International Workshop Agreement

IWA 2

Quality management systems — Guidelines for the application of ISO 9001:2000 in education

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Based on ISO 9001:2000
Second edition, 2000-12-15
Quality management systems — Requirements

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). ISO's technical work is normally carried out through ISO technical committees in which each ISO member body has the right to be represented. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

In order to respond to urgent market requirements, ISO has also introduced the possibility of preparing documents through a workshop mechanism, external to its normal committee processes. These documents are published by ISO as International Workshop Agreements. Proposals to hold such workshops may come from any source and are subject to approval by the ISO Technical Management Board which also designates an ISO member body to assist the proposer in the organization of the workshop. International Workshop Agreements are approved by consensus amongst the individual participants in such workshops. Although it is permissible that competing International Workshop Agreements exist on the same subject, an International Workshop Agreement shall not conflict with an existing ISO or IEC standard.

An International Workshop Agreement is reviewed after three years, under the responsibility of the member body designated by the Technical Management Board, in order to decide whether it will be confirmed for a further three years, transferred to an ISO technical body for revision, or withdrawn. If the International Workshop Agreement is confirmed, it is reviewed again after a further three years, at which time it must be either revised by the relevant ISO technical body or withdrawn.

Attention is drawn to the possibility that some of the elements of this International Workshop Agreement may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Workshop Agreement IWA 2 was approved at a workshop held in Acapulco, Mexico, in October 2002, and hosted by the General Bureau of Standards (DGN), with the support and cooperation of the organizations in charge of coordinating the Mirror Subcommittee for Quality Management Systems within the Mexican ISO Committee, the Mexican Institute for Standardization and Certification (IMNC) and the National Committee for Standardization on Quality Management Systems (COTENNSISCAL). The meeting was facilitated by the Latin-American Institute for Quality (INLAC).

The text which is in italics and not boxed represents the text approved at the workshop. For the benefit of the user, the ISO 9001 requirements are included in boxed text before the comparable clause in this International Workshop Agreement. Information marked “NOTE” is for guidance in understanding or clarification.

The text of ISO 9004 is also provided to allow those users who wish to move beyond the requirements of ISO 9001 to enhance the efficiency of their quality management system in pursuit of continual improvement of performance. The ISO 9004 text is in dashed boxes following the comparable clause.

This corrected version of IWA 2:2003 incorporates a second page to the Supplement, which was omitted by mistake.

Supplement

This proposal was prepared in Mexico during the workshop held in Acapulco, and was created under the leadership of the National Committee for Standardization on Quality Management Systems (COTENNSISCAL) with the participation of the following organizations:

ASECAD de México
Centro de Investigación y Desarrolo de la Formación para el Trabajo (CIDFORT)
Colegio de Calidad Empresarial, S.C.
Consultoría Profesional en Sistemas de Calidad
CAAP
CSC
Grupo Raloy
Instituto de Ciencias, Humanidades y Technologías de Guanajuato (ICYTEG)
Instituto Latinoamericano para la Calidad (INLAC)
Instituto Mexicano de Normalización y Certificación (IMNC)
Instituto Politécnico Nacional (IPN)
— Centro de Estudios Científicos y Tecnológicos No. 7 “Cuauhtémoc”
— Centro de Investigación e Innovación Tecnológica
— División de Metrología, Normas y Calidad Industrial
— Unidad Profesional Interdisciplinaria de Biotecnología
Instituto Tecnológico de Oaxaca
Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM)
Qualitec Internacional, S.A. de C.V.
Secretaría de Educación Pública (SEP)
— Coordinación de Asesores de la Subsecretaría de Educación Superior e Investigación Científica
— Coordinación General de Universidades Tecnológicas
— Unidad Administradora del Proyecto para la Modernización de la Educación Técnica y la Capacitación
Sindicato Nacional de Trabajadores de la Educación
Tecno-Ingeniería Computacional, S.A. de C.V.
Universidad Nacional Autónoma de México, UNAM
— Facultad de Ingeniería
Universidad de Colima
Universidad Tecnológica de Tula Tepeji
Universidad Tecnológica Fidel Velázquez

Delegates and observers from the following countries and organizations participated during the workshop held in Acapulco.

Delegates:

Argentina, Instituto Argentino de Normalización (IRAM)
Australia, Standards Australia International (SAI)
Brazil, Petrobras and DS
Canada, Canadian Center for Management Development
Colombia, Instituto Colombiano de Normalización Técnica y Calidad (ICONTEC)
Denmark, TQM I/S
Germany, DIN
México, COTENNSISCAL, IPN, SEP, INLAC and ITESM

Spain, AENOR
Sweden, RFK AB
United Kingdom, British Standards Institution
United States, DPA Training and INFORM
Venezuela, FONDONORMA

Observers:

Centro de Investigación y Desarrollo de la Formación para el Trabajo (CIDFORT)
Colegio Nacional de Educación Profesional Técnica (CONALEP)
Det Norske Veritas
Instituto Argentino de Normalización (IRAM)
Instituto Chapultepec
Instituto de Ciencias, Humanidades y Tecnologías de Guanajuato (ICYTEG)
Instituto Latinoamericano para la Calidad (INLAC)
Instituto Politécnico Nacional
— ESIME Azcapotzalco
INTERPRO Consultores
Secretaría de Educación del Estado de Tabasco
Secretaría de Educación Pública
— Coordinación General de Universidades Tecnológicas
— Dirección General de Centros de Formación para el Trabajo
— Dirección General de Educación Tecnológica Agropecuaria
— Dirección General de Educación Tecnológica Industrial
— Unidad Administradora del Proyecto para la Modernización de la Educación Técnica y la Capacitación
Colegio de Posgraduados
TESCAP
Universidad ETAC
Universidad Nacional Autónoma de México
— Facultad de Ingeniería
Universidad Tecnológica de Aguascalientes
Universidad Tecnológica de Tula Tepeji
Universidad Tecnológica de Tecámac
Universidad Tecnológica de Torreón

Quality management systems — Guidelines for the application of ISO 9001:2000 in education

Introduction

ISO 9001:2000, Quality management systems — Requirements

0.1 General

The adoption of a quality management system should be a strategic decision of an organization. The design and implementation of an organization's quality management system is influenced by varying needs, particular objectives, the products provided, the processes employed and the size and structure of the organization. It is not the intent of this International Standard to imply uniformity in the structure of quality management systems or uniformity of documentation.

The quality management system requirements specified in this International Standard are complementary to requirements for products. Information marked "NOTE" is for guidance in understanding or clarifying the associated requirement.

This International Standard can be used by internal and external parties, including certification bodies, to assess the organization's ability to meet customer, regulatory and the organization's own requirements.

The quality management principles stated in ISO 9000 and ISO 9004 have been taken into consideration during the development of this International Standard.

0.1 General

The objective of this International Workshop Agreement is to provide guidelines to assist organizations that provide educational products to implement an effective quality management system that meets the requirements of ISO 9001:2000.

NOTE 1 The text of ISO 9004:2000 is provided without comment for those educational organizations that wish to go beyond meeting the requirements of ISO 9001:2000 to enhance the efficiency of their quality management system. It is well known that the cost of implementing an efficient and effective quality management system is a single cost whereas the consequent benefits continue indefinitely. Educational organizations are encouraged to have a good understanding of the ISO 9004:2000 guidelines and the eight quality management system principles when implementing the quality management system that suits their needs.

NOTE 2 To ensure that the overall cost of implementation is properly rewarded by the success of organization-wide continual gain, the implementation should be planned and carried out as a project or programme of projects depending on the size and individual circumstances of the educational organization.

The following general guidance is provided to help educational organizations to relate the concepts in ISO quality management system standards to education practices.

A curriculum can specify what is expected to be learnt and how the learning is to be assessed. However, the curriculum by itself does not ensure that needs and expectations will be met if deficient processes exist in educational organizations. The need to prevent these deficiencies has led to the provision of this International Workshop Agreement to help educational organizations implement a quality management system that is

known to be effective. Continuing assessment of the curriculum and educational processes that support instruction can ensure the effectiveness of the learning process. Internal quality audits provide verification of the fulfilment of requirements, for example, stated claims of achievements

The quality management system should be the simplest one that works well. It need only be comprehensive enough to meet the quality objectives for the educational organization. Quality control is an essential process in a quality management system. Accurate measurement is not easy when assessing human performance, and appraisal is usually conducted during the educational process.

ISO 9001:2000, Quality management systems — Requirements

0.2 Process approach

This International Standard promotes the adoption of a process approach when developing, implementing and improving the effectiveness of a quality management system, to enhance customer satisfaction by meeting customer requirements.

For an organization to function effectively, it has to identify and manage numerous linked activities. An activity using resources, and managed in order to enable the transformation of inputs into outputs, can be considered as a process. Often the output from one process directly forms the input to the next.

The application of a system of processes within an organization, together with the identification and interactions of these processes, and their management, can be referred to as the "process approach".

An advantage of the process approach is the ongoing control that it provides over the linkage between the individual processes within the system of processes, as well as over their combination and interaction.

When used within a quality management system, such an approach emphasizes the importance of

a) understanding and meeting requirements,

b) the need to consider processes in terms of added value,

c) obtaining results of process performance and effectiveness, and

d) continual improvement of processes based on objective measurement.

The model of a process-based quality management system shown in Figure 1 illustrates the process linkages presented in clauses 4 to 8. This illustration shows that customers play a significant role in defining requirements as inputs. Monitoring of customer satisfaction requires the evaluation of information relating to customer perception as to whether the organization has met the customer requirements. The model shown in Figure 1 covers all the requirements of this International Standard, but does not show processes at a detailed level.

NOTE In addition, the methodology known as "Plan-Do-Check-Act" (PDCA) can be applied to all processes. PDCA can be briefly described as follows.

Plan: establish the objectives and processes necessary to deliver results in accordance with customer requirements and the organization's policies.

Do: implement the processes.

Check: monitor and measure processes and product against policies, objectives and requirements for the product and report the results.

Act: take actions to continually improve process performance.

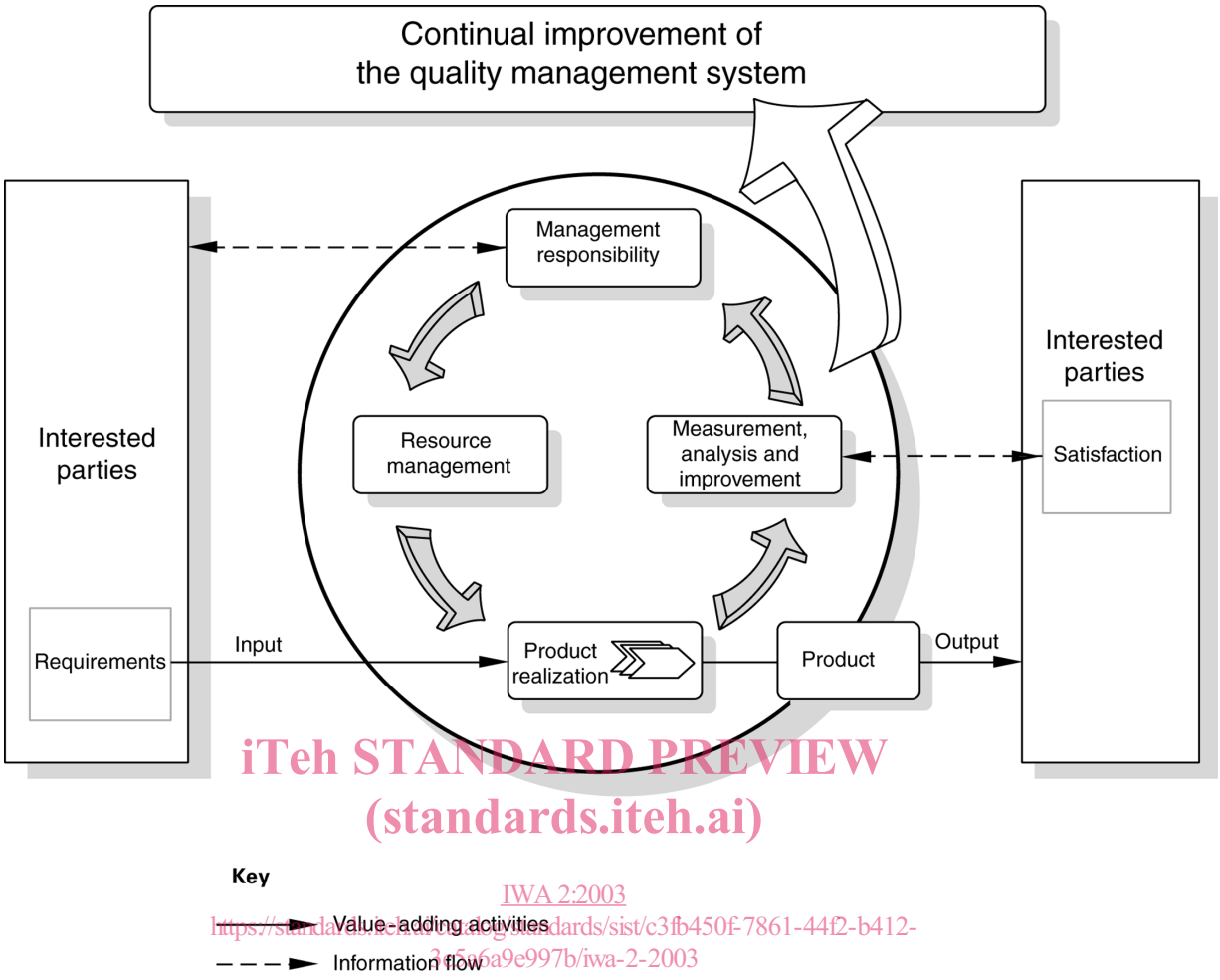

Figure 1 — Model of a process-based quality management system

0.2 Process approach in educational organizations

Educational organizations that provide educational products should define their processes. These processes, which are generally multidisciplinary, include administrative services and other forms of support, as well as those concerning assessment, such as:

- *a strategic process to determine the role of the educational organization in the socio-economic environment;*
- *provision of the teaching capability of the learning providers;*
- *maintenance of the working environment;*
- *developing, reviewing and updating study plans and curricula;*
- *admission and selection of applicants;*
- *student's education follow-up and assessment;*
- *final assessment aimed to grant the student an academic degree, a degree that will be supported by a diploma, acknowledgement, bachelor's degree or certificate of competencies;*
- *support services for the teaching-learning process carried out for the satisfactory accomplishment of their curricula, and support to the student until he/she can succeed in obtaining his/her academic degree or certificate;*
- *internal and external communication; and*
- *measurement of educational processes.*

ISO 9001:2000, Quality management systems — Requirements

0.3 Relationship with ISO 9004

The present editions of ISO 9001 and ISO 9004 have been developed as a consistent pair of quality management system standards which have been designed to complement each other, but can also be used independently. Although the two International Standards have different scopes, they have similar structures in order to assist their application as a consistent pair.

ISO 9001 specifies requirements for a quality management system that can be used for internal application by organizations, or for certification, or for contractual purposes. It focuses on the effectiveness of the quality management system in meeting customer requirements.

ISO 9004 gives guidance on a wider range of objectives of a quality management system than does ISO 9001, particularly for the continual improvement of an organization's overall performance and efficiency, as well as its effectiveness. ISO 9004 is recommended as a guide for organizations whose top management wishes to move beyond the requirements of ISO 9001, in pursuit of continual improvement of performance. However, it is not intended for certification or for contractual purposes.

0.4 Compatibility with other management systems

This International Standard has been aligned with ISO 14001:1996 in order to enhance the compatibility of the two standards for the benefit of the user community.

This International Standard does not include requirements specific to other management systems, such as those particular to environmental management, occupational health and safety management, financial management or risk management. However, this International Standard enables an organization to align or integrate its own quality management system with related management system requirements. It is possible for an organization to adapt its existing management system(s) in order to establish a quality management system that complies with the requirements of this International Standard.

ISO 9001:2000, Quality management systems — Requirements

1 Scope

1.1 General

This International Standard specifies requirements for a quality management system where an organization

a) needs to demonstrate its ability to consistently provide product that meets customer and applicable regulatory requirements, and

b) aims to enhance customer satisfaction through the effective application of the system, including processes for continual improvement of the system and the assurance of conformity to customer and applicable regulatory requirements.

NOTE In this International Standard, the term "product" applies only to the product intended for, or required by, a customer.

1 Scope for educational organizations

This International Workshop Agreement (IWA) provides guidelines for the application of ISO 9001:2000 in educational organizations providing educational products.

These guidelines do not add to, change or modify the requirements of ISO 9001:2000, and are not intended for use in contracts for conformity assessment or for certification.

Each clause of ISO 9001:2000, framed with a continuous solid line, appears before the corresponding text of this IWA. The whole text of ISO 9004:2000, framed with a dashed line, is included to provide a complete vision of the continual performance improvement of organizations.

ISO 9004:2000, Quality management systems — Guidelines for performance improvements

1 Scope

This International Standard provides guidelines beyond the requirements given in ISO 9001 in order to consider both the effectiveness and efficiency of a quality management system, and consequently the potential for improvement of the performance of an organization. When compared to ISO 9001, the objectives of customer satisfaction and product quality are extended to include the satisfaction of interested parties and the performance of the organization.

This International Standard is applicable to the processes of the organization and consequently the quality management principles on which it is based can be deployed throughout the organization. The focus of this International Standard is the achievement of ongoing improvement, measured through the satisfaction of customers and other interested parties.

This International Standard consists of guidance and recommendations and is not intended for certification, regulatory or contractual use, nor as a guide to the implementation of ISO 9001.

ISO 9001:2000, Quality management systems — Requirements

1.2 Application

All requirements of this International Standard are generic and are intended to be applicable to all organizations, regardless of type, size and product provided.

Where any requirement(s) of this International Standard cannot be applied due to the nature of an organization and its product, this can be considered for exclusion.

Where exclusions are made, claims of conformity to this International Standard are not acceptable unless these exclusions are limited to requirements within clause 7, and such exclusions do not affect the organization's ability, or responsibility, to provide product that meets customer and applicable regulatory requirements.

ISO 9001:2000, Quality management systems — Requirements

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 9000:2000, *Quality management systems — Fundamentals and vocabulary*.

ISO 9001:2000, Quality management systems — Requirements

3 Terms and definitions

For the purposes of this International Standard, the terms and definitions given in ISO 9000 apply.

The following terms, used in this edition of ISO 9001 to describe the supply chain, have been changed to reflect the vocabulary currently used:

supplier → **organization** → **customer**

The term "organization" replaces the term "supplier" used in ISO 9001:1994, and refers to the unit to which this International Standard applies. Also, the term "supplier" now replaces the term "subcontractor".

Throughout the text of this International Standard, wherever the term "product" occurs, it can also mean "service".

3 Terms and definitions in educational organizations

For the purposes of this IWA, the terms and definitions given in ISO 9000:2000 and the following apply.

3.1
customer
organization (3.3.2) or person that receives a product (3.4.2)

[ISO 9000:2000]

*EXAMPLE A customer can be a **consumer** (in education, generally a learner), a **client** or **purchaser** (in education, generally a person or body funding the learner who may also be the learner), an **end-user** (in education, generally the person or organization that benefits from the learning achieved by the learner).*

3.2
interested party
person or group having an interest in the performance or success of an organization

[ISO 9000:2000]

*EXAMPLE An interested party can be a **customer** (3.1), parents' association, other related **educational organization** (3.5) or society.*

NOTE A group can comprise an organization, a part thereof, or more than one organization.

3.3
educational process
*process resulting in **educational product** (3.4)*

3.4
educational product
product concerned with education

NOTE An educational product generally involves the provision of a service that includes intellectual software of information and some form of computer software or paper-based hardware assisting the transfer of information and retention for continuing reference.

3.5
educational organization
*organization that provides an **educational product** (3.4)*

3.6
education provider
*person who delivers an **educational product** (3.4) to learners*

NOTE The education provider is referred to by customary titles which vary on national and educational hierarchical grounds including for example, teacher, trainer, lecturer or professor.

ISO 9001:2000, Quality management systems — Requirements

4 Quality management system

4.1 General requirements

The organization shall establish, document, implement and maintain a quality management system and continually improve its effectiveness in accordance with the requirements of this International Standard.

The organization shall

a) identify the processes needed for the quality management system and their application throughout the organization (see 1.2),

b) determine the sequence and interaction of these processes,

c) determine criteria and methods needed to ensure that both the operation and control of these processes are effective,

d) ensure the availability of resources and information necessary to support the operation and monitoring of these processes,

e) monitor, measure and analyse these processes, and

f) implement actions necessary to achieve planned results and continual improvement of these processes.

These processes shall be managed by the organization in accordance with the requirements of this International Standard.

Where an organization chooses to outsource any process that affects product conformity with requirements, the organization shall ensure control over such processes. Control of such outsourced processes shall be identified within the quality management system.

NOTE Processes needed for the quality management system referred to above should include processes for management activities, provision of resources, product realization and measurement.

4 Quality management system

4.1 General requirements in the educational organization

Due to the fundamental character of this clause and the fact that it sets the basis for the rest of ISO 9001, the guidelines are limited to the following:

a) educational organizations should define and manage those processes included in the educational design, educational development, and the educational delivery processes, the procedures for implementation, and the measurement of results;

b) the conditions for the acceptance of the education at the time of delivery; and

c) continual improvement of these processes and provision of resources.

The educational organization should define very clearly the intended "organization" to which the proposed quality management system is to apply. For example, is it to be a department or school within a larger educational organization, an entire educational organization or all the educational organizations in a given government or local government division.

Establishing the intent will help the educational organization to identify who serves as "top management" and the nature of the systems and processes that have to be understood if continual improvement and customer satisfaction are to be achieved.

They will also help to identify what services are delivered, which is essential in the identification and separation of customers and other interested parties.

An instructional quality management system should be understood in terms of the curriculum, a system of learning processes, the organizational structure, responsibilities, processes, and resources that ensure the quality of instruction. This includes most activities of the educational organization's employees or appropriate suppliers. Control of instruction may be exercised during the following processes:

a) instructional needs analysis;

b) instructional design;

c) instructional development;

d) delivery of instruction;

e) instructional evaluation;

f) educational faculty organization development; and

g) operation of libraries, workshops, and laboratories.

ISO 9004:2000, Quality management systems — Guidelines for performance improvements

4 Quality management system

4.1 Managing systems and processes

Leading and operating an organization successfully requires managing it in a systematic and visible manner. Success should result from implementing and maintaining a management system that is designed to continually improve the effectiveness and efficiency of the organization's performance by considering the needs of interested parties. Managing an organization includes quality management, among other management disciplines.

Top management should establish a customer-oriented organization

a) by defining systems and processes that can be clearly understood, managed and improved in effectiveness as well as efficiency, and

b) by ensuring effective and efficient operation and control of processes and the measures and data used to determine satisfactory performance of the organization.

Examples of activities to establish a customer-oriented organization include

— defining and promoting processes that lead to improved organizational performance,

— acquiring and using process data and information on a continuing basis,

— directing progress towards continual improvement, and

— using suitable methods to evaluate process improvement, such as self-assessments and management review.

Examples of self-assessment and continual improvement processes are given in annexes A and B respectively.