate Programs
  Western Cooperative for Educational Telecommunications (WCET), US
  http://www.wiche.edu/telecom/projects/balancing/principles.htm

- Best Practices for Electronically Offered Degree and Certificate Programs
  Eight Regional Accrediting Commissions, US
  http://www.wcet.info/resources/accreditation/
  Accrediting%20-%20Best%20Practices.pdf

- ODL QC Standard
  Open & Distance Learning Quality Council (ODL QC), UK
  http://www.odlqc.org.uk/standard.htm

- Strategies for Assuring the Quality of Distance Education Provision, Chapter 6, in CHE ed., "*Enhancing the contribution of Distance Higher Education in South Africa*"
  South African Institute for Distance Education prepared for Council on Higher Education (CHE), South Africa
  http://download.che.ac.za/documents/d000070/Distance_Education_Sept2004_Chapter6.pdf

- Quality Assurance in Open and Distance Learning
  Denise Kirkpatrick, in the website of Commonwealth of Learning, Canada
  http://www.col.org/colweb/webdav/site/myjahiasite/shared/docs/KS2005_QA.pdf

- Quality on the Line: Benchmarks for Success in Internet-Based Distance Education
  National Education Association (NEA), Blackboard Inc. and the Institute for Higher Education Policy (IHEP)
  http://eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=ED444407&ERICExtSearch_SearchType_0=no&accno=ED444407
  (Please use the search engine in ERIC.)

- 2008 Accreditation Handbook
  Distance Education and Training Council, US
  http://www.detc.org/acredditHandbk.html

- ADEC Guiding Principles for Distance Learning
  American Distance Education Consortium, US
  http://www.adec.edu/admin/papers/distance-learning_principles.html

- Principles of Good Practice
  Southern Regional Education Board
  http://www.ecinitiatives.org/publications/principles.asp

- Core Quality Framework
  Sustainable Environment for the Evaluation of Quality in E-Learning

(SEEQUEL)

http://www.educationobservatories.net/seequel/SEEQUEL_core_quality_Framework.pdf

- Canadian Recommended E-learning Guidelines (CanREGs)
  FuturEd, prepared for Community Association for Community Education (CACE) and the Office of Learning Technologies (OLT) of Human Resources Development Canada (HRDC)
  http://www.futured.com/pdf/ CanREGs%20Eng.pdf

- European Quality Observatory (EQO)
  (Offering database about the qualities in e-Learning)
  http://www.eqo.info/

Student Protection

- Consumers Guide to e-Learning
  FuturEd, prepared for Community Association for Community Education (CACE), Canada
  http://www.futured.com/pdf/ConGuide%20Eng%20CD.pdf

- A Buyer's Guide to Distance Learning: Finding the course you want
  Open & Distance Learning Quality Council (ODL QC), UK
  http://www.odlqc.org.uk/documents/bg2003.pdf

- E-Learner's Guide to the Selection and Quality Dialogue with e-Learning Providers
  Sustainable Environment for the Evaluation of Quality in E-Learning (SEEQUEL)
  http://www.educationobservatories.net/seequel/SEEQUEL_eLearners_user_guide.pdf

VIII. Conclusion

We showed some additional quality components for doing quality assurance of program/institution employing DE/e-Learning with those for traditional face-to-face education. Quality assurance agencies can conduct quality assurance of DE/e-Learning by adjusting their standard or guideline to the new education delivery style. We believe the list contributes to the new challenges in terms of showing the minimum requirements for assuring the credit and certification/degree even though the quality components are not comprehensive. If more quality item is needed for the quality assurance, other examples (shown in URLs) will be an informant to solve the difficulties.

With quite a high degree of probability, the distinction between face-to-face instructions and DE/e-Learning will become increasingly unclear such as blended learning coming up. Quality assurance in the educational process will reach to a limit because of diversification and advancement of educational method. Some area of the quality assurance of DE/e-Learning will be asked to have a support by a specialist of DE/e-Learning. This may be a "**new type of peer review**" and cooperation with DE/e-Learning community will be important to assure the quality.

What will remain in the end is quality assurance in terms of the educational effects and the credit and certification/degree achieved by students. Essentially it is recognized that DE/e-Learning will achieve the equivalent educational effects to face-to-face classes under the appropriate conditions. The form of quality assurance can be expected to shift more to quality assurance of the educational effects and educational outcomes. The process, especially study hours for credits and study years for graduation, become relatively meaningless.

Amid the strict requirement for educational outcomes in educational services from now on the specifications (quality of design) must be clearly stated when conducting transactions in university education with students and other stakeholders. The content of education, such as Open Course Ware (OCW), is being disclosed as well. Higher education institutes and quality assurance agencies are required to build an environment in which information can be widely shared so that students, who are the consumers, can make choices based on their own responsibility.

University Distance Learning Course Standards set by the Japan University Accreditation Association (JUAA)

The Japan University Accreditation Association

1. Present Status of Distance Learning Education in Japan

There are 734 universities in Japan*[1] as of April 2006. Among them, 43 institutions provide distance learning programs. 3 out of 43 independently conduct this type of education, while the remaining 40 are attached to an on-campus university course. Most of these programs employ a traditional education method, namely, the combination of correction by post and a certain period of schooling (classroom education), and only one university offers education via e-Learning only without schooling.

According to the survey conducted by the JUAA in 2005, the number of students enrolled in distance learning courses was 145,000, accounting for about 5% of the total university students in Japan.

Distance learning education in Japan has a long history, dating back to 1951. Up until now, many institutions have turned out a number of graduates through this education, achieving satisfactory results. As stated above, however, most of the students in distance learning courses choose the traditional mode of learning, and the demand for obtaining a university degree via e-Learning only is still very low in Japan. Under such circumstances, obvious problems concerning the quality of distance learning education provided by Japanese universities have not appeared yet.

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[1] "Universities" here refers to higher educational institutions that grant bachelor or higher degrees. Small-sized institutions that provide a single degree program are also included in this category.

Incidentally, the number of Japanese universities that employ distance learning, such as e-Learning, for on-campus programs has been increasing year by year.

Under such circumstances in Japan, the JUAA conducted a revision of its "University Distance Learning Course Standards" (hereinafter called "the Standards") in 2006 for dual purposes: 1) to support the quality improvement of distance learning education provided by higher educational institutions in Japan, and 2) to evaluate such educational programs as a part of the JUAA's accreditation by institution.

Needless to say, the most crucial reason for this revision is to amend the Standards in line with the rapid advancement of information technology so as to correspond to the present situation of distance learning education in Japan. Considering such circumstances, hearings were conducted in the process of revision to gather opinions and suggestions of various parties involved in university and distance learning education. As a result, it was strongly suggested that the Standards should not excessively put emphasis on information technology, considering the overall situation of Japanese universities. The revision, therefore, was made by taking into account such opinions to a certain extent.

2. Purpose and Position of University Distance Learning Course Standards

JUAA is a private organization that was established in 1947, modeled after the accreditation by institution conducted in the United States. Upon establishment, the JUAA compiled the first edition of its University Standards. Following several revisions, the University Standards set by JUAA now play an essential role in university accreditation in Japan. (As for the current University Standards, refer to: http://www.juaa.or.jp/english/main/hyouka/university-standard.pdf

University Distance Learning Course Standards was also compiled in 1947, several months after the University Standards. Revised three times, however, University Distance Learning Course Standards have not performed as vital role in university accreditation. Nevertheless, as increasing the quality assurance of universities it comes more and more important from now on, so the JUAA conducted a revision of

the Standards so that universities with distance learning courses can pursue higher education quality by using items defined in the Standards as a reference, upon implementing their education and research activities both for undergraduate course education and master's/doctoral courses. The Standards are designed for academic faculties and graduate courses that provide higher education via distance learning, including both: 1) solely-established distance learning courses and 2) distance learning courses attached to an on-campus course. Accordingly, the Standards are compiled so as to clearly indicate whether the items applied to the former or latter type.

The Standards are positioned in the lower layer of the overall structure of the JUAA's University Standards. The parts overlapping with JUAA's upper University Standards set by the JUAA are intentionally left for the convenience of evaluators, thus enabling universities with distance learning courses to pursue self-study, and the JUAA's evaluators to evaluate universities by using only the Standards.

The Standards, which was originally compiled based on various standards stipulated by MEXT, are rather meant to encourage improvement and request universities to continue working toward achieving their own missions and objectives. As the JUAA does not intend to force universities uniformly to attain all the items under the Standards, different expressions are used to indicate the level of importance of each item of the Standards. Therefore, please note that as shown below in descending order of importance, items using the three words in the first category are of the highest importance.

1. "necessary," "must" and "required"
2. "important," "critical," "essential" and "crucial"
3. "desirable," "desired" and "expected"

Furthermore, flexible expressions are intentionally employed in the Standards for broader interpretations by taking into account the diverse potentials and circumstances of distance learning education, and giving full respect to the missions and objectives of each university.

In addition, the evaluation items for self-study are listed at the end of the Standards as a reference for conducting evaluation, so that universities and

third-party evaluators can assess the conformity of each university to the Standards. These self-study items can be characterized as reflecting the unique features of distance learning education. For example, the "Education Method" section indicates a diverse mode of educational methods to provide an education level equivalent to an on-campus course, and the "Student Services" section includes the necessity of concern about using IT equipment and systems to support students in home-learning and everyday life.

Lastly, the JUAA is in the process of reviewing its "Major Items for Self-study" to be used for university evaluation from FY2008. The items listed at the end are to be used as a reference for the review.

The entire "University Distance Learning Course Standards" are shown in **Appendix I**. For various reasons we could not make sufficient effort to translate the University Distance Learning Course Standards into English. Though the standards may be difficult to understand because the quality assurance system is different among agencies, we hope they serve as a useful reference for the quality assurance of distance learning in other agencies.

Referenced Information Model of Quality Assurance Concept and Methods in E-Learning

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Abstract:

Standardization for quality management and assurance in e-Learning became a live issue recently. ISO/IEC JTC1 SC36 already have considered and proposed about this issue. In our experimental studies, once we tried to audit some e-Learning in practice, we found the difficulty to do so. While companies and researchers always tried to improve their e-Learning themselves, these activities usually did not reach enough assurance of user requirement. One of the reasons was luck of information about quality and its assurance. It was difficult to find these information from vender or school. If information could be found, we could not understand it easily and not satisfy with contents of information. Quality is vague word and user requirements are very various. For e-Learning market promotion, so standardization about quality in e-Learning was important issue as like in other industries. In order to develop standards related quality, we needed to research many things, that is ISO standard drafts reviewing, defining terms and activities in quality assurance, and referenced information model for mutual agreement. And developing and using guideline and tool, we recognized an importance of mutual understanding for methods about quality assurance auditing and its results.

Key Words:

Quality Assurance in e-Learning, Standard, ISO/IEC 19796, Information Model, Methods and Metrics

1. Introduction

This paper is going to deal with quality issues in e-Learning management from the standpoint of standardization. The research activities and its outcomes in e-Learning technology standardization have had big impacts and contributions for e-Learning market formulation, and improvement of school and university education during a half decade. Especially, the standardization on e-Learning systems such as SCORM specification is significantly expanded. This result led to reduce dispersion and failure on e-Learning systems.

In the other hand, theories and practices of instructional design have been given much re- attention in order to improve quality on e-Learning contents and services. It might be true that instructional design is significant influence for improving e-Learning contents and services.

However instructional design has limited effects for its quality improvement, because instructional design has focused on development stage or process only, not on whole management cycle, and also deals with only contents development and instruction itself. Instructional design theories have not provided much expertise and findings for managing organization, project, system, or learning activities directly.

So, we recognized that the whole perspective of quality management and assurance is needed to manage and improve e-Learning continuously.

2. Research Background

Our research was basically based on the two streams, one is ISO/IEC JTC1 SC36 (ISO-SC36) activities, and the other is ASIA e-Learning Network (AEN) activities.

In 2002, ISO-SC36, that was the formal international standardization committee for technology on education, learning and training, established the working group related to quality management and assurance on e-Learning. The working group had many discussions globally, then in 2004, ISO-SC36 and also ISO approved

ISO/IEC 19796-1 through committee consideration, that was the quality management and assurance standard draft in e-Learning. ISO/IEC 19796-1 is the document to describe quality approaches and to promote understanding for various quality activities.[1] The basic concept of ISO/IEC 19796-1 is originated form instructional design and its process. And ISO-SC36[2] is going to make sense and develop three standard drafts more in order to adapt wide range quality approaches.

In 2003, one working group (WG) about quality management/assurance on e-Learning contents and services was organized as a part of the Asia e-Learning Network (AEN) projects as initiating in Ministry of Economy, Trade and Industry in Japan (METI). AEN was established based on the ASEM ministry's meeting. AEN is the community for knowledge sharing and standardization studying in e-Learning among ASEAN counties, China, Korea and Japan.

So, in this paper, some research activities and outcomes on AEN WG are explained mainly. AEN WG basically focused on developing quality management and assurance guidelines. There were conceptually two reasons for developing these guidelines. The first reason is to reduce misunderstanding about quality concept and quality related activities among stakeholders, because quality term is very vague.

The second reason is to promote quality auditing or self-assessment on e-Learning contents and services, because there were not existence of common methods, items and metrics for quality assurance in Japan and other countries. Audit and assessment for assurance were indispensable and these were needed to improve e-Learning contents and services.

3. Purpose

For developing standardization of quality management/assurance in e-Learning, 1) the concept of quality itself should be identified. 2) common understandings for what we assure and audit quality in detail are needed. 3) common understandings how to assure and audit quality are also needed.

In this paper, quality concept is deal with in the chapter 4, problems for common understanding are deal with in the chapter 5, for common understanding, quality object are deal with in the chapter 6, and quality methods on quality approaches were deal with in the chapter 7.

4. Quality concept review

At the first, our AEN-WG Japan reviewed dominant ISO standard drafts and technical reports related to quality management and assurance, that is ISO8402[3], ISO10006:2003[4], ISO/IEC9126[5], ISO/IEC-TR15504-1:1998[6], ISO 9241[7], ISO/TR 18529[8], ISO9000:2000[9]. Quality is an ability of a set of inherent characteristics of a product, system or process to fulfil requirements of customers and other interest parties（ISO8402）.

This definition are basic, but very general level, so it should be defined for e-Learning area. Then the WG also reviewed prominent specification drafts about quality management/assurance in e-Learning. For example, CEN/ISSS Quality Assurance Guideline[10], ASTD E-Learning Courseware Certification (ECC) [11], Sloan Consortium Quality Elements (Sloan-C) [12], Quality On the Line by the institute for higher education policy in U.S. (QOL) [13], LSDA[14] and also Referenced Framework for Description Quality approaches (RFDQ) by ISO/IEC JTC1 SC36 WG5 [15]. In addition to, the WG reviewed some academic papers to deal with improvement of their teaching and learning in practical.

Then we found over 40 functions for improving education and learning. The functions could be parted into 5 types, 1) function design (design quality for education), 2) improving development process (process quality), 3) usability and user interface design (quality of use), 4) Feedback for learning activity and interaction (learning quality), and 5) Organizational management (organization quality).

5. Issues on quality assurance and audit

The WG made the first guideline about e-Learning quality assurance based on these five class quality concepts in 2004. The guideline enabled to do audit or self assessment for quality assurance. Concretely, the guideline showed each class consisted of plural categories. There were 21 categories set in total. Each category had one more item. Each item had also a criterion to measure or to define the status as instance in quality assurance.

Based on these classes, categories and items, the WG researched a quality needs survey, and audit actually organization and e-Learning contents and services[13]. The 10 institutions of the top-class as e-Learning contents developer or contents provider in Japan undertook our audits. The guideline was applied to these audits, then we found clearly that there were some problems in it, and also in auditing quality itself in e-Learning. In particular there were the following problems when our audits were actually done.

(1) The audited object becomes vague, (2) Situations of audit become uncertain in auditing in practice (meaning of audit), (3) By difference of the viewpoints from roles or agents that an audit person assumes, the meaning of criterion become different. As the result, each audit outcome was leaded different one and also becomes unstable within one inspector, (4) In the case of an audit, degree to require a confident for quality assurance is not stable both audit-side and respond-side, (5) To begin with, it was hard to understand the difference with and relationship between five classes.

It assumes that such these problems are not the problems that would be only happened in this our audit case. These would be happen in any case of auditing. In order to make a guideline as a standard for Japanese and Asian markets, these problems should be solved. So the WG decided to try following issues.

At first, one problem is to become quality object vague in auditing. It is necessary to describe quality object clearly and to understand it easily. In audit and self assessment, these things become necessary to reduce dispersion.

2nd problem is uncertain and confusing whose activities should be audited. When someone audits the same item, one audits activities of contents developer, the other one dose audit activities of the HRD staff. It is necessary for auditor to know a quality class or item who has responsible to.

For solution of the third problem, audit should be done with understanding why or where quality issue occurs. The fourth problem is the degree to require confident and evidence to quality assurance. It is difficult to judge whether a confident to fulfil a requirement. So result of audit judgment tends to be unstable. On the other hand, the discrepancy problem occurs in any type of evaluation. Toward this solution, purpose of audit and criterion of audit should be defined.

The last problem, quality concept itself is ambiguous; also five class concepts are not easy to divide each concept. If there is a detailed quality model, it is encouraged each other about quality and their quality activities.

6. Identifying quality with quality elements

6.1 Defining quality assurance object

To solve the first problem, the objects of each five quality class should be specified as evaluation objects. In an evaluation theory, quality object that is evaluated is divided into some layers [16]. There are common idea between the theory and five class concept.

By the educational evaluation theory, the most central evaluation object is learner and/or learning. Evaluating learner means evaluating his/her achievement or status. Because the purpose of education is to occur a learning of learner, it is reasonable that most important object is learner or learning. In other words, one of assurance object is to say a learning achievement or a occurrence of learning for assuring quality.

However, actually this is a very difficult issue. Therefore various activities become necessary in order to promote learning achievement and occurrence of learning. One

of various activities is instruction. Instruction means a direct effect for learning and learning activities. In other words, instruction is the second layer, so instruction is also important evaluation object. In e-Learning, instruction directly delivers on display mainly. Therefore instruction itself as delivery and interface are included in this 2nd layer. Delivery becomes an evaluation object in e-Learning. Next activities are to design and to prepare for instruction and learning environment. In other words, these are design and implementation of various functions and contents offered to learner in e-Learning. So the 3rd layer is products.

Offered functions and contents depend on process or systems for development of them. It is said that quality is formed by process and developmental system. Therefore the fourth evaluation object is to say development process of contents and functions. This development process is a meta layer for instruction. A development process of e-Learning is closely related to instructional design process. But, it dose not mean that we have to apply a certain instructional design to their e-Learning development. It is important whether it is administered along some instructional design process. Furthermore, educational evaluation theory evaluate to organization. Evaluating organization dose not focus on a specific course and specific education contents. Organization should be evaluated from the view point of support and encouragement activities for quality improvement. So, the 5th layer of evaluation object is organization. Educational evaluation theory divided 2 layers in organization objects, that is "organization facilities" and "organizational systems". But, in this model, we treat with one integrated object because of understanding easily. If there is not organized support, it is difficult to improve quality continuously. These layers to be assured are almost related to each five quality class.

6.2 Role and situation on quality assurance

To solve the 2nd and 3rd issues, in this section, one viewpoint in auditing quality assurance is made clear. What the role and situation are uncertain is caused not to specify where quality issue occurs. Quality issue occurs between offering and purchasing fundamentally (figure1). It is useful to recognize situation or role. There are so many agents in e-Learning environment. These agents have deferent roles and situations. Deferent roles and situations make us confuse in quality. One agent

would be some situations. Situations are showed arrows in figure1. Agent has some types of relationship with other agents. Role of agent will be changed in their situations.

Almost agents have two roles. One is requirement-role; the other
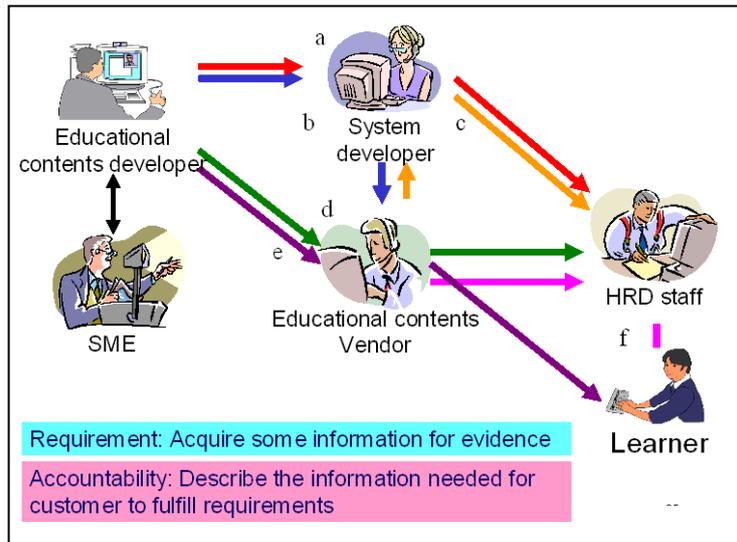
Figure1 Quality assurance agents and relationship

is accountability-role. So viewpoints of quality are different between supplier-side and customer-side reflected as their roles. In case of HRD staff, showing "f" lines in figure, they require quality as a customer for a supplier. In this case, supplier is educational contents vender or system vender. They try to know important information from them. And also they as a supplier have to explain to and to fulfil with customer or learner.

6.3 Quality elements

In order to solve the last issue and also to develop a guideline for quality assurance and its audit, it is needed that the guideline should be described definitions in detail of each object, item and metrics such like information model using element definitions. So, nine viewpoints were set as quality assurance definition elements (Table1). These elements picked up following points, 1) how to divide five class quality, 2) how to guide auditing procedure, 3) how to guide to develop audit items and criterion. And nine elements were sorted by definition elements and audit elements.

Definition elements, from 1 to 5, are indispensable in each class definition. Hereby five class of quality assurance can be defined clearly. Audit elements, from (6) to (9), lead us to make items and criteria, and to discuss about audit and result of audit.

1) Responsibility. Aim: to specify a person in charge of quality. Defining person who

has responsibility is very important and indispensable in case of quality assurance. 2) Evaluation layer. Aim: to specify the object category that should be assured or audited area. Based on the evaluation theory as mentioned above, this element is to specify an abstract object layer for quality assurance. These are divided into five objects by the evaluation theory. 3) Assurance object. Aim: to specify an aspect of object for quality assurance. This element is to specify an aspect of quality object as entity which is observed or evaluated directly. 4) Quality assurance contents. Aim: to specify the direction of quality object. If concepts that should be assured are defined well, only object information is not enough. Generally information of evaluation layer and assurance object provides information to specify the object as surface level. So it is needed to describe contents about its object. Thus quality definition is needed to specify what kind of contents of object. For example, when organization quality is taken up "responsibility": "management", "layer": "organization", "assurance object": "quality activities", It is insufficient only by the information. As contents of activities of quality assurance in an organization, "assurance contents": "management cycle" add this information, we can define clearly what quality activities we assure. 5) Term of assurance. Aim: to specify the period and the time demanded quality assurance from customers. This information can dissolve a gap of a contract and requirement hereby.

6) Activities for assurance. Aim: to specify and to audit quality activities. Quality assurance requires actual activities for quality object, this information lead to understand quality improvement activities. 7) General/Specific. Aim: to specify the object of attribution that can be useful to identify which quality class should be adapted. The element can be divided which is general or specific one. Actually assessing, the ways to audit will be different in which is general or specific. In case of our audits, both auditors and respondents were sometimes confused in particular, in difference with project quality and process quality. The former is activities about management cycle, and the latter is activities of development itself instead of management. Therefore, the former is positioned in meta of meta on development activities, and the latter is the level that is meta for development activities. 8) Purpose of audit. Aim: to describe purpose of audit or assessment. In case of an audit, it is needed that more concrete criterion must be applied and judged. About this concrete criterion, it is shown next. When once this audit criterion is set, auditors do evaluate with specifying purpose or orientation of audit. For example,

Table 1   Five quality class definitions using quality assurance elements

	Organization	Process		Product	Usability	Learning
		Project Process	**Development Process**			
Responsi–bility	Management; director board	Project manager	Project manager	Manager for product	Manager for usability	Manager for learning
Evaluation layer	Organization	Organization	Process	Instruction	Instruction	Leaner and learning
Assurance object	Total quality management activities	Project activities for development	Process activities for development	Delivered functions	Operation with actual instruction	Learning activities and progress of learner ability
QA Contents	Organizational management	Project management	Development	Function	Interface	Learning effectiveness
Term of assurance	During the managing continuation	During project	Lifecycle process	During development and delivery	During development and delivery	During development and F/B to delivery
Activities for assurance	Activities of management cycle	Activities of Management cycle	Activities of each development process	Activities of function design and development	Activities of interface design and development	Learning activities and achievement information management activities
General / specific of contents	Whole projects and whole educational contents	Specific project	Specific educational contents	Specific educational contents	Specific educational contents	Specific educational contents
Purpose of audit	Establishment & maintenance of organizational system	Practical use of efficient and effective project	Enforcement of Trace-ability	Explanation about for required functions	Enforcement of interface improvement	Explanation about improving action for learning design
Criterion for audit	Degree of organizational and systematic actions for quality	Statement clearness about project management activities	Statement clearness about actual development process activities	Statement clearness about design intention	Statement clearness about improving activities	Statement clearness about functions for learning assurance

organization class has "assurance object", that is, to assure "total quality management activities". These activities should be audit as "activities for assurance", that is "management cycle". Then "purpose of audit" set as "establishment & maintenance of organizational system", auditors make clear what activity should audit. Because it means "management cycle are evaluated from the viewpoints of system establishment and maintenance system". 9) Audit criterion. Aim: to specify audit criterion with complying audit purpose. For example, organization class has "purpose of audit" as "establishment & maintenance of

organizational system", "audit criterion" is "degree of organizational and systematic actions". This means the purpose should be judged from the viewpoint of degree of organizational level and systematic level.

7. Revised Guideline for Quality Assurance

The WG has worked collaboratively to revise the guideline with Japan e-Learning Consortium (eLC) organized by e-Learning related companies. The committee provided us the occasions of experiment, interviewing, and discussion. For example, 1) Reviewing the quality assurance items and terms. The WG and the committee discussed and revised quality assurance items and wording to understand easily and correctly. 2) Providing data about importance of each quality assurance items. All items were not same weight to attain quality requirements. So they researched the importance of each items as "indispensable", "recommended", "optional". 3) Experiment for validation of 5 quality concept and its construction.

Then the WG published the new guidelines in 2005. The new guidelines consisted of 4 parts. Part 1 is General, part 2 is Process Quality, part 3 is Production Quality, and part 4 is Quality evaluation items for learner (brief). [17] [18] [19] [20] The WG will try to publish guidelines of the other quality concept; organization quality, quality of use, and learning quality.

These new guidelines defined its concept, construction, items, item importance, item description, scale, and scale description, sample worksheet for quality assurance activities. And also quality assurance activity process was provided, because quality would be produced in process.

This process means production or development process, so ISO/IEC19796-1 indicates the process of e-Learning products and services. Quality management and assurance activity should be performed at not only specific quality assurance and/or control process, but also on each developmental process and/or sub-process. Developers select and perform methods for development in process and sub-process, while from the viewpoint of quality management and assurance, the person of responsibility for the development project basically should indicate the reason or

evidence of these methods.

Sometimes these methods have the function of development and the function of quality control and/or assurance. For example, both of "need analysis" and "fish bone" methods are meaningful not only to identify the educational goal, but also to assure the framework analysis process using its diagram as an output of identifying a goal.
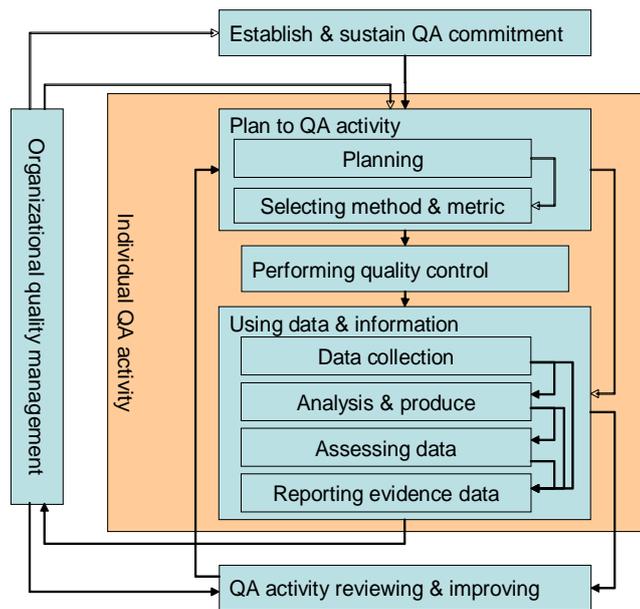
Figure 2 Quality assurance activities

It is needed that the items and methods are identified how to perform on development process and sub-process as a quality management and assurance activity. Figure2 indicates the quality assurance activity on each development process and sub-process.

8. Conclusion

We, the AEN GW, tried to establish and promote quality management/assurance process and system in e-Learning. So we have done many activities during 3 years. In this paper, I explained quality concepts in e-Learning and development of quality assurance and audit guidelines as AEN activities. And also I explained the quality assurance check tool and its experiment briefly. Researching quality object, role model in quality, quality elements and developing quality check tool, we can be clear quality in e-Learning, and make developer and professionals understand their activities and each requirement of quality.

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Appendix

Appendix I

University Distance Learning Course Standards

<div align="right">Japan University Accreditation Association</div>

1. Missions and Objectives

Universities have the missions, as central institutions for higher education and academic research, to cultivate capable human resources and contribute to academic progress and social advancement, giving full respect to academic freedom. The objective of graduate schools is to conduct in-depth research, while pursuing academic theories and their applications at the highest intellectual levels, as well as to develop highly specialized professionals with a focus on the breadth and depth of knowledge and outstanding expertise to work in a specialty area, thus contributing to academic innovation and cultural advancement in Japan.

The Undergraduate Course and Master's/Doctoral Course of a university have the following objectives. The objective of an Undergraduate Course is to develop human resources with a focus on broad and deep knowledge, comprehensive decision-making abilities and rich human values, in addition to teaching specialized liberal arts in each academic discipline. The objective of a Master's Course is to provide high-level academic knowledge from a broader viewpoint and to develop capable human resources who can conduct research activities in each academic discipline or work in a specialized area. The objective of a Doctoral Course is to develop professionals equipped with highly-advanced research skills and in-depth knowledge and expertise who can conduct research activities independently in each academic discipline as researchers or who can work in a highly specialized area.

The objective of distance learning courses provided by universities is to provide the above-stated university education widely to the general public without restrictions of time or place in order to expand educational opportunities. Therefore, universities must endeavor to maintain their educational levels so that they can accomplish the objectives of Undergraduate and Master's/Doctoral Courses. Upon conducting educational activities, universities must pay special consideration to the unique features of distance learning courses.

Universities must disseminate their own educational objectives to all related persons on campus including teachers, administrative staff and students through official publications such as their university guidebook, handbook for students and website. The objectives must also be disclosed to the general public including applicants. Furthermore, it is essential for them to regularly review and assess the appropriateness of their educational objectives, with consideration to the advancement of academic research and cultures as well as to changes in social conditions or expectations.

2. Educational and Research Structure

To achieve their own educational objectives, universities must organize educational and research structures properly, while considering the unique features of distance learning courses. Universities must also periodically review and assess the properness of their organization and system according to their own educational objectives.

3. Educational Program and Instruction

(1) Curriculum

(i) Organization of Curriculum

To achieve their own educational objectives, universities must organize their curriculum appropriately in light of the unique features of distance learning courses and in line with the specialty of each academic discipline. In organizing their curriculum, it is necessary to allocate subjects suitable to each academic course and conduct educational activities appropriately, while considering the educational objectives of Undergraduate and Master's/Doctoral Courses.

In organizing the curricula of Undergraduate Courses, universities must pay attention to developing practical skills of students such as foreign language fluency and effective utilization of information in response to the recent rapid advancement of globalization and the information society. Based on their own educational objectives, it is also necessary to effectively allocate various subjects in each academic discipline, including basic and general education, foreign language learning, and information management as complementary parts of a comprehensive university education, with consideration for the optimum balance of the total academic workload of students. Particularly, in response to the much

greater diversity and complexity of society today, education at higher institutions must develop the "intelligence" of students to tackle current social and academic problems. It is therefore important to develop human resources with abilities to understand situations from a broader viewpoint, think independently and critically, and make proper decisions, as well as to cultivate rich human values and a higher sense of morality and ethics.

In organizing the curriculum of a Master's/Doctoral Course, it is necessary to pay attention to various social trends such as progress in academic research, cultural diversification, and current developments of science and technologies. Furthermore, it is desirable to allocate subjects properly to develop the practical skills of students, as well as to pay due consideration to cultivating rich human values and a sense of ethics, which are indispensable for all highly specialized professionals and researchers.

(ii) Subjects and Credits

Universities must allocate subjects properly to attain the educational objectives of each academic course. Upon allocation, it is essential to pay due consideration to maintaining the systematization of academic disciplines and specialty areas that form the core of the curriculum in each academic course, while simultaneously securing opportunities for voluntary learning*[1] by students.

To enhance students' willingness to study and accept responsibility for accreditation of their study results, it is necessary for universities to pay due consideration to the original intent of the credit earning system. The characteristics, content and forms of learning of each subject as well as workload required to earn the credit concerned should also be taken into account when setting the number of units of each credit.

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[1] In these Standards, "learning" or "study" refers to learning activities directly related to credit acquisition or credit accreditation, different from learning with a broader definition.
In doing so, it is desirable to provide diverse educational opportunities and to enhance tie-ups and exchanges with other universities at home and abroad. In doing so, universities must take into account the comparative relevancy of educational objectives between the academic courses or institutions concerned, as well as the content and level of subjects concerned, while paying due educational consideration. In addition, the policy, requirements and procedures for the credit accreditation must be defined in writing.

(iii) Credit Accreditation and Transfer

When evaluating the performance of students in each academic year, universities must test those eligible students who satisfied the conditions set by each subject and accredit the credit of successful students.

To better fulfill the educational objectives of Undergraduate and Master's/Doctoral Courses and requirements of each academic discipline as well as to facilitate diversification and revitalization of education and research, universities may take flexible measures to recognize and accredit credits obtained from the on-campus courses of the same university and other universities or various external educational organizations as credits of distance learning courses.

(iv) Preparatory Education

With the diversification of students enrolling, it has become increasingly difficult to expect a uniform level of academic achievement among them. In response to such diversification, it is important for universities to implement preparatory education to facilitate their smooth transition to Undergraduate and Master's/Doctoral Courses, by taking into account the unique features of distance learning courses.

Particularly, it is crucial for universities to provide preparatory education regarding the utilization of information technology, which is indispensable for students on distance learning courses, as well as writing skills and foreign language fluency which may vary considerably among students.

(2) Education Method

(i) Teaching Method

Universities must provide flexible delivery of teaching in distance learning courses by utilizing correspondence texts, broadcast teaching, face-to-face teaching and teaching via multimedia in combination or alone. They must also make various efforts to enhance their educational results by providing opportunities for students to meet teachers so that they can receive various counseling and guidance directly from teachers.

Prior to providing the education of distance learning courses, universities must provide students with course texts and materials. Upon confirming the level of

understanding of students by reporting and testing, it is important to give guidance by actively utilizing various information technologies.

(ii) Counseling, Guidance and Support for Study

To achieve satisfactory educational results, universities providing education through distance learning courses must offer proper counseling and guidance for students in order to stimulate their enthusiasm to study. It is therefore necessary to explain clearly the sequence of credit-earning and to present model courses to earn credits during the orientation program prior to enrollment, and via official publications and electronic media, so that students can properly understand the significance and contents of subjects taught at school. It is also necessary to explain in advance the requirements and criteria for awarding degrees to students.

Upon providing distance learning course education where students learn mainly by home schooling, it is necessary to respond quickly to questions posed by students during their learning period to improve their educational results. Accordingly, it is particularly essential for universities to pay consideration to maintaining the enthusiasm of students to study by establishing various systems to support their learning individually. To achieve "face-visible education*[1]," it is important to endeavor to enhance exchanges between students and teachers as well as among students using various information technologies.

To stimulate the enthusiasm of students to study, it is necessary to distribute an appropriate syllabus for each subject that includes study objectives, teaching method and class schedule, as well as to provide instruction and guidance on how to prepare for each class and standards for performance evaluation. Each subject must be taught in accordance with this syllabus.

(iii) Maximum Limit on Subject Registration and Performance Evaluation

To promote voluntary learning of students and fulfill the original intention of the credit earning system, it is important for academic faculties of distance learning

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[1] "face-visible" here is not used in a limited sense to refer to the use of information technology that enables the other party's face to be seen in real-time during communication. The expression "face-visible education" is used metaphorically to describe education based on close exchanges between teachers and students.

Furthermore, teachers must carry out strict performance evaluations to accomplish the educational objectives of each academic course. For this, universities must establish their pertinent performance evaluation system in accordance with the circumstances of each university.

courses to set a maximum limit on the number of subjects that a student can register for during each academic year. In this regard, universities must decide their policies independently, based on their own educational objectives.

(iv) Method of Teaching and Giving Guidance

Universities must focus on providing students with a broad and deep knowledge and expertise. In addition, Undergraduate Courses must endeavor to cultivate human resources who can think independently, comprehensively and critically based on their proper decision-making skills and judgment. Master's/Doctoral Courses are required to develop human resources who can think and conduct research activities independently in each academic discipline or work in a highly specialized area. It is also very important to establish an appropriate environment to obtain satisfactory results in education and research. It is therefore essential to pay careful consideration when correcting reports submitted by students and giving guidance for preparation on writing a dissertation. It is particularly necessary to provide individual counseling and guidance for research activities in preparation for writing a dissertation and training of practical skills. It may be effective to provide the guidance by multiple teachers in order to develop the different potentials of students, broaden their perspectives and facilitate their deep learning. In such a case, due consideration must be paid to clarifying the responsibilities of each teacher in giving guidance and to maintaining the consistency of guidance.

Furthermore, it is beneficial for students to receive a variety of education and guidance at different graduate courses of the same institution, depending on the content of education and research to be offered. For this, it is important to examine and judge precisely whether such measures fulfill the missions and objectives of the graduate course concerned, and whether the education and research are appropriate for the level of the graduate course concerned.

(v) Organizational Improvement in Education Programs and Methods

Upon providing distance learning course education, to further improve their educational objectives, it is critical for universities to consistently make organizational efforts to develop the teaching skills and methods of their teachers in both education and research activities. In doing so, it is also important to endeavor to develop and improve printed materials for study which play an important role in the education of distance learning courses, as well as to pay

special attention to ensuring the quality of correction instructors. For example, it is necessary to promote organizational efforts to introduce various FD-related programs such as teacher evaluation by students and utilization of the evaluation results, opportunities for training and so on toward attaining further development and improvement of teaching skills and methods. It is also important for universities to take proper measures to improve the "information literacy" of their teachers.

(vi) Measurement of Educational Results

Upon conducting educational activities to accomplish their own educational objectives, it is essential for universities with distance learning courses to review and assess consistently what educational results have been accomplished by their activities. They must therefore develop and utilize diverse and effective methods to measure such educational results.

It is also crucial for universities to survey and analyze a variety of student data as indications of their educational results such as the credit acquisition ratio, status of degree awarding and graduation ratio within the maximum years of the term of study, and to utilize such data to improve their education.

(3) Degree Awarding and Accreditation for Completion of Course Study

Degree awarding and accreditation for the completion of course study is one of the most important responsibilities for universities. Accordingly, it is important to pay special consideration to the educational objectives of each academic course, establish a flexible and diverse system for awarding degrees or completion of course study, and to operate the system appropriately according to the original intention of the university education system. For this purpose, they must stipulate in writing the standards and accreditation procedures to evaluate the qualifications based on which to award degrees, and periodically review and assess the appropriateness of such standards and procedures. It is also necessary to specify the proper name of each academic discipline under the degree-awarding rules and regulations.

In case of approving the completion of course study earlier than or beyond the standard number of years of study, universities must take special care to employ such measures properly.

4. Student Admissions

(1) Method of Admitting Students

Taking into account the educational objectives of each academic course, universities must define their admission policies, establish a proper admission system based on such policies and admit students according to proper and fair procedures.

Upon admitting students, universities must properly evaluate whether the applicants have acquired the basic educational foundation required to study on Undergraduate, Master's and Doctoral Courses. In doing so, it is also important for universities to evaluate applicants from many viewpoints, including their enthusiasm and suitability for the course, particularly taking into account the unique features of distance learning courses.

Universities must establish a system to review and assess constantly and systematically their method of admitting students. It is also necessary to ensure accountability with regard to fairness in admission practices by disclosing the acceptance criteria and reasons for decisions of pass or fail. Furthermore, prior to admitting students, it is important for universities to clearly inform them of the unique features of distance learning courses where home-schooling is the major learning method.

(2) Admission Period

Universities must define the admission period properly in accordance with their educational objectives. To meet the needs of students who wish to continue to study between higher educational institutions both at home and abroad, it is important for universities to pay due consideration so that such students can transfer smoothly between higher educational institutions of similar educational level at home and abroad.

(3) Optimization of Admission Capacity and Number of Enrollments

Universities must define the proper admission capacity and admit the optimal number of students according to various conditions such as the characteristics of each academic discipline, faculty and their facilities and equipment in order to conduct proper education and research activities based on their own educational objectives and attain satisfactory education and research results.

It is desirable for universities that constantly face significant shortages or excessive enrollments to grasp the reason and take necessary measures to achieve optimization.

5. Student Services

To attain the educational objectives of each academic course, universities must pay special attention to providing proper student services. Particularly, universities must pay due consideration to protecting the personal information of students.

(1) Support during Home Schooling Period and Protection of Human Rights

Universities must make efforts so that students can receive proper education and conduct research activities by the method of home schooling using various information technologies. Toward this end, universities are required to provide various student services to support their daily learning, such as by establishing a section to liaise between students and the university to respond properly and quickly to questions from them and give counseling and guidance. It is also necessary to establish a student support system by district to ensure mutual communications and promote exchanges among students.

Upon promoting mutual exchanges among students using information technologies, it is critical to pay due consideration to protecting the human rights of students by taking appropriate measures to prevent personal attacks via the Internet and leaks of personal information.

To provide financial assistance for students in need as well as a means to support students to purchase publications or materials required for their home schooling, it is important to set up and operate an independent scholarship system (benefits and loans) exclusive for students of distance learning courses, provide services to introduce various external scholarships and handle necessary application formalities.

(2) Support during Schooling Period and Protection of Human Rights

Universities must set up the guidance and counseling system to assist students properly by providing advice for learning as well as mental and physical health care during the schooling period. Universities must also pay due consideration to securing

the human rights of students and preventing the occurrence of any kind of harassment during the schooling period.

Furthermore, universities must pay attention so that the participation in schooling will not impose excessive burdens on students. In addition, it is essential to provide proper support and guidance for the extra-curricular activities of students as precious opportunities to develop their personality and capability through group activities. To provide such support services, it is desirable to establish an appropriate welfare system for students by furnishing facilities for exercise and training.

6. Education and Research Conditions

Universities must establish a proper environment for teachers in terms of personnel, physical and time conditions, so that they can pursue high-quality educational and research activities.

It is also necessary to allocate sufficient budget for individual research activities and traveling for research purposes, provide proper facilities and equipment for research including laboratories, and furnish a sufficient number of teaching and research assistants to help assist the educational and research activities of teachers. When employing students of Master's/Doctoral Courses as teaching assistant or research assistant, it is critical to define in writing the employment standards, job content and remuneration, and to pay due consideration so that performing such assistant jobs will not place excessive burdens on students.

It is also significant to promote necessary measures to obtain funded researches entrusted by outside organizations, thus contributing to the revitalization of their research activities. In addition, universities must pay special consideration to alleviating the burden of class management and faculty administration on teachers and to providing necessary training opportunities and budgets to ensure that they can pursue their research activities effectively.

Universities that provide both on-campus and distance leaning courses must particularly pay due consideration to ensure that excessive burden will not be placed on teachers who hold dual posts in the on-campus and distance-learning courses.

7. Social Contributions

Universities are expected to make active contributions to society using their intellectual resources. They therefore need to make efforts to construct a system to facilitate exchanges with society in various forms such as extension courses, and to promote tie-ups and exchanges with outside education and research institutions, enterprises and organizations and local communities to conduct their educational and research activities effectively. In addition, it is important to release useful information and actively return the results obtained from education and research activities to society. Furthermore, universities are expected to build a technology transfer system to share the knowledge and technologies produced by higher education institutions effectively with society. As a further contribution to global society, it is desirable to rapidly disclose their research findings to international academic journals and magazines, and to exchange information and friendships with outside researchers, as well as to provide knowledge and technologies to overseas countries.

8. Faculty

(1) Faculty

To attain their own educational objectives, universities must establish an appropriate quality and size of faculty organization required to provide pertinent education and conduct researches in proportion to the type and size of their curriculums, and assign qualified teachers appropriately. Particularly, it is essential to assign the necessary number of full-time teachers in charge of core subjects to fulfill the purpose of each academic faculty's curriculum. It is also desirable to allocate part-time teachers as necessary to supplement full-time teachers.

On graduate courses, it is essential to assign the necessary number of full-time teachers exclusively in charge of graduate courses as well as teachers in charge of both undergraduate and graduate courses. It is also critical to allocate part-time teachers as necessary to supplement full-time teachers.

Optimization of the balance among age brackets of teachers is also significant in order to maintain the proper quality of their education and research systems and facilitate further development of these systems.

Upon organizing curriculums and fulfilling the purpose of curriculums, universities

must take necessary measures in advance to establish a network of close communication among teachers in charge of each subject to provide organic and systematic education for students.

To enhance the effectiveness of education, required experiments and practical training, foreign language learning and information processing education, universities must establish a proper system to help students pursue their studies and assist teachers by allocating necessary human resources who can provide such education.

Universities with both on-campus and distance learning courses must establish the faculty organization properly to conduct both educational activities without problem.

(2) Qualifications and Responsibilities of Teachers

Teachers at universities, as central institutions for higher education and academic research, are responsible for performing their dual duties as teacher and researcher. Teachers must take the initiative in sharing administrative responsibilities related to education and research, in addition to making efforts toward achieving the objectives of their faculty and graduate courses with full understanding of such objectives.

In addition, teachers of academic faculties must help guide students in accomplishing satisfactory study results, while promoting the development and individualization of education. Teachers at graduate courses must consistently strive to improve their personal skills as a teacher and researcher in order to help raise the overall quality of the university's education and research, in addition to conducting in-depth educational and research activities in their own academic discipline. They are also required to have good leadership skills as a teacher and researcher and outstanding research achievements to satisfy the peculiarities of education and research of each academic course. Depending on the field, highly-advanced skills and excellent practical proficiency may be necessary.

Upon evaluating the qualifications of teachers, therefore, due consideration must be given to factors such as personality, achievements in education and research both at home and abroad, and business experiences and accomplishments in each academic discipline.

(3) Appointment/Discharge, Promotion and Guarantee of Job Status

Universities must appoint, discharge and promote their teachers fairly and properly in accordance with written criteria and procedures, based on their evaluated personal skills as a teacher and researcher.

Teachers must be guaranteed the proper position, status and treatment commensurate with their responsibilities so that they can pursue their education and research activities effectively. This principle must also be applied in adopting the tenure system.

(4) Evaluation of Education and Research Activities by Teachers

Universities must assign teachers who are capable of conducting adequate education and research activities suited to the type and content of curriculums concerned. Furthermore, to improve such abilities, universities must develop and utilize their own evaluation methods, and disclose the evaluation results. Upon conducting evaluations, a number of factors must taken into account such as achievement in education and research, disclosure of research results, activities in each academic society, participation in joint research and international research projects both at home and abroad, winning of academic awards, and off-campus social activities.

9. Administrative Staff

To carry out their educational and research activities smoothly and effectively, universities must clearly define the role of the administrative staff in charge of distance learning courses within the whole structure of the university organization, and allocate the appropriate administrative staff, while taking into account the unique features of distance learning courses with restrictions in time and place.

The administrative staff must accommodate staff members with a deep understanding of the purpose and objectives of education and research activities at undergraduate and graduate courses. It is necessary to define the position of the administrative staff clearly in the entire decision-making and communication system of the university, and establish an environment to conduct the school management comprehensively, while maintaining cooperative relationships with education and research organizations on campus.

Upon conducting administrative works, it is desirable establish an appropriate environment for the administrative staff such as by providing training opportunities for them, while taking into account the unique features of distance learning courses, including outside-campus examinations, schooling and necessity of dealing with students of diverse background. For the convenience of students, it is also necessary to set up a section to exclusively handle student services for the entire period from entrance to graduation, including entrance examinations and job placement, within the entire structure of the administrative staff.

10. Facilities and Equipment

To conduct educational and research activities in line with their own missions and objectives, universities must allocate a sufficient area of grounds and buildings in proportion to the size of their organization including the type and content of curriculums, number of students and teachers, while considering the unique features of distance learning courses. They also must furnish the appropriate number and area of lecture and seminar rooms, laboratories and training rooms to enable satisfactory educational results to educate students and fulfill the purpose of curriculums effectively.

Universities must also provide proper facilities and equipment, machines and their supplies including computers and other IT tools available for students to achieve satisfactory educational results in each academic course, and must utilize such facilities and equipment effectively, while constantly taking necessary measures to renew and upgrade them appropriately, in response to changing social conditions and requirements. Thus, in addition to providing machines and equipment, it is also necessary to establish a proper support system by allocating necessary human resources and to employ necessary measures to facilitate the effective use of such equipment for students and teachers. Furthermore, it is necessary to establish a proper maintenance and operation system for facilities, equipment, machines and their supplies, and a system to ensure the health and safety of users.

Among the graduate courses of distance learning courses established on the basis of the undergraduate faculties in the same academic discipline, those without a considerable number of students may share facilities and equipment owned by the related faculties and research centers of the same university. Even in such a case, it is expected to pay due consideration to achieving the education and research objectives of each graduate course. In particular, due consideration must be paid to securing an environment and

opportunities to conduct higher and independent education and research activities for Master's/Doctoral Course students, compared with Undergraduate Course students.

In response to the recent diverse expectations from society, universities offer a variety of educational opportunities such as a satellite campus and night courses. In doing so, universities must also pay special attention to providing the necessary facilities and equipment available for students using such opportunities so that they can pursue their education and research activities satisfactorily.

11. Library and Other Materials

Based on their educational objectives, universities must systematically furnish a sufficient volume of academic information and materials such as publications and electronic media according to a well-designed plan. Where necessary, it is desirable to establish their own facilities to store them and utilize them effectively.

To promote voluntary learning by students, universities must provide a sufficient number of seats in study rooms available for students in proportion to the actual number of students, and must systematically furnish a sufficient volume of academic information such as publications and other materials. It is also necessary to pay due consideration to the convenience of library users by providing guidance concerning the effective use of libraries and handling procedures for referring to and borrowing materials from libraries. In addition, an annual library operating schedule and daily opening hours must be decided with proper consideration for the ending hours of classes during the schooling period.

It is also desirable to make a variety of databases and a digital library available for students, in response to the advancement, globalization and diversification of academic research.

12. Administration

Universities must define in writing the rules and regulations regarding their administration and operation to realize their own missions and objectives. Upon implementing the administrative regulations and rules, universities must pay due consideration to applying the principle of democratic and effective decision-making, giving full respect to academic freedom.

Universities must establish a decision-making body regarding distance learning courses and define its position within the entire university organizational structure. This decision-making body is required to cooperate with other faculty meetings, graduate course committees and campus-wide advisory bodies, if any.

The head of such decision-making body must be appointed or discharged through fair and reasonable procedures, in accordance with the regulations, while considering the missions and objectives of each university.

13. Financial Affairs

To carry out their education and research activities appropriately, universities must secure solid financial resources to compensate necessary expenses, and must allocate and manage these resources correctly and effectively according to a well-designed long-term financial plan. They are also required to build up the "infrastructure" to maintain a high level of education and research to play a leading role in the development of human resources; to contribute to the advancement of academic research on a global scale; to cultivate capable human resources; and to contribute to the advancement of academic research in Japan. Universities must therefore pay special consideration to securing a stable financial basis.

It is particularly important for universities to establish a system and structure to obtain funds from outside the campus and make active efforts to gather such funds in the form of accepting subsidies for science research and donation and returning the knowledge and technology produced by them to society.

14. Self-study

(1) Self-study

Universities must consistently review and assess their educational and research activities not only to maintain a proper qualitative level, but also to attain further development and improvement toward achieving their own educational objectives, and promote the diversification and individualization of education and research activities.

Prior to conducting self-study, universities must establish a proper system, procedures, and methods for self-study and define proper evaluation items, in accordance with the characteristics, organization and size of each academic faculty. Furthermore, to make good use of self-study results, universities must establish and operate an effective system to realize further development and improvement based on the results.

Additionally, universities are required to disclose such self-study results to the general public.

(2) Evaluation by Third Parties

Universities must undergo periodic third-party evaluations by an external organization with regard to such self-study results in order to obtain more effective feedback on their efforts. They must also establish an effective system to attain further development and improvement based on the third-party evaluation results.

15. Accountability

Universities must comply with related laws and regulations and be accountable to fulfill their responsibilities to society by actively disclosing the status of their organization, management and various activities. It is desirable to establish proper regulations and systems to disclose such information upon request.

It is particularly necessary to pay due consideration to conducting transparent management of university and disclosing information regarding distance learning courses appropriately, so that the general public can accurately understand the status of universities.

Evaluation Items for Self-study

1. Missions and Objectives

1) Missions and objectives as well as educational objectives are clearly defined.

2) Missions and objectives as well as educational objectives are disseminated within the campus including their faculty, administrative staff and students.

3) Due consideration is paid to maintaining the qualitative level of the university to attain the educational objectives of the Undergraduate and Master's/Doctoral Courses.

4) Missions and objectives as well as educational objectives are disclosed widely to society through publications such as the school guidebook and website.

2. Educational and Research Structure

1) The educational and research structure is appropriately organized to attain the educational objectives.

2) A proper system is established to examine and assess the appropriateness of the educational and research structure.

3. Educational Program and Instruction

(1) Curriculum

(i) Organization of Curriculum

1) Proper subjects are systematically allocated to attain the educational objectives.

(ii) Subjects and Credits

1) Proper subjects are adopted by taking into account the systematization among academic disciplines and specialty areas.

2) Proper subjects are adopted while securing opportunities for voluntary learning by students.

3) The proper credit is allocated to each subject.

4) Upon setting the number of units of each credit, the characteristics, content and forms of learning as well as workload to earn the credit concerned are taken into account.

(iii) Credit Accreditation and Transfer

1) The procedure of credit accreditation for each subject is properly established.

2) Upon evaluating the qualification of students to take a test of each subject for earning credits, appropriate and flexible measures are taken by admitting students who submitted a certain volume of study reports per one credit or by confirming the level of understanding of students using various information technologies.

3) Various opportunities to learn are provided for students at the on-campus courses of the same university, other universities and external educational institutions.

4) In accrediting the credits obtained from other educational institutions such as on-campus courses of the same university, other universities and external educational institutions, or accepting credit transfers between such educational institutions, the policy, requirements and procedures for the credit accreditation and transfer are defined in writing.

(iv) Preparatory Education

1) Appropriate preparatory education is provided in response to the diversification of students in enrollment, while considering the unique features of distance learning courses which focus on home schooling.

2) Preparatory education to teach how to use information technologies is provided.

3) Preparatory education to teach writing skills is provided.

(2) Education Instruction

(i) Teaching Method

1) A flexible mode of learning is provided in each subject in accordance with educational objectives, while considering the convenience of students.

2) An appropriate guidance for learning is provided so that students can voluntarily study by using printed texts.

3) Appropriate printed texts for distance learning are distributed to students at an appropriate time.

4) Upon adopting commercially-available printed texts, a guide or aids for learning to supplement the texts are prepared. Efforts are made to computerize such a guide or aids for learning.

5) Upon implementing distance learning by using printed texts, the deadline for returning the corrected reports to students is properly set in advance, so that students can receive them within the defined timetable.

6) Due consideration is paid when correcting reports by setting the least volume (characters) of comments and providing proper comments to enhance their enthusiasm to study.

7) A flexible report-correction system is employed in response to the diversification of students.

8) Upon providing lessons face-to-face or via multi-media, students are given opportunities to exchange opinions during each lesson. In addition, such lessons are properly taught by placing questions to students and answering them or providing a proper Q&A session.

9) Upon providing lessons via multi-media, the method of confirming the level of understanding of students is properly established.

(ii) Counseling, Guidance and Support for Study

1) The proper counseling and guidance for students are provided to achieve satisfactory educational results.

2) The proper system to quickly respond to questions placed by students is established, such as a system using questionnaire cards.

3) The personal support system to learn how to use computers is provided for students and various support systems are established as a "help desk."

4) Proper measures are taken to prevent students from dropping out because of decreased motivation for learning.

5) Various efforts are made to enhance exchanges between students and teachers as well as among students on the same distance learning course, such as organizing study meetings in each district and encouraging teachers in charge of subjects taught at distance learning courses to set up their own websites.

6) Information technologies are utilized in teaching and enhancing exchanges among students.

7) An appropriate syllabus for each subject is produced and used effectively in providing counseling, guidance and support for study.

(iii) Maximum Limit on Subject Registration and Performance Evaluation

1) The maximum limit on the number of subjects that a student can register during each academic year is clearly established by taking

into account educational objectives.

2) The procedures and criteria for performance evaluation are clearly defined.

3) A proper system is introduced so that students can inquire about the evaluation of their performance.

(iv) Environment for Educational and Research Activities

1) An appropriate environment is established to obtain satisfactory results in education and research in graduate courses.

2) The personal support system to encourage students to learn voluntarily is established.

(v) Organizational Improvement in Education Programs and Methods

1) Organizational efforts are made to introduce and implement various FD (Faculty Development) programs to constantly develop and improve the teaching skills and methods of teachers in both education and research activities.

2) Efforts are made to develop and improve teaching materials.

3) Proper measures are taken to ensure the quality of correction instructors and increase their incentives.

4) Proper measures are taken to improve the "information literacy" of teachers.

(vi) Measurement of Educational Results

1) Educational results are examined and assessed regularly.

2) Indications and methods to measure educational results are established.

(3) Degree Awarding and Accreditation for Completion of Course Study

1) The system for awarding degrees and accreditation for the completion of course study is established and operated appropriately.

2) The criteria and evaluation procedures for awarding degrees and accreditation for the completion of course study are defined in writing.

3) The appropriateness of the criteria and evaluation procedures for awarding degrees and accreditation for the completion of course study is periodically reviewed and assessed.

4. Student Admissions

(1) Method of Admitting Students

1) The admission policy is properly established based on educational objectives.

2) The proper admission system is established according to the admission policy.

3) The proper method of admitting students is adopted according to the admission policy.

4) The system to examine and assess the student admissions regularly and systematically is established.

5) The university's accountability with regard to fairness in admission practices is ensured.

(2) Admission Period

1) The admission period is properly defined in accordance with educational objectives.

2) The admission period is properly defined so that students can continue their study without hindrance.

(3) Optimization of Admission Capacity and Number of Enrollments

1) The proper admission capacity is defined according to various conditions such as the characteristics of each academic discipline, faculty, and faculties and equipment.

2) The optimal number of students is admitted according to the defined admission capacity.

5 Student Services

(1) Support for Home Schooling and Protection of Human Rights

1) The proper guidance and counseling system is established to assist students in their daily learning and life during their home schooling period.

2) Efforts are made to provide student support services by each district.

3) Due consideration is paid to protecting the human rights of students, upon using information networks.

4) Due consideration is paid to protecting the personal information of students.

5) The independent scholarship system as well as services to introduce various external scholarships and handle necessary application

formalities is established.

(2) Support during Schooling Period and Protection of Human Rights

1) The proper guidance and counseling system is established to assist students during their schooling period.

2) Due consideration is paid to protecting the human rights of students during their schooling period.

3) Due consideration is paid to protecting the personal information of students during their schooling period.

4) Efforts are made to alleviate the financial burden on students to participate in schooling.

5) Efforts are made to establish and improve the proper system to provide support and guidance for the extra-curricular activities of students and appropriate welfare system for students by furnishing facilities for exercise and training.

6. Education and Research Conditions

1) Sufficient budget is allocated so that teachers can pursue high-quality educational and research activities effectively.

2) The proper facilities and equipment for research are provided so that teachers can actively pursue high-quality educational and research activities effectively.

3) A sufficient number of teaching and research assistants is furnished.

4) Proper measures are taken to obtain and increase funded researches entrusted by outside organizations.

5) The necessary opportunities and budgets for various trainings are ensured to enhance educational and research activities of teachers.

6) Due consideration is paid so that excessive burden will not be placed on teachers in charge of distance learning courses in education and administration. In particular, due consideration is paid so as not to place excessive burden on teachers who hold dual posts in on-campus and distance learning courses.

7. Social Contributions

1) Various efforts are made to make contributions actively to society by sharing educational and research results with society.

2) The technology transfer system is properly constructed to share knowledge and technologies produced by the university with society.

3) Various efforts are made to contribute to the global society.

8. Faculty

(1) Faculty

1) The appropriate quality and size of faculty organization required to attain the educational objectives is established.

2) The number of full-time teachers exclusively in charge of each academic course meets the criteria to set up the university, distance learning course and graduate course.

3) The full-time teachers are properly allocated to the core subjects to organize the curriculum in each academic course properly.

4) The age brackets of full-time teachers are well balanced.

5) Upon providing the on-campus and distance-learning courses simultaneously, the appropriate faculty organization is established to conduct both educational activities without hindrance.

(2) Qualifications and Responsibilities of Teachers

1) Due consideration is paid so that teachers can fully understand the educational objectives to set up their own academic faculty and graduate course.

2) Administrative responsibilities related to education and research are appropriately shared among teachers.

3) The appropriate system is established to support the improvement of personal skills of teachers to conduct educational and research activities.

4) Evaluation of the qualifications of teachers is properly conducted.

(3) Appointment/Discharge, Promotion and Guarantee of Job Status

1) The appointment, discharge and promotion of teachers are conducted fairly and properly in accordance with the written criteria and procedures.

2) The proper position, status and treatment suitable for responsibilities of teachers are guaranteed.

(4) Evaluation of Education and Research Activities by Teachers

1) Evaluation of teachers is conducted by taking into account various factors such as achievement in educational and research activities and social contribution.

9. Administrative Staff

1) The role of the administrative staff in charge of the distance learning course is clearly defined within the entire structure of the university organization.

2) The administrative staff are properly organized by taking into account the unique features of the distance learning course.

3) Cooperative relationships between the administrative staff and educational and research organizations are properly maintained.

4) Training opportunities are properly provided for the administrative staff to deal with the unique features of the distance learning course.

5) The administrative staff are organized by taking into account the convenience of students.

10. Facilities and Equipment

1) Sufficient facilities and equipment are furnished to conduct educational and research activities in accordance with the missions and objectives of the university.

2) Efforts are made to provide various facilities, equipment, machines and their supplies to attain satisfactory educational results, while taking necessary measures to renew and improve them appropriately.

3) The necessary human resources are allocated to facilitate the effective use of the allocated equipment of students, teachers and administrative staff.

4) The proper support system is established to take charge of the maintenance and operation of facilities, equipment, machines and their supplies.

5) The proper system is established to ensure the health and safety of users of facilities and equipment.

11. Library and Other Materials

1) A sufficient volume of academic information and materials such as publications and electronic media are furnished systematically according to a well-designed plan, based on the educational objectives of the university.

2) Proper measures are taken so that students can use the library effectively.

3) The library's daily opening hours are decided with proper consideration for the ending hours of classes during the schooling

period.

12. Administration

1) The decision-making body regarding distance learning courses is clearly defined within the entire organizational structure of the university.

2) The decision-making body regarding distance learning courses fulfills its function in accordance with the written rules and regulations by applying the principle of democratic and effective decision-making.

3) The decision-making body regarding distance learning courses cooperates properly with other faculty meetings, graduate course committees and campus-wide advisory bodies.

4) The head of the decision-making body regarding distance learning courses is appointed or discharged through fair and reasonable procedures, in accordance with the regulations.

13. Financial Affairs

1) Solid financial resources are secured to carry out educational and research activities appropriately according to a well-designed long-term financial plan.

2) The system and structure to obtain funds from outside the campus are established.

3) Active efforts are made to gather funds from outside the campus.

14. Self-study

(1) Self-study

1) Self-study by the university is periodically conducted.

2) The system, procedures and methods for self-study are properly established.

3) The system to make effective use of the self-study results to realize further development and improvement of the university is properly established.

4) The self-study results are disclosed to society.

(2) Evaluation by Third Parties

1) The periodic third-party evaluation by an external organization with regard to the self-study results is conducted.

2) The system to attain further development and improvement of the

university based on the third-party evaluation results is established.

15. Accountability

1) The proper regulations and system to disclose the status of the organization, management and various activities of the university to society are established.

2) Due consideration is paid to disclose accurate information by a proper method so that the general public can accurately understand the status of the university.

(Revised February 22, 2006)

Appendix II

Japanese regulations concerning distance education and e-Learning in higher education

Takahiro Saito

In Japan the educational delivery methods and number of credits required for university graduation are legally regulated by both the University Establishment Standards and the University Correspondence Education Establishment Standards, shown in Table 1. Correspondence courses are only permitted for specialty areas in which the provision of adequate classes on a correspondence bases is deemed feasible.

Table 1. Treatment of educational methods and number of credits required for graduation (bachelor)

	Attended in person (University Establishment Standards)	Correspondence (University Correspondence Education Establishment Standards)
Face-to-face classes Lectures/exercises/experiments/tests, or a combination of these	(Regular style)	Of the 124 credits required for graduation, at least 30 must acquired through face-to-face or media classes
Media classes Coursework using advanced media taken outside of classroom	Credits earned through media classes may not amount to more than 60 of the required total of 124	Of the 124 credits required for graduation, at least 30 must acquired through face-to-face or media classes
Broadcast classes Learning using broadcasts (*)	Not approved	Of the 30 credits above, up to 10 can be obtained through broadcast classes
Print classes Learning using posted printed material(*)	Not approved	(Regular style)

(*) combined with personal instruction giving correction, comment, advice, etc.

The University Establishment Standards were revised in 1998, and it became possible for those attending traditional university in person to obtain 30 of the requisite 124 credits through distance learning. However, only the distance learning communicating

through a video conference was envisaged at that time; synchronism and interactiveness were required, as was a room that could take the place of lecture theatres. The ceiling for credits was raised to 60 in 1999. In 2001, the classes, which are deemed as having the same educational effect as face-to-face classes, gained media classe status regardless of whether or not the media were synchronous and interactive.

In 2001, students at universities with correspondence courses, who had previously been required to obtain 30 or more credits from face-to-face classes, became able to obtain 30 or more of the required credits from either face-to-face classes or media classes. Media-based learning had now become an educational method thought to posses more or less the same effectiveness as face-to-face classes, as far as they are satisfied with the standards for media classes. Eventually, it became possible for all the credits required for gradation to be obtained through media-based learning. A correspondence course university where graduation can be completed entirely through e-Learning has actually been established.

The standards imposed on media classes are as follows:

- Matters concerning the classes that Universities can provide pursuant to the stipulations of Article 25 Section 2 of the University Establishment Standards

Education employing the advanced use of a variety of media using communications satellites, optical fibers etc., and integrated use of a variety of information such as written word, sound, still and moving pictures, which meet the following requirements and which have been <u>recognized as having an education effect equivalent to that of face-to-face education</u>.

(i) The classes are conducted with simultaneousness and interactiveness, and is conducted in a classroom, research room or place conforming with these in which the lecturer is not present in person (including the conference rooms of corporations or places near the workplace or home of students when they are being given credits)

(ii) The classes combine, in each instructional session, prepared responses, annotated instruction, questions and answers, and opportunities are provided for the students to exchange opinions about the classes in question.

The former are the requisites for classes involving video conferences and other simultaneous and interactive media; the latter are the requisites for classes involving

non-simultaneous media such as web-based instructions. The specifications about "each instructional session" and the provision of "opportunities provided for the students to exchange opinions" have been made to compensate for the fact that the lack of simultaneousness leads in turn to a lack of interactiveness. The most crucial requisite in the above is the specification that the classes have "an education effect equivalent to that of face-to-face education." Study hours are separately specified for broadcast and print classes, but media classes are treated almost exactly like face-to-face classes are. That's why equivalence of education effects is so important. Whatever other external requisites are fulfilled, classes cannot be recognized as media classes unless they possess the equivalent educational effects as face-to-face classes.

Appendix III

THAILAND: The Establishment of Degree Level Courses of Study in the Distance Education System and its Implementation *1

Decree of Ministry of Education
Provisions concerning the Application for the Establishment of Degree Level Courses of Study in the Distance Education System and its Implementation.

In order to encourage the lifelong education of people and the autonomous learning by learners, and to maintain the quality of standards for the establishment of the higher education program, it is appropriate to stipulate "the Provisions concerning the Application for the Establishment of Degree Level Courses of Study in the Distance Education System and its Implementation, B.E. 2548 (2005) (January 15)." Therefore pursuant to Articles 8 and 16 of the Enforcement of Public Duties of Ministry of Education Law, under the advice of the Committee for Higher Education, the Minister of Education decrees as follows:

Section 1

This decree shall be called as "Decree of the Ministry of Education, Provisions concerning the Application for the Establishment of Degree Level Courses of Study in the Distance Education System and its Implementation, B.E. 2548 (January 15)."

Section 2

This decree shall become effective from the date of decree as stipulated in Official Gazette.

Section 3

Regarding existing provisions, whether consistent with or in contradiction with this decree, upon implementation of this decree, such pre-existing provisions shall be superseded by this decree.

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1 This document is non-official translation prepared by the project group.

Section 4

A higher educational institution which shall apply for the establishment of degree level study courses in distance education and its implementation, shall be lawfully established and under the supervision of the Ministry of Education, and must have the necessary and sufficient premises, land, personnel and other resources for the provision of distance education.

Section 5

These provisions shall apply to each major and department for which the higher education institution desires to establish within the distance education system. Study courses to be established shall be at the same level as those of the education system of the school year system, and shall conform to the degree level curriculum criteria provided by the Ministry of Education.

Section 6

Principles and Objectives

6.1 Act of National Education of B.E.2542 (1999), in response to the demands of individuals and the society, for the improvement in the efficiency and quality of higher education, provides the establishment of various measures for life-long education for even people who have not attended the regular academic school system.

6.2 The establishment of distance education shall put emphasis on the provision and expansion of learning opportunities based on the interest and ability of each learner and knowledge seeker at the time and place of their convenience, in accordance with the progress of the communication technologies.

Section 7

Application for the establishment of degree level study courses in the distance education system and its implementation

7.1 Application for establishment
A higher education institution, which wishes to establish study courses in the distance education system, shall comply with relevant laws, regulations and requirements, whether such study course has already been established in the school year system or will be newly established thereafter.

7.2 Conditions for establishment

The higher education institutions, which will establish the distance education, shall have:

1) Teachers in charge of the curriculum, full time teachers, and specialized teachers in accordance with the standards for the curriculum at the degree level provided for by the Ministry of Education.
2) Sufficient premises, land, personnel, resources, and other materials.

7.3 Implementation of the curriculum,

The standard of quality shall be maintained, and inspection and evaluation of the condition of implementation shall be regularly carried out in the future.

Article 8

A higher education institution which establishes distance education shall consistently develop a system to improve distance education. In particular, such institution shall provide the technologies and media (principal media, supplemental media and complex media) so learners may enjoy high quality education services, and perform autonomous studies efficiently and effectively.

Article 9

A higher education institution which establishes distance education shall create effective measurement and evaluation systems for learning outputs, and shall maintain standards which are equivalent to those of the education level of the school year system and in accordance with the National Education Standards.

Article 10

A higher education institution which establishes distance education shall establish a control and monitoring system for the learning of the learners, examinations and written assignments as part of autonomous learning, and shall implement a plan for regular examinations and quizzes. The examinations shall be taken places in a location where examination supervisors can confirm the attendance of the learner to the examination.

Article 11

A higher education institution which establishes distance education shall develop a quality assurance system which is efficient and appropriate for the distance education. Such system shall be comprised of at least the following 4 elements:

11.1 Management and administration of curriculum

11.2 Resources for learning, teaching and analysis

11.3 Aid and support for learners

11.4 Labor market, social needs and/or degree of satisfaction of employers of graduates

In order to continuously improve each curriculum, each curriculum shall be revised in accordance to the times and evaluated at least every 5 years.

Section 12

The higher education institution which establishes distance education shall provide and establish an internal quality assurance of education which is efficient and adequate for the distance education, and obtain an external quality assurance.

Section 13

Implementation of the provisions pursuant to this decree shall be carried out in conjunction with the "Guidelines concerning the Application for the Establishment of Degree Level Study Courses in the Distance Education System and its Implementation."

Section 14

In order to efficiently and sufficiently carry out the establishment of the study courses in the distance education system in accordance with the guidelines and provisions provided in this decree, the Ministry of Education may perform monitoring, control, tracking and evaluation of the distance education through the Committee of Higher Education.

Section 15

In the event the above provisions are not implemented, or in the event it is necessary to implement items not considered in the provisions of this decree, the Committee of Higher Education shall discuss on such circumstances and shall make final decision.

October 4, B.E.2548 (2005)
Jeantrow Chaisen, Minister of Education

Higher Education Standards and
Related Provisions

Appendix IV

PEOPLE'S REPUBLIC OF CHINA:

"Principles and Views regarding the Establishment and Administration of Off-Campus Learning Centers (Bases) of the Modern Distance Education (provisional)" and "Provisional Administrative Regulation on Off-Campus Learning Centers (Bases) of Modern Distance Education" *1

Document of the Ministry of Education

Higher Education Agency [2002] No.1

Notice regarding the Printing and Distribution of the "Principles and Views regarding the Establishment and Administration of Off-Campus Learning Centers (Bases) of the Modern Distance Education" (provisional) by the Cabinet Secretariat of the Ministry of Education.

To: Education Agency (Board of Education) of each Province, Autonomous Region, and Directly Controlled City, the Board of Education of the Production and Construction Corps in Xinjiang, as well as each Model University for Modern Distance Education

This Ministry has established the "Principles and Views regarding the Establishment and Administration of Off-Campus Learning Centers (Bases) of the Modern Distance Education" (provisional) in order to appropriately carry out the establishment and administrative operations of off-campus learning centers (bases) for modern distance education, and to facilitate the sound development of model operations of the modern distance education. This document shall hereby be printed and distributed to each related organization, which shall thoroughly implement its contents and each organization shall promptly report the relevant conditions of such implementation to this Ministry.

Attachment:

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1 This document is non-official translation prepared by the project group.

Principles and Views regarding the Establishment and Administration of Off-Campus Learning Centers (Bases) of the Modern Distance Education (provisional)

In order to strengthen the administration of services regarding modern distance education models, to standardize the school administration, to ensure the quality of the education, and to explore and establish a life-long learning system, the principles and views on the establishment and administration of Off-Campus Learning Centers for Modern Distance Education (hereinafter referred to as the "Off-Campus Learning Centers"(Bases)) has been specifically provided as follows:

I. Role of Off-Campus Learning Centers (bases)

Off-Campus Learning Centers (Bases) are an essential part of the infrastructure for the realization of modern distance education. The centers are an important guarantee in the transmission of teaching contents and to achieve distance learning processes, so it is important to enhance the administrative efficiency of the Model University of Modern Distance Education (hereinafter the "Model University"), and to strengthen the support services for the students, including important methods to facilitate the human interaction among teachers and students, and among students themselves, and to establish an environment for learning and human development. Through the establishment of the "Off-Campus Learning Centers" (Bases), the reconstruction and structural optimization of educational resources can be facilitated, forming a learning center in each community step by step and offering services for adult education, life-long education and life-long learning, as the foundation to build our country's system of life-long education. Through the establishment of the "Off-Campus Learning Center" (Bases), facilitating the rebuilding and structural optimization of the educational resources, establishing the learning center for communities one by one, providing services for adult-educations, life-long education and life-long learning, the basis for the building of the life-long learning system in our country will be established.

II. Fundamental organization and conditions of establishment of Off-Campus Learning Center (Bases)

1. Fundamental organization of Off-Campus Learning Centers (Bases)

There are three types of Off-Campus Learning Centers (Bases): self-established and self-use type, jointly established and jointly enjoyed type, and social pubic service type. The State facilitates the development of the jointly established and jointly enjoyed type and the public service type. Related administrative provisions for the social and public services of modern distance education and its learning center shall be otherwise established. Off-Campus Learning Centers (Bases) are service entities of the modern distance education, and are not authorized to recruit new students, to teach, or to issue any certificates. Off-Campus Learning Centers (Bases) shall be equipped with a basic environment for distance education and for an administrative capacity. In general, Off-Campus Learning Centers (Bases) which provide service for higher education at a local full time 4 year system university, university for adult education, broadcast university via the television, or private university, must be established in compliance with the standards authorized by the State. Off-Campus Learning Centers (Bases) which provide services for education other than for academic background may be established with corporate status by enlisting the cooperation of business organizations or training institutions. When a university's distance education center, mid-range vocational school, or training institution, which provides education services other than for academic background and has already been reviewed and authorized, wishes to establish an Off-Campus Learning Center (Base) to provide services for higher degree education, shall be assessed by a group of expert organized by the education administration authority at provincial level.

2. Basic conditions to establish an Off-Campus Learning Center (Base)

(1) An entity which will be entrusted with the establishment of an Off-Campus Learning Center (Base) shall be required to be an independent legal entity.

(2) It shall own the land and be able to support the necessary facilities to provide support services of modern distance education, and shall have capacity to further expand them.

(3) It shall possess a hardware system environment necessary to support services of modern distance education, including facilities such as network access, a local area network, multimedia learning equipment, and administration of education resources, transmission and broadcasting ability and a backup system thereof.

(4) It shall possess an administrative and technical staff that is familiar with the support services of modern distance education, with a relative higher capacity and good experiences, and are well suited to the needs of modern distance

education.

(5) It shall be required to have experimental or practical facilities necessary to complete the education services, and the corresponding administrative and coaching staff.

III. Main tasks of the Model University and Off-Campus Learning Centers (Bases)

Model Universities shall reasonably plan the distribution of Off-Campus Learning Centers (Bases) according to the need for human resources in each industrial sector and region as well as the development program of distance education of the said university, and shall comply with applicable administrative provisions of the education administrative department of the provincial government where such Model University and Off-Campus Learning Centers (Bases) are located. Upon establishment of a Off-Campus Learning Center (Base), the Model University shall conclude an agreement with the organizations entrusted with the establishment of Off-Campus Learning Center (Base). The Off-Campus Learning Center (Base) shall administratively belong to the organization that has established it and shall be operationally subject to the guidance of the Model University with which it has concluded the agreement

1. Main tasks of the Model University

(1) Transmit state policies and measures regarding modern distance education to Off-Campus Learning Centers (Bases).

(2) Determine, monitor, and implement various education administration regulations and a system for modern distance education, and bear comprehensive responsibility for the quality of the modern distance education.

(3) Provide services to build a favorable attitude towards learning and taking examinations, establish, arrange, and implement a plan for education services for the ideology and political thoughts of the students.

(4) Implement a plan for new student recruitment, publish application guidelines for new students, and bear responsibility for activities to recruit new students.

(5) Establish standards for payment of tuition for modern distance education, and report and receive approval from the provincial government where such model

university is located.

(6) Establish the curriculum, prepare the construction of educational resources for modern distance education, and implement the education services of the modern distance education by organizing the teachers.

(7) Establish educational guidelines and the corresponding evaluation standards.

(8) Bear responsibility for the management of student enrollment, and issue the appropriate certificate to students whose academic achievement has met the corresponding standards.

(9) Instruct Off-Campus Learning Centers (Bases) on required administrative and educational steps that fall under the responsibility of the Off-Campus Learning Centers (Bases).

(10) Prepare the implementation of various training activities, as well as provision for specialized training of responsible officials of Off-Campus Learning Centers (Bases), the operations and administrative staff of the network education system, curriculum administrative staff, and the education staff of student ideology and political thoughts.

2. Main tasks of the Off-Campus Learning Center (Base)

(1) Thoroughly implement state and local policies and guidelines of modern distance education as well as the various regulatory regimes of the Model University in connection with modern distance education.

2) Upon demand and work assignment from the Model University, incorporate activities to promote the recruitment of new students and allocate resources for the recruitment of new students, and appropriately carry out enrollment procedures for new students. Off-Campus Learning Centers (Bases) may not carry out the activities to promote the recruitment of new students and the allocation such resources in 2 or more provinces.

(3) Appropriately carry out services related to the enrolment of students in collaboration with the Model University.

(4) Guarantee the normal function of the technical facilities for modern distance

education and the support services for learning by the students.

(5) Bear responsibility for the organization of administrative activities at the educational stages as instructed by the model university.

(6) Build a favorable attitude towards learning and taking examinations by students and implement the ideology and political education of the students, as well as bear responsibility for the guarantee of discipline during examinations.

(7) Protect the intellectual property rights of the educational materials possessed by the Model University, and prevent the illegal use of such materials.

(8) Bear responsibility for the day to day control of the students.

(9) Receive an assessment by the education administrative department of the provincial government where such Off-Campus Learning Center (Base) is located, or by any organization authorized by the provincial government for such assessment.

IV. Administrative tasks and approbation after assessment of the Off-Campus Learning Centers (Bases) by the education administrative department of the province.

The education administrative department of the provincial shall strongly emphasize modern distance education model activities and incorporate the establishment of Off-Campus Learning Centers (Bases) into higher education and the development program for life-long educational system of the related area. The responsibilities for the administration of Off-Campus Learning Centers (Bases) by the Education Administrative Department of the province shall be relatively concentrated and the person in charge of higher education shall bear such responsibility. Student administrative activities of the modern distance education shall be particularly noted, as students activities in various forms shall be actively organized, and students participating in modern distance education at Off-Campus Learning Centers (Bases) within a province, autonomous region, or a directly controlled city shall be treated as students of such province, autonomous region, or directly controlled city.

1. Responsibilities of the education administrative department of the province for the administration of an Off-Campus Learning Center (Base).

(1) Implement a review and approval system upon the establishment of an Off-Campus Learning Center (Base) in the local area and bear responsibility for the administration and monitoring of such system.

(2) Transmit the policies and guidelines of the state and the area regarding modern distance education to the Model University and Off-Campus Learning Centers (Bases), provide them with information regarding the needs for human resources, instruct the Model University to rationally set degree majors and construct plans to recruit new students, as well as review application guidelines for new students and promotion materials for the recruitment of new students.

(3) Bear responsibility for the administration of Off-Campus Learning Centers (Bases) established within the assigned area, regularly implement an inspection and evaluation, and responsibly provide instructions to a Off-Campus Learning Center (Base) which does not pass such inspection or evaluation to fix or improve, or temporary suspend or cancel authorization as a service provider of distance education. The results of the inspection and evaluation of Off-Campus Learning Centers (Bases) shall be important criteria for the inspection and evaluation of the Model University carried out by the education department.

(4) Off-Campus Learning Centers (Bases), which have been self-established without review and approbation, shall be under obligation to promptly carry out a review and approbation procedures. If a review and approbation procedures are not carried out, the school administration shall be issued a suspension order. Off-Campus Learning Centers (Bases) established by each Model University prior to the distribution of this views, shall again carry out a review and procedures for approval. In the event such Off-Campus Learning Centers (Bases) fail to be approved by such review and approval procedures, the improvements for adjustment or the suspension of the administration shall be carried out within the specified time and the relevant corrective measures shall be appropriately taken in collaboration with the Model University.

(5) A disciplinary judgment against an Off-Campus Learning Center (Base) shall be decided after the opinion from the relevant Model University has been requested. A copy of the opinion of disciplinary judgment against an Off-Campus Learning Center (Base) shall be sent and reported to the Ministry of Education.

Upon establishment of an Off-Campus Learning Center (Base), the organization entrusted with such establishment and the Model University shall jointly apply for the necessary review and seek the approval by the education administrative department of the province where the Off-Campus Learning Center (Base) is located. When a reviewed and approved Off-Campus Learning Center (Base) provides services for another Model University, such Center shall transmit relevant materials on such Model University to the newly established education administrative department of the province where the Center is located and shall make a record of such.

The education administrative department of the province, after having received the application from the Off-Campus Learning Center (Base) to be established, shall carry out a review and approval procedures within a certain time period, and shall promptly inform the results of such procedures to the Model University and the organization entrusted with such establishment, and shall send a report and copy of such result to the Ministry of Education as well as inform the other model university and make public notification.

2. Application materials for the establishment of an Off-Campus Learning Center (Base) requiring review by the education administrative department of the province.

(1) Application documents for the establishment of an Off-Campus Learning Center (Base). This document shall include the following: a summary of the organization entrusted with such establishment; classification, rank, size, place of establishment, planned majors, provisional date of commencement of classes, communications address and postal code of the Off-Campus Learning Center (Base) applying for establishment; name of officer of responsibility and identification number, contact telephone number and e-mail address of such center, etc.

(2) A feasibility study of the Off-Campus Learning Center (Base) by the organization entrusted with establishment: The followings items regarding the Off-Campus Learning Center (Base) shall be included in this study: administrative staff, assistant teachers, administrative methods, quality assurance system and information security measures, land for learning and attached structures, network environment and other required environments and conditions of facilities, administration system, and the potential for sustainable development

(3) Documented authorization of the Model University for the provision of modern distance education by the Ministry of Education.

(4) Plans by the Model University providing modern distance education in the area in question.

(5) Protocol for the establishment of an Off-Campus Learning Center (Base) between the Model University and the organization entrusted with the establishment of such Center.

(6) Materials of Proof of the land, facilities, funds, etc. of the Off-Campus Learning Center (Base)

(7) Administrative regulation and regime of the Off-Campus Learning Center (Base).

(8) Provision of other required documents or materials.

The education administrative department of each province, autonomous region, and directly controlled city shall establish the administrative regulations regarding the Off-Campus Learning Centers (Bases) within each jurisdiction in accordance with the spirit of this opinion, and shall prevent and oppose any monopoly, regionalism, or other unfair acts of competition, protect the legitimate rights and interests of the learners, and put forth effort to build a sound development environment. The education administrative department of each province, autonomous region, and directly controlled city shall implement an annual inspection of the Off-Campus Learning Centers (Bases) within its jurisdiction, and shall report the basic conditions and the results of such annual inspection of the Off-Campus Learning Centers (Bases) within its jurisdiction by the end of November each year to the Ministry of Education.

<div align="center">January 7, 2002, Ministry of Education, Cabinet Secretariat</div>

Document of the Cabinet Secretariat of the Ministry of Education

Higher Education Agency [2003] No.2

Notice regarding the Printing and Distribution of the Principles and Views regarding the Establishment and Administration of Off-Campus Learning Centers (Bases) of the Modern Distance Education" (provisional) made by the Cabinet Secretariat of the Ministry of Education.

To: Education Agency (Board of Education) of each Province, Autonomous Region, and Directly Controlled City, the Board of Education of the Production and Construction Corps in Xinjiang, as well as each Model University for Modern Distance Education

This Ministry has established the "Principles and Views regarding the Establishment and Administration of Off-Campus Learning Centers (Bases) of the Modern Distance Education" (provisional) in order to appropriately carry out the establishment and administrative operations of off-campus learning centers (bases) for modern distance education, and to facilitate the sound development of model operations of the modern distance education. This document shall hereby be printed and distributed to each related organization, which shall thoroughly implement its contents and each organization shall promptly report the relevant conditions of such implementation to this Ministry.

Attachment : Provisional Administrative Regulations on the Off-Campus Learning Centers (Bases) of the Contemporary Distance Education

March 10, 2003

Attachment:

Provisional Administrative Regulation on Off-Campus Learning Centers (Bases) of Modern Distance Education

Article 1

This regulation shall be established in order to improve management of Off-Campus Learning Centers (Bases) of modern distance education (hereinafter referred to as "Off-Campus Learning Centers (Bases)" and continues to enhance the normalization of support services for modern distance education.

Article 2

Off-Campus Learning Centers (Bases) as set forth in this regulation shall be defined as off-campus learning centers (bases) established or used solely or jointly, by a university to provide modern distance model education under the authorization of the Ministry of Education (hereinafter referred to as the "Model University"), and off-campus learning centers (bases) established by the social public service system to provide support services of modern distance education under the authorization of the Ministry of Education (hereinafter referred to as the "Public Service System").

Article 3

Off-Campus Learning Centers (Bases) are organizations entrusted by the Model University and pursuant to the unified request and working procedures of the Model University, shall promote the recruitment of new students, the allocation of resources to recruit new students, support for student learning and the administration of enrollment and daily activities of the students, and provide support services for modern distance education in collaboration with the Model University. The Off-Campus Learning Centers (Bases) shall not carry out various educational activities or issue various graduation diplomas or certificates so as to carry out an independent school administration, and shall not engage in any administrative activities which are not related to the support service of modern distance education. An Off-Campus Learning Centers (Base) shall not establish another Off-Campus Learning Center (Base) which in nature is a subsidiary organization.

Article 4

The organization entrusted with the establishment of the Off-Campus Learning Center (Base) shall be a business corporation or have legal entity as a business corporation, shall be authorized to engage in educational activities or related services, and shall be capable of solely bearing any corresponding legal responsibilities.

- Off-Campus Learning Centers (Bases) to be established shall comply with the following conditions:

(1) The Off-Campus Learning Center (Base) shall possess specialized administrative, service and technical staff suited to the needs of the support services, to ensure the implementation of the education by the Model University and the guidance and tutorial activities for the students, and to guarantee normal function of the facilities.

(2) The Off-Campus Learning Center (Base) shall possess relatively independent facilities, and be equipped with full educational service facilities which relatively are concentrated, and possess an excellent learning environment

(3) The Off-Campus Learning Center (Base) shall be equipped with a local area network (LAN) environment with more than 100MB, connection to a communications network co-used by the State, such as CHINANET or CERNET, by broadband with more than 512KB, and equipped with specialized servers appropriate for the needs of the educational activities in function and quantity. Off-Campus Learning Centers (Bases) which provide support services for the Model University which implements distance education via satellite, shall be equipped with satellite transmission receiving facilities in order to receive the information from the Model University of modern distance education, and shall be used under the authorization of the related authorities, and can store education information data over the LAN.

(4) The Off-Campus Learning Center (Base) shall be equipped with multimedia network rooms to meet the appropriate educational needs, a multimedia computer for Internet access, a video projector or large screen projection television, a two-way educational video system, uninterrupted power sources, etc. The number of the multimedia computers for Internet access shall be at least 1 per 6 students, and the total number shall not be less than 50, under any condition..

(5) The Off-Campus Learning Center (Base) shall possess distance education software corresponding to the following functional requirements:

(i) Provision of teaching materials from the Model University to the students, and support the realization of various forms of effective learning by

students.

(ii) Support information search and communication by teachers and students over the Internet

(iii) Implementation of the management and monitoring of the learning processes of students and teaching processes of teachers

(6) The Off-Campus Learning Center (Base) shall comply with the requirements by the State and local area regarding safety, fire prevention, health etc.

Article 6

Upon establishment of an Off-Campus Learning Center (Base), the Model University or the Public Service System shall apply to the education administrative department of the province where such Center is located and shall include the following documents in such report.

(1) Classification, rank, place of establishment, communications address, postal code, a copy of identification document of the officer of responsibility, person to contact, telephone number, e-mail address, etc., for communications, of the Off-Campus Learning Center (Base) to be established. Also, a summary of the organization entrusted with the establishment of the Center and a copy of the certificate of incorporation, etc.

(2) Administrative methods, learning support services, learning supporting staff, and information security measures of the Off-Campus Learning Center (Base) to be established

(3) Materials of Proof of the land for learning activities, annexed facilities, network environment and other required environments and facilities, funds, etc. of the Off-Campus Learning Center (Base) to be established

(4) Off-Campus Learning Centers (Bases) established by the Model University by personal construction for private use, or by joint construction for joint use, shall submit the document to the Ministry of Education which authorized the implementation of the modern distance education model as well as the planning documents of modern distance education to be implemented in the said area by the Model University and the protocol of entrustment. Off-Campus Learning Centers (Bases) established by the Public Service System, shall submit the

document of the Ministry of Education which authorized the implementation of the supporting services for modern distance education.

Article 7

Off-Campus Learning Centers (Bases) established by the Model University or the Public Service System shall be reviewed and approved by the education administrative department of the province where such center is located. The education administrative department of the province shall receive application in March and October each year and shall reply to such application within 30 days of receipt. The education administrative department in the province shall regularly inform the Ministry of Education regarding the Off-Campus Learning Centers (Bases) whose establishment has been authorized by such department, leaving a record and make a public notification.

Article 8

Off-Campus Learning Centers (Bases) shall implement various regulations and systems regarding the modern distance education of the Model University and shall protect the intellectual property rights of the Model University in accordance with those set forth by law.

Article 9

Off-Campus Learning Centers (Bases) shall comply with the State Administrative Ordinance on the Computers and Network Securities, and shall be responsible for the security of the computer network, cable TV and other communication networks by employing a full time specialist, installing network security facilities and related system software, to prevent the communication and dissemination of illegal information, as well as human-related damage such as attack by computer virus, etc.

Article 10

Conditions of establishment, direction, and administration of the Off-Campus Learning Centers (Bases) by the Model University shall be important contents in the evaluation of modern distance education activities by the Model University.

The education administrative department of the province shall be responsible for monitoring, inspection and evaluation of the Off-Campus Learning Centers (Bases) within its jurisdiction. The Off-Campus Learning Centers (Bases) which do not pass the evaluation, shall be required to implement improvements for adjustment or cancel its qualifications as a support service provider, and shall report to the Ministry of Education and have its opinion recorded. The Model University shall take relevant and

appropriate measures.

Article 11

This regulation shall be in effective as of the date of publication. If any conflict arises between existing documents and this regulation, this regulation shall take precedence.

Appendix V

Preliminary Survey on Quality Assurance of D/E-learning
for Higher Education

APQN Project Group 3, Quality Assurance of Distance Learning and e-Learning (D/E-learning), is working for the following purposes:

- *Share information on the latest quality assurance systems of D/E-learning in the Asian-pacific quality assurance agencies,*

- *Make a matrix of D/E-learning qualities to easily understand the multidimensionality and multiple perspectives of the D/E-learning quality assurance among the Asian-pacific quality assurance agencies, and*

- *Promote the development and improvement of the D/E-learning quality assurance in each Asian-pacific quality assurance agency.*

Through this questionnaire survey we would like you to provide information for us about your organization's BASIC situations concerning D/E-learning Quality Assurance for Higher Education in the first stage of this project.

Please return the questionnaire by email or FAX to the following address no later than March 20, 2005.

Takahiro SAITO, Project Leader of APQN PG3

National Institution for Academic Degrees and University Evaluation (NIAD-UE), Japan

e-mail: tksaito@niad.ac.jp

FAX: +81 42 353 1863

Please contact the person should you have any questions about this survey.

Thank you.

1) **Q1. Brief description of the present situation of distance learning and e-Learning (D/E-learning) for higher education in your country/area**

   a) Do you have the official definition of D/E-learning in your country/area? Please choose one appropriate answer from those provided below.

   *Yes **3***   *No **2***

   b) If yes, please specify below.

- *Distance Education is the education system which connects instructors and learners from different places. DL is planned to transfer knowledge and experience through special technique of course design, special methods of communication by using video, audio, computer, printing material, multimedia communications or some combination of these so that students can study by themselves without attending the classroom with reliable evaluation and assessment system in order to earn the degree awarded as in the traditional system.* **(Thailand)**
- *There is no strict definition on DE/e-Learning, but some guidelines set by the government indicate its definition. For traditional on-campus university "lecture by using media" is regarded as "distance education". It must keep to the following regulation;*
  - *"Lecture by using media" must integrally treat a broad range of information in character, voice, still picture, and moving picture, etc. by advanced use of various media through communications satellite and/or optical fiber, etc., and it must be admitted by the university that it has the education effect equivalent to the face-to-face instruction.*
  - *Besides, it must meet either of the following requirements.*
    + *The lecture is offered simultaneously and interactively, and the student takes it in the classroom, laboratory or the similar place other than the ordinary classroom.*
    + *The lecture includes instructions such as answering the given questions or assignments, providing corrections and comments on students' answers to them, offering question and answer session, etc. in every classes, and it assures the occasion to exchange idea among the students about the relevant subjects.*
- *For correspondence university "lecture of correspondence (only printed study materials)", "lecture of the air (lessons are offered by broadcast)", and "lecture by using media" shown above are considered as distance education.* **(Japan)**

c) Which organization set the official definition?

- *Commission on Higher Education, Ministry of Education* **(Thailand)**
- *Ministry of National Education* **(Indonesia)**
- *Ministry of Education, Culture, Sports, Science and Technology* **(Japan)**

---

d) According to the official definition, how many higher education institutions deliver programs via D/E –learning in your country/area? Please put the figures in the following blanks.

    _____ higher education institutions use D/E-learning.

- *1 (one) higher education institutions use D/E-learning.* **(Thailand)**
- *24 higher education institutions use D/E-learning.* **(Indonesia)**

If you do not have the exact figure, approximately _____ % of higher education institutions deliver their programs via D/E-learning.

- *In 2004, 16.5%, 7.7% and 11.9% for university (4 years), junior college (2 years), technical college (5 years but only 2 years are regarded as higher education) deliver their programs via internet, respectively.* **(Japan)**

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e) What are the major media (e.g. mail, internet, radio, TV (ground-base/ satellite-base)) used for the instruction and feedback in D/E-learning?

- *mail, internet, radio, TV are all available but not used for D/E-learning* **(Mongolia)**
- *Primarily printed material (modular system), and supported by other supplements (e.g. mail, internet, radio and ground-based TV)* **(Indonesia)**
- *Correspondences, TV, Internet, e-mails, face-to-face contact or a mix of these* **(Hong Kong)**
- *All media mentioned above are used. (mail, internet, radio, TV (ground-base/ satellite-base))* **(Thailand)**
- *As for the instruction University of the Air offers their lectures by ground-base and satellite base TV and radio, but the other many universities use correspondence and internet including web-TV. E-mail, chat, message board, web-TV, FAX, correspondence, etc. are used for the feedback.* **(Japan)**

f) Which degrees can students earn by using only D/E-learning in your country/area?
Please select appropriate answer(s).
(2-year certificate/diploma, bachelor degree, master degree, doctor degree, other (please specify _____))

- *2-year certificate/diploma, bachelor degree, master degree, doctor degree, other (certificate to doctor) **(Hong Kong)***
- *Associate degree (2-year), bachelor degree, master degree, and doctor degree **(Japan)***
- *2-year certificate/diploma, bachelor degree, master degree **(Indonesia)***
- *Bachelor and Master **(Thailand)***

If you have special situation about the awarded degrees by D/E-learning, please specify below (e.g. the awarded degree of the D/E-learning is not considered to be equivalent to that of the traditional higher education).

- *The D/E-Learning is considered to be equivalent to the traditional higher education. **(Indonesia)***
- *The standard criteria for DL is being formulated so the equivalence of the degree awarded from DL and traditional learning is still an issue. **(Thailand)***

g) Which academic fields can student learn by using only D/E-learning in your country/area? Please specify.

- *All academic fields **(Indonesia)***
- *There is no regulation for the academic field of D/e-Learning, but now, student can learn Liberal arts, Literature, Humanities, Pedagogy, Art, Law, Economics, Business, Informatics, Engineering, Information Engineering, Human science, Home economics, Social welfare, etc.**(Japan)***

h) If you have a special situation of D/E-learning other than the above mentioned, please specify.

- *To earn a bachelor degree the student must get more than 124 course credits according to the University Establish Standards though the number is different*

among universities. For the student studying at the traditional on-campus course, less than 60 credits earned in "lecture by using media" can be counted in the 124 credits. For the student studying at the correspondence course, more than 30 credits must be earned in "schooling" or "lecture by using media" for the total 124 credits. It means that the student in the correspondence course can earn all of the credits required for graduation by attending the "lectures by using media." (Japan)

2) Quality Assurance of D/E-learning for higher education

a) Which organization is responsible for the quality assurance of D/E-learning in your country/<u>area</u>?

- *No central body. However, each self-accrediting university/higher education institution is responsible for the quality assurance of its own D/E-learning (Hong Kong)*
- *In Japanese higher education system Ministry of Education, Culture, Sports, Science and Technology approves university's establishment. After that the university selects a quality assurance agency among the agencies authorized by the Ministry, and requests the agency to implement an evaluation of the university. The agency assures the university's quality according to their standard. Even though the university offering some lectures by using media or offering distance education, it is quality-assured by the agency in the same manner. (Japan)*
- *The BAN-PT (or NABHE – National Accreditation Board of Higher Education) (Indonesia)*
- *Commission on Higher Education by Bureau of Standards and Evaluation. (Thailand)*

* If there is a great deal of complexity about the D/E-learning quality assurance system, please explain the system by using organization/function chart.

b) If the quality assurance system of D/E-learning exists, please specify the quality assurance criteria for D/E-learning by following item:

(i) Unit(s) of the quality assurance
(whole institution, program, department, D/E-learning system, other (please specify _____))

- *whole institution (Japan)*
- *whole institution, program, department, and Regional Learning Center (UPBJJ) (Indonesia)*

- *whole institution, program, department, and Distance learning system **(Thailand)***

    (ii) Mode(s) of the quality assurance
    (accreditation,   evaluation,   other   please
    specify _____))

- *accreditation and evaluation **(Japan)***
- *accreditation **(Mongolia)***
- *accreditation, evaluation **(Indonesia)***
- *accreditation, self-assessment report, evaluation **(Thailand)***

    (iii) Purpose(s) of the quality assurance
    (accountability,   quality   improvement,   student   protection,
    other(_____))

- *accountability, quality improvement **(Japan)***
- *all (accountability, quality improvement, student protection) **(Mongolia)***
- *accountability, student protection **(Indonesia)***
- *accountability, quality improvement, student protection, knowledge development, public information, and to respond to the National Education Act of 1999 **(Thailand)***

    (iv) Procedure(s) of the quality assurance
    (self-report, site-visit, application of the other quality assurance agency's
    result,   other   (please
    specify _____))

- *self-report, site-visit **(Japan)***
- *self-report, site-visit **(Indonesia)***

    (v) Quality assurance criteria
    Please select from the following criteria:
    e.g. Institutional context and commitment

- Course structure/ educational contents
- Teaching/learning process
  - Teaching Staff
  - Educational Media (e.g. delivering media, interactive system, feedback system, etc.)

- Facilities/ equipment other than media infrastructure
- Teaching support
- Learning support
  - Teaching/learning outcomes
  - Management/Finance (incl. self-evaluation system)

- NIAD-UE checks the total situation of distance education by focusing the education outcomes are equivalent to the face-to-face instruction. <u>The special criteria for distance education are in the "method of education delivery" and "student support and guidance".</u> **(Japan)**
- All of the criteria mentioned above, and
  - Vision, mission, aims, and objectives
  - Governance
  - Information System **(Indonesia)**
- All of the criteria mentioned above, and
  - Research
  - Quality Assurance system and mechanism
  - Budget **(Thailand)**

(vi) Are those criteria special to the D/E-learning?

Yes **1**   No **2**   not applicable **2**

(vii) When those criteria were developed, which country/organization's guidelines were consulted?

- *The laws concerning distance education in Japan, and the "Best Practices for Electronically Offered Degree and Certificate Programs" (the eight regional accrediting commissions in USA, 2000).* **(Japan)**
- *Many countries such as countries in America, Europe, Australia and Asia* **(Thailand)**

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c) Has your organization implemented the quality assurance of D/E-learning?
1 ☐ Yes, we have implemented the quality assurance of D/E-learning
1 ☐ No, but we have the guideline of the D/E-learning quality assurance
0 ☐ No, but we are in the process of developing the guideline of the D/E-learning quality assurance
1 ☐ No, we do not have any plan to implement the quality assurance of D/E-learning

1 ☐ Other: (please specify: _____))
We have an intent to look at the issue in greater detail

---

3) **Please raise any issue on the D/E-learning quality assurance for higher education relevant to your country.**

- Effective regulations of the D/E-learning **(Hong Kong)**
- Profit universities using e-Learning are breaking into the higher education market. How to assure their education, especially e-leaning, is a critical issue. **(Japan)**
- Immediately start the establishment of the D/E-learning quality assurance activities for higher education. **(Mongolia)**
- Quality on Instructional Material Development **(Indonesia)**
- Quality on Tutorial system development (incl. Tutor qualification) **(Indonesia)**
- The criteria to work on the comparison and the equivalence of the recognition of the degree from other countries. **(Thailand)**
-

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4) **From the viewpoint of your agency or your country/area please advise to the PG3 what matter should be discussed.**

- Measurement of students' actual learning attainment if assessments are completed purely on-line (Hong Kong)
- Quality items for D/e-Learning (Japan)
- Research on D/E-learning situation in Mongolia. Establishment of D/E- learning quality assurance mechanisms, formulation of official definition and reflection of this in Education Law, legal framework for D/E- learning quality assurance, development of standards or criteria for accreditation of D/E-leaning. (Mongolia)
- Instructional Material Development (Indonesia)
- Tutorial system development (Indonesia)
- Student evaluation and assessment in distance learning. (Thailand)
- Quality assurance in distance learning. (Thailand)

Name of your organization and country
- Hong Kong Council for Academic Accreditation, Hong Kong, China
- National Institution for Academic Degrees and University Evaluation, Japan
- The Mongolian National Council for Education Accreditation, Mongolia
- BAN-PT – Badan Akreditasi Nasional Perguruan Tinggi (or NABHE – National Accreditation Board of Higher Education), Indonesia
- Commission on Higher Education, Thailand

Contact person's name: _____

Tel/fax: _____

Email: _____

If you know an appropriate person for mutual understanding on the D/E-learning quality assurance for higher education, please recommend the person(s) for PG3, thank you.

Name: _____

Organization: _____

Specialty: _____

Email address: _____

Appendix VI

Survey on Quality Assurance of Distance and e–Learning for Higher Education, 2006

APQN Project Group 3, Quality Assurance of Distance Learning and e-Learning (QA of D/e-Learning), is working for the following purposes:

- *Share information on the latest QA systems of D/e-Learning in Asia Pacific QA agencies,*

- *Make a matrix of qualities in D/e-Learning to easily understand the multidimensionality and multiple perspectives of D/e-Learning among the Asia Pacific QA agencies, and*

- *Promote development and improvement of QA of D/e-Learning in each Asia Pacific QA agency.*

In March 2005, we did a preliminary survey on QA of D/e-Learning for higher education and got some responses from APQN members. Though the number of responses was small but among them results showed that some members recognize the importance of QA of D/e-Learning but do not have specific standards or guidelines for d/e-learning.

We would like to comprehend what is going on about QA of D/e-Learning in Asia Pacific region in the final stage of this project. Please provide information for us about the present QA of D/e-Learning in your organization through this questionnaire survey. The results are to give you feedback as the latest information.

The questions are simple and it is supposed to take less than 10 minutes to complete them.

Please Answer the Questions, and Return the Questionnaire by e-mail or FAX to the Following Address No Later than October 30, 2006.

For your answer English is preferable but your domestic language is also acceptable. If you need long time to translate your answer and document into English, please send it without translation.

Please contact the person should you have any questions about this survey.

Takahiro SAITO, Project Leader of APQN PG3

National Institution for Academic Degrees and University Evaluation (NIAD-UE), Japan

e-mail: tksaito@niad.ac.jp

FAX: +81 42 353 1863

Thank you very much for your cooperation!

Q1. Quality assurance of distance learning and/or e-learning in your organization

1) Has your organization ever implemented QA of d/e-learning?
- **2** 1. Yes, we have done QA of program/university that offers education mainly by d/e-learning.
- **3** 2. Yes, we have done QA of program/university that employs d/e-learning in some classes or parts of lessons.
- **8** 3. No, but we will do QA of program/university using d/e-learning near future.
- **0** 4. No, we do not have any plan to implement QA of d/e-learning.
- **1** 5. Others (Please specify: _____)

- ・ N/A   The publicly-funded programmes offered at institutions under the UGC are not delivered in d/e-learning mode

2) How do you treat d/e-learning in your QA system?
- **0** 1. D/e-learning is considered to be the same as traditional face-to-face instruction.
- **5** 2. D/e-learning is considered to be different from traditional face-to-face instruction.
- **4** 3. We entrust the treatment of d/e-learning to the target program/university's internal QA.
- **1** 4. We have not implemented QA of program/university using d/e-learning.
- **1** 5. Don't-know
- **3** 6. Others (Please specify: _____)

- ・ The same overall criteria apply, but are tailored in interpreting the criteria to d/e delivery. So the answer is both 1 and 2. The over-riding criteria is ensuring that the delivery method is appropriate for the stated learning outcomes.

- ・ We do not monitor individual consumption of e-learning. We do require organizations that have certain arrangements with external Providers such as twinning, joint, franchise etc that e-learning will be considered a component of their programmes)

3) Do you have <u>special standards (including guidelines, statements, etc.) to d/e-learning</u> in your external QA system? When some items are specific to d/e-learning in general standards, these items can be also considered as the special standards.

    4   1. Yes
  10   2. No

If yes, please specify below about the special standards to d/e-learning, or please send the document as an attached file.
* English is preferable but your domestic language is also acceptable.

Q2. Regulation of distance learning and/or e-learning in your country/area

1) Is there a <u>regulation (including guidelines, statements, etc.) of d/e-learning for higher education</u> in your country/area?

  7   1. Yes
  3   2. No
  3   3. Don't-know

---

2) If yes, please specify below about the regulation of d/e-learning in your country/area. If you have the document, please send it as an attached file.

 (regulation)
    a)   Name of the regulation: _____

    b)   Organization which established the regulation: _____

    c)   Web site (if available): http://_____

The following standards and regulations special for d/e-learning are indicated in the question 1(3), 2(1) and 2(2).

- University Correspondence Education Establishment Standards (Japan)
- "Provisions concerning the Application for the Establishment of Degree Level Courses of Study in the Long-Distance Education System and its

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Implementation" (Thailand)

- "Principles and Views regarding the Establishment and Administration of Off-Campus Learning Centers (Bases) of the Modern Long Distance Education" (provisional) (presented by Shanghai Educational Evaluation Institute)

- We have rerulation for d/learning approved by our minister of education and training. (Vietnam)

- ALLAMA IQBAL OPEN UNIVERSITY, RAWALPINDI was established by the regulation. (Pakistan)

- Coverage of d/e learning is incorporated within the general criteria and guidelines for approving and accrediting higher education programmes. These are available at: http://www.nzqa.govt.nz/for-providers/aaa/course-approval.html (NZQA, New Zealand)

- "Cross Border Provision of Education and Training" (Generally, e-learning is considered part of cross-border learning.) (Samoa)

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3) Other than the above regulation(s), is there a hidden regulation (implied consent) about d/e-learning in your country/area? If yes, please specify below.

_____

_____

(No answers)

---

4) Are awarded degrees and earned credits in d/e-learning program/university considered to be equivalent to those in traditional face-to-face program/university in your country/area?

Please consider, a graduate of d/e-learning higher education can proceed to a postgraduate course of traditional (face-to-face) university?

(a) Awarded degrees **9**   1. Equivalent

                     0   2. Not equivalent

                     2   3. Case by case (Please specify: _____)

- Institutions have the autonomy on admission matter.

Please consider, earned credits in d/e-learning can be counted for graduation of traditional (face-to-face) university when the student transfers?

(b) Earned credits   **7**   1. Equivalent

                                  2   2. Not equivalent

                                  2   3. Case by case (Please specify: _____)

- Institutions have the autonomy on admission matter.

- Depending on the subject discipline and University requirement earned credits will be taken into account

---

Q3. Please raise any issue on the D/E-learning quality assurance for higher education relevant to your country/area.

- No specific issues noted.   We continue to consider best-practice in relation to the quality assurance of d/e learning.   There are challenges that arise from the fast-changing technology and business models involved in this delivery mode. (NZQA, New Zealand)

- Pakistan: The quality of distance education considered to be not at par with conventional learning therefore, its not getting equivalent value for career opportunities and advance studies. Thus we need a quality assurance system at par with face to face learning to get recognition of the distance education degrees in terms of teaching and learning quality. The standards and parameters need to be defined in line with international practices to make this system of distance learning effective in Pakistan that is meeting needs education for increasing population. (Pakistan)

- In Sri Lanka only one Open and Distance Learning University and it is difficult to find experienced academics for external reviews in Quality Assurance. (Sri Lanka)

- The Samoa Qualifications Authority is still at the drawing board with most of its policies. We have not trialed them yet. This would be carried out sometime next year. What we adopted from the OECD/UNESCO document seem to cover it for now but will be modified once implemented. (Samoa)

- Distance learning is only an emerging concepts and practices in Cambodia. There are many things out of current scope of quality assurance agency. (Cambodia)

- Academic programs are still not appropriate because taken from traditional face-to-face program; Assessment of student achievement; Instruction and support during the course. (Vietnam)

Name of your organization and country

- New Zealand Qualifications Authority, New Zealand
- Chulalongkorn University, Thailand
- University Grants Committee, Hong Kong
- Higher Education Commission, Pakistan
- New Zealand Universities Academic Audit Unit, New Zealand
- Quality Assurance and Accreditation Council of the UGC, Ministry of Education, Sri Lanka
- Samoa Qualifications Authority, Samoa
- Japan Accreditation Board for Engineering Education (JABEE), Japan
- Accreditation Committee of Cambodia, Cambodia
- General Department of Education Testing and Accreditation, Ministry of Education and Training, Vietnam
- Japan University Accreditation Association, Japan
- National Institution for Academic Degrees and University Evaluation, Japan
- Shanghai Educational Evaluation Institute, China
- Hong Kong Council for Academic Accreditation, Hong Kong, China
- Commission on Higher Education, Thailand

Contact person's name: _____
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Thank you very much.