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## **QUALITY ASSURANCES**

Realizing the Vision of Quality Open
Distance Learning through the
Establishment of Quality Assurance
System at
Universitas Terbuka, Indonesia

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#### Abstract

Universitas Terbuka (UT) is one of the mega universities with a student body well over 300 thousand students scattered all across the Indonesian archipelago. With the increase demand for quality open and distance learning (ODL) by its students and stakeholders, UT needs to find a management system that will ensure the provision of quality learning services. Within the last six years, beginning in 2001, UT has started its quest in pursuing quality and continuous improvement. A comprehensive QA system was developed and a centre for Quality Assurance was established as proof of the strong commitment of all staff and management of UT. Systematic and step-by-step actions were put in place, from development of QA framework and manuals, socialization, internal and external assessment,

and integration of QA programs into action plans. The efforts by UT in pursuing quality are evident in the accreditation and certifications it has received since 2005. UT has been awarded Quality Certification and International Accreditation by the International Council for Open and Distance Education (ICDE) Standards Agency (ISA) since 2005. The UT has also been awarded the ISO 9001:2000 Certificate by an internationally recognized ISO accreditation body in the quality management system of the distribution of learning materials to distance students in 2006, learning and examination material development, and the provision of learning services in 6 Regional Offices.

Key words: quality assurance, distance education, open university

## Universitas Terbuka (UT) at a Glance

Indonesia is the largest archipelago in the world, stretching more than 5,000 kilometers from the east to the west and more than 3,000 kilometers from the north to the south situated along the South-east Asian equator comprising of over 17,000 islands. The land area of Indonesia contributes only 20% of the total territorial area of the country. Demographically, Indonesia is the fourth most populous country in the world (after China, India, and the United States), with 220.1 million people, an annual population growth rate of 1%, and urban population of up to 47% (UNDP, 2006). According to the most recent *Human Development Report 2006*, Indonesia belongs to the Medium Human Development Rank with per capita income based on the purchasing power parity (PPP) of US\$ 3,609 (UNDP, 2006). The country represents a mosaic of ethnic and regional cultures, with over 1,000 local spoken dialects and one national language, Bahasa Indonesia.

Universitas Terbuka (UT) is an open university, established in 1984 as the 45th state university to provide opportunity and access to university education, for in-service teachers, working adults and recent high school graduates. UT was founded as a part of the government's national strategies to improve participation in higher education. In 2006, UT enrolled more than 340,000 students, residing in different parts of the country, with over 95% consisting of working adults. Since its foundation, UT has enrolled over 1.2 million students and has produced over 600,000 alumni, working in various fields of the profession.

UT operates by networking with participating institutions. UT's headquarter is located in Jakarta and has 37 Regional Offices (RO) providing academic and administrative services for students in their respective regions, with 1,753 tutorial locations, and 671 examination locations. UT's network encompasses an external network with state universities throughout the country for curriculum, course material and test item development as well as for the provision of qualified tutors; with the Post Office and cargo companies for the distribution of course materials; with major state-owned Banks for the payment of fees; with the television, radio and media network for communication and interaction with students; with regional and state university libraries for access to additional learning resources; and with local educational offices and schools for the administration of practical works and examination. This diverse network requires effective coordination and good communication between the central office, regional centers, and the participating institutions. Effective management can only be achieved through accurate planning, effective networking and partnership, efficient development and delivery of quality programs, and consistent implementation of quality assurance system.

UT students learn from the course materials delivered by the institution and from other learning resources accessible from other institutions. UT has developed multi-media learning packages for the students, with the printed materials as the major media supplemented with audio cassettes, video programs, computer-assisted instruction, web-based materials and online tutorials. Student learning activities are facilitated through tutorials, counseling, study groups as well as administrative services. Students' needs for tutorials are provided and facilitated by regional offices. A variety of tutorial methods have been implemented, namely face-to-face, correspondence, broadcast, and online tutorials.

UT has four Faculties (Teacher Training and Educational Science; Mathematics and Natural Sciences; Economics; Social and Political Sciences), with 35 Programs of Studies. Additionally, it has a Graduate School offering three masters programs in Public Administration, Management, and Fishery Management. UT media resources for learning include 117 courses with radio tutorials, 419 courses with online tutorials, and 1002 televised tutorial programs. There has also been increasing uses of multi-media learning materials, in which about 30% of the 962 learning materials are multi-media learning materials (UT, 2007)

The major challenge for UT is to provide quality university education accessible at a distance by students with different level of economic capacity, have limited access to ICT facilities, and low ICT literacy rate. Since 2002 UT has launched *UT Online* services, aiming at introducing web-based academic and administrative services for students. The web-based academic services consist of online courses and online tutorials while the web-based administrative services include online counseling and online information dissemination. An online examination system has also been introduced for some courses to facilitate students' flexibility in taking semester examinations. The

experiences of UT in the use of internet in distance education showed that it has insignificant effect on the students. Very few students have accessed the UT online learning services, even though there is no fees charged to the students except for the internet connection. But gradually there seems to be an encouraging increasing trend of the use of online learning services by UT students. ICT uses for teaching and learning have increased in terms of the number of the provision of online tutorials from 377 courses in 2005 to 419 courses in 2006, and the number of access by students from 5,225 students in 2005 to 16,243 in 2006. Other online services of UT include online dissemination of examination results; online counseling; and online examination (UT, 2006; 2007).

## Quality Assurance in ODL

Quality assurance has become an important issue in ODL, and effort to improve quality has been put forth by ODL institutions. ODL customers and stakeholders have become increasingly interested in quality issues. Learners demand quality ODL services for which they have to pay partially or completely. Stakeholders require ODL providers to pay serious attention to quality in terms of products, processes, production and delivery systems as well as philosophy. Total quality approach, which covers not only products but also services and processes, has been regarded a useful method of looking at the whole process of ODL. The 1990s may have been known as the decade of quality in higher education (Frazer, 1992), and the quality issue has received greater attention ever since. In many parts of the world, quality assurance (QA) mechanisms are even imposed by university management or state regulatory bodies (Kember, 2000; QAAHE, 2001). Achievement, continuous improvement and maintenance of quality standards become primary goals to attain by ODL institutions. Although there has been some doubt that quality

might be difficult to achieve in ODL organization, but this skepticism has been proofed to be unfounded. Recent account by *Daniel* (1997) confirms that there is no reason in principle that even large-scale ODL system cannot achieve high quality services.

As pressures for quality improvement have emerged both internally and externally, ODL institutions are challenged to undertake continuous improvement of their services. Externally, stakeholders have persistently questioned the quality, accountability, effectiveness and efficiency of distance learning provision in which they have interests and to which they make contribution as users. And for many ODL institutions, funding levels and student enrolments in distance education programs depend on quality of performance and services provided.

Quality in the field of ODL means different things to different stakeholders: designers, managers, students, producers, tutors, employers or government (Robinson, 1994). It can be defined as standard and excellence of the processes as well as the products; and, having recognized the complexity of quality issue, making judgments about quality requires the consideration of relating quality to human agents and resources factors (Ramanujam, 2000). In any service organization, including ODL institutions, the only option to excel is through the pursuit of quality. Failing to meet quality requirements, may result in customers turning to competitors or other providers which are able to satisfy their needs. Quality has become vital competitive strategy of any organization to meet customer satisfaction (Jackson & Ashton, 1993).

Quality in ODL is most often viewed in terms of the outputs produced, despite the importance of the process component. Quality in ODL covers a number of aspects including products, processes, production and delivery system, and philosophy (COL, 1997).

In terms of products, the quality of ODL varies from one institution to another, depending on priorities, resources and size and potential student body to serve. ODL institutions in developed countries to a larger extent have used ICT-based courses, while those institutions in developing countries use printed materials as a major medium of instructional delivery because access and participation by students is still relatively low. It is the challenge for institutions in developing countries to socialize and educate students, educators and the society in using ICT facilities for ODL enterprise.

Quality of processes is more difficult to address since there are various kinds of learning supports provided by institutions, such as tutorial services, organized study groups, library access, and access to learning resources. The challenge for the institution is not only to provide learning support but also to encourage student participation and use of this support to ensure quality learning processes. The management and decision making processes are also difficult to assess. It is even more difficult to assess and takes some time to observe how the quality of decision making has positive and productive impact on an institution.

Management of production and delivery system is crucial in ODL, as management of these activities follows assembly-line procedures and some jobs require craftsmanship. Deadlines and schedules have to be timely met. What goes wrong in one activity can have devastating effects on further subsequent activities. For instance, delays in meeting course development deadlines can result in delays in production, printing, dispatching, and eventually in students receiving materials. Even examination schedules may have to be delayed; otherwise students may perform badly in the examinations. The process of course, test item and media development as well as tutorial services requires professional craftsmanship.

In terms of philosophy, institutional vision, mission and policy documents are often well stated and circulated widely among staff. The problem is often how staff understands the meaning of these documents. The challenge for ODL leaders are to engineer change and ensure that staff focuses their activities and priorities on institutional goals and missions. Consultation and communication between institutional leaders and staff are needed to socialize and internalize these ideas. Implementation of institutional mission, policy and strategy requires constant follow up and guidance from the top level administration.

### Establishment of QA System at Universitas Terbuka

QA is based on the assumption that quality can be improved continuously. QA is not an effort to create quality, but rather it is a systematic and comprehensive effort to improve quality. For UT, an important step to put QA into action was through the establishment of a Quality Assurance System Committee in 2001 to work on the design, development, implementation, and evaluation of QA system. Then, a Quality Assurance Centre was founded in 2003 to plan, organize, coordinate and facilitate the quality assurance and improvement of the institution's distance learning services.

The framework for Quality Assurance for ODL developed by the Association of Open Universities (AAOU) was used by UT as a starting point to formalize its own approach to quality. This framework comprises all-inclusive components of an ODL organization; i.e., policy and planning, human resource provision and development, management and administration, learners, program design and development, course design and development, learner support, learner assessment, and media for learning (AAOU, 2001).

The framework was modified and contextualized suited to UT needs and has been integrated into management strategies, as well as into operational and annual plans. Adocument called "Quality Assurance System for Universitas Terbuka" was produced in 2002 after numerous consultations and meetings (*UT*, 2002). In line with the AAOU framework, UT's framework also comprised of 107 statements of best practices, covering nine components.

Each statement of best practices was further defined into indicators and methods of achievement. Manuals, methods, systems, procedures, work instructions, and records that are needed in the quality management system (QMS) were also identified. This document serves as the foundation for implementing QA system, supplemented with an instrument for self-evaluation and priority setting, and a list of units or divisions within the University responsible for assuring the quality of their respective work activities.

The development of manuals was the most challenging task for UT. This process was done by teams involving staff from different units related to particular activities that they performed in daily work. QA system documents work activities, and ensure that systems and procedures are implemented accordingly. Series of activities for writing manuals were conducted, involving tryouts and improvement of the manuals. The work on developing 112 QA manuals were completed in 18 months during the year 2002-2003, involving more than 200 staff. In 2004, the UT developed additional QA manuals for use by staff to perform various activities of distance learning services provision. In 2005, continuous improvement of QA manuals was conducted, involving mapping of core activities of UT distance education system. Effective QA implementation began in 2003, initiated with large-scale socialization involving 200 managers university-wide. These managers were expected to become core agents for change in their respective units. Since 2004, UT has

consistently implemented a comprehensive QA system to ensure that all management and staff develop quality culture, so that UT becomes a learning organization with a high spirit for continuous improvement. Through the process of internal and external assessment, UT realizes that there is a need for further improvement of the QA manuals. Hence, as detailed procedures were removed from the QA manuals and incorporated into job manuals or work instructions, the number of UT QA manuals was reduced to only 96 manuals in 2007.

Internalization of QA through socialization, training, guidance, supervision, and systematic try-out to the university community were done to ensure that the main ideas and basic principles of the system were well understood by people within the organization. Socialization of OA framework was conducted for academic and administrative staff as well as managers from all levels of the hierarchy. Staff awareness of quality had to be established so that everyone realized that UT could no longer wait to start effort on continuous improvement. The most difficult challenge for UT was developing quality culture since it requires changing the attitudes and work habits of the management and staff. Through the process of writing OA manuals, using the manuals in daily activities, and getting feedback from users directly for continuous improvement involving intensive coordination enabled the internalization process to take place and hopefully will result in the development of quality culture among staff. Integrating QA into annual action plans that required careful coordination and consideration of resources and cost was also an effective strategy for internalization.

QA involves the mechanism for internal and external assessment. Internal assessment is conducted through internal audit, monitoring and evaluation. The UT evaluation system is extensive as it requires that each unit to annually undertake and report results of selfassessment and self-monitoring of the implementation of QMS on a semester basis. These different types of assessments are necessary to examine whether targets or tasks have been achieved and whether the tasks are performed in accordance to policies, systems, and procedures in the manuals. The results of the assessments were then analyzed and necessary feedbacks were given so that units can continually improve themselves.

External assessment is conducted by inviting credible external assessors to carry out both accreditation and certification process. Through these processes, UT improves its distance learning services to students, assures accountability of it as an ODL provider, and at the end improves public confidence in ODL. UT invited the International Council for Open and Distance Education (ICDE) Standards Agency (ISA) to conduct quality certification and international accreditation in 2005, with successful results after careful and rigid external audit by ISA. Nationally, UT sought accreditation from the National Accreditation Board for Higher Education (BAN-PT). Through the national accreditation, UT seeks to benchmark the quality of its study programs against external criteria which is required by higher education stakeholders.

UT also uses the ISO 9001:2000 certification process to stimulate and ensure the QMS system is implemented systematically, in accordance to the developed operational plan, is effective in producing quality products, process, production, and work ethos, and continuous quality improvement is internalized. As acknowledgement of its efforts in establishing quality management, UT has been awarded ISO 9001:2000 certificate for course materials distribution from the International Organization for Standardization (ISO) certification agency in 2006. As of September 2007, UT has been awarded with ISO 9001:2000 certificates for development of learning and examination materials, as well as for the provision of

distance learning services of six ROs. By the end of 2007, it is hoped that ISO certification can be awarded for both academic administration services and for the provision of distance learning services for five additional ROs.

The strategy to use the certification process to establish quality management proved to be effective. Significant improvements can be seen throughout UT. Stronger commitment has been demonstrated by UT top management and staff members. Longterm and short-term strategic plans have been established and reviewed as necessary. Actions have been taken to improve organizational performance including monitoring activities. Necessary resources needed for continuous improvement have been identified and fulfilled by UT to support its operational activities and to ensure effective implementation of its quality management system. Supporting infrastructure such as buildings and better work facilities are provided to ensure that work environment and climate is conducive for delivering quality learning services both at the UT headquarters and the ROs. The management has also attempted to improve staff performance and motivate staff to work more effectively and efficiently, with clear and measurable objectives and targets. Customer satisfaction surveys have been integrated into the system and results are analyzed. New policies and procedures based on data are established wherever needed and used to foster continuous quality improvement.

UT's endeavor to pursue quality management through ISO certifications continues through 2009. The preparation for ISO 9001:2000 in the areas of partnership management and public relations and in the provision of distance learning services of 12 ROs has already begun in 2007. By the end of 2008, thirteen ISO 9001:2000 certificates, one ISO 27001:2000 certificate in learning information system, and one ISO 1801:2000 certificate for work environment health and safety.

#### Conclusion

Universitas Terbuka has utilized QA system as a method and tool to effectively respond to the challenge of quality in ODL. QA is not an effort to create quality, but rather it is a systematic and comprehensive effort to improve quality. QA is not a means to achieve particular target and develop procedures, but rather it is a continuous process of improvement. QA is based on the assumption that quality can be improved continuously. QA is inspired by the business practice, and therefore, it uses the language commonly applied in business, such as customer, service, product, and efficiency. Traditionally, educational institutions consider such an approach as being inappropriate; however, escalating pressures from stakeholders for greater accountability requires ODL institutions to have quality self-assessment. ODL system operates like service organization, in which there are industry-like operations, such as the design, development, production, and distribution of multimedia learning materials.

QA system ensures the quality of distance learning provision for students and stakeholders' interests for quality higher education can be met satisfactorily. The tough competition among distance higher education providers requires UT to work smarter and to assure the quality of its distance learning provision. Quality will ascertain the establishment of UT as one of the leading ODLs in Asia in 2010 and in the world 2020.

#### References

- COL. 1997. Planning and management of distance education, London: Commonwealth of Learning (COL) and International Extension College.
- Daniel, Sir John. 1997. Mega-universities, virtual universities and knowledge media: can we have quantity with quality? In Chew, P. C. et al (ed.). Quality assurance in distance and open learning, pp. 3-13. Institut Teknologi Mara, Malaysia: Proceedings of 11th Annual Conference of AAOU.
- AAOU. 2001. A framework for developing a quality assurance system within a dedicated distance education institution. Unpublished document of Asian Association of Open Universities.
- Frazer, M. 1992. Quality assurance in higher education. In A. Craft (ed.), Quality assurance in higher education: proceedings of an international conference Hong Kong, pp. 9-25. London: The Falmer Press.
- Jackson, P. & Ashton, D. 1993. Implementing quality through BS5750 (ISO 9000). London: Kogan Page
- Kember, D. 2000. Action learning and action research: improving the quality of teaching and learning. London: Kogan Page.
- QAAHE (Quality Assurance Agency for Higher Education). 2001. Guidelines on the quality assurance of distance learning. Available at <a href="http://www.qaa.ac.uk/public/dlg/dlg">http://www.qaa.ac.uk/public/dlg/dlg</a> txt.ht
- Ramanujam, P. R. (2000) Quality and research in distance open learning, *Indian Journal of Open Learning*, 9(1), 63-72.
- UNDP. 2006. Human development report 2006. New York: United Nations Development Program
- UT. 2002. Sistem jaminan kualitas Universitas Terbuka (Quality assurance system of Universitas Terbuka). Jakarta: Universitas Terbuka (UT).
- UT. 2006. Annual report of Rector of Universitas Terbuka 2005. Unpublished document.
- UT. 2007. Annual report of Rector of Universitas Terbuka 2006. Unpublished document

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