# INTERNATIONAL STANDARD

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# Quality management — Guidelines for training

Management de la qualité — Lignes directrices pour la formation

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# Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

International Standard ISO 10015 was prepared by Technical Committee ISO/TC 176, *Quality management and quality assurance*, Subcommittee SC 3, *Supporting technologies*.

Annex A of this International Standard is for information on RD PREVIEW (standards.iteh.ai)

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# Introduction

The Quality management principles underlying the ISO 9000 family of standards (of which the ISO 10000 series form a part) emphasize the importance of human resource management and the need for appropriate training. They recognize that customers are likely to both respect and value an organization's commitment to its human resources and its ability to demonstrate the strategy used to improve the competence of its personnel.

Personnel at all levels should be trained to meet the organization's commitment to supply products of a required quality in a rapidly changing market place where customer requirements and expectations are increasing continuously.

This International Standard provides guidelines to assist organizations and their personnel when addressing issues related to training. It may be applied whenever guidance is required to interpret references to "education" and "training" within the ISO 9000 family of quality assurance and quality management standards. Any references to "training" in this document includes all types of education and training.

An organization's objectives for continual improvement, including the performance of its personnel, might be affected by a number of internal and external factors including changes in markets, technology, innovation, and the requirements of customers and other stakeholders. Such changes may require an organization to analyse its competence-related needs. Figure 1 illustrates how training could be selected as an effective means of addressing these needs.

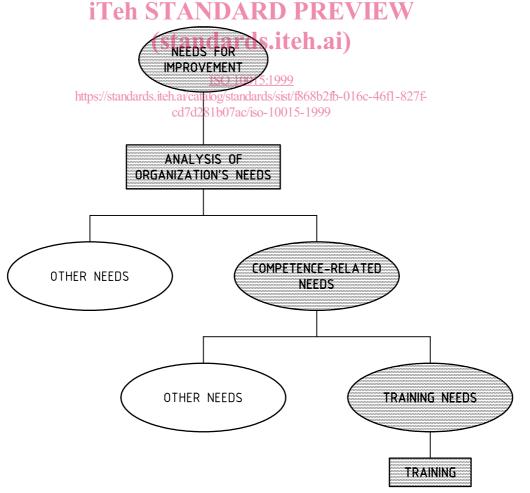


Figure 1 — Improving quality by training

The role of this International Standard is to provide guidance that can help an organization to identify and analyse training needs, design and plan the training, provide for the training, evaluate training outcomes, and monitor and improve the training process in order to achieve its objectives. It emphasizes the contribution of training to continual improvement and is intended to help organizations make their training a more effective and efficient investment.

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# **Quality management — Guidelines for training**

# 1 Scope

These guidelines cover the development, implementation, maintenance, and improvement of strategies and systems for training that affect the quality of the products supplied by an organization.

This International Standard applies to all types of organizations.

It is not intended for use in contracts, regulations, or for certification.

It does not add to, change, or otherwise modify requirements for the ISO 9000 series.

This International Standard is not intended to be used by training providers delivering services to other organizations.

NOTE The main source of reference for training providers should be ISO 9004-2:1991, Quality management and quality system elements — Part 2: Guidelines for services, until superseded by ISO 9004:2000.

Training providers may use this International Standard when addressing the training needs of their own personnel.

### ISO 10015:1999

## 2 Normative reference//standards.iteh.ai/catalog/standards/sist/f868b2fb-016c-46f1-827fcd7d281b07ac/iso-10015-1999

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 this publication 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 8402, Quality management and quality assurance — Vocabulary<sup>1</sup>).

# 3 Terms and definitions

For the purposes of this International Standard, the terms and definitions given in ISO 8402 and the following apply.

#### 3.1

#### competence

application of knowledge, skills, and behaviours in performance

# 3.2

# training

process to provide and develop knowledge, skills and behaviours to meet requirements

<sup>1)</sup> To be revised as ISO 9000:2000.

# 4 Guidelines for training

# 4.1 Training: A four-stage process

## 4.1.1 General

A planned and systematic training process can make an important contribution in helping an organization to improve its capabilities and to meet its quality objectives.

This training process is illustrated in the training cycle diagram shown in Figure 2.

To increase the readability of this International Standard and to distinguish clearly between guidance and use of the process model to describe the guidance, the process model appears in Tables A.1 to A.5 in annex A.

For selecting and implementing training to close the gaps between required and existing competence, management should monitor the following stages:

- a) defining training needs;
- b) designing and planning training;
- c) providing for the training;
- d) evaluating the outcome of training.

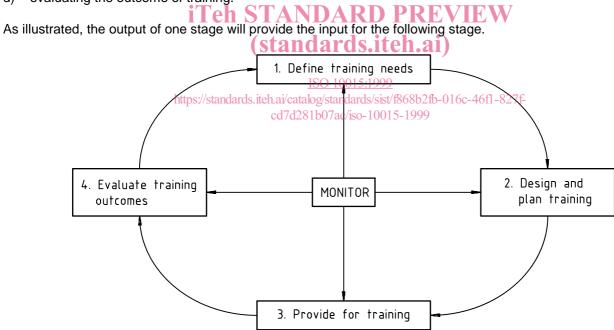


Figure 2 — Training cycle

# 4.1.2 Purchase of training-related products and services

It should be the responsibility of the management to decide if and when the external or internal purchasing and resourcing of products and services related to <u>any of the four stages</u> of the training process, and its monitoring, should occur (see Tables A.1 to A.5).

For example, some organizations might find it beneficial to use external expertise to carry out an analysis of its training needs.

## 4.1.3 Involvement of personnel

Appropriate involvement of the personnel whose competence is being developed, as part of the training process, may result in those personnel feeling a greater sense of ownership of the process, resulting in their assuming more responsibility for ensuring its success.

# 4.2 Defining training needs

## 4.2.1 General

The training process should be initiated after a needs analysis of the organization has been conducted and competence-related issues have been recorded, as depicted in Figure 1 in the Introduction.

The organization should define the competence needed for each task that affects the quality of products, assess the competence of the personnel to perform the task, and develop plans to close any competence gaps that may exist.

The definition should be based on an analysis of present and expected needs of the organization compared with the existing competence of its personnel.

The purpose of this stage should be to:

- a) define the gaps between the existing and required competence;
- b) define the training needed by employees whose existing competence does not match the competence required for the tasks; and
- c) document specified training needs. (standards.iteh.ai)

The analysis of the gaps between existing and required competence should be conducted to determine whether the gaps can be closed by training of whether other actions might be necessary (see Table A.1). cd7d281b07ac/iso-10015-1999

### 4.2.2 Defining the needs of the organization

The organization's quality and training policies, quality management requirements, resource management and process design should be considered when initiating training, as an input to 4.2, to ensure that the required training will be directed toward satisfying the organization's needs.

### 4.2.3 Defining and analysing competence requirements

Competence requirements should be documented. This documentation can be periodically reviewed or as necessary when work assignments are made and performance is assessed.

The definition of an organization's future needs relative to its strategic goals and quality objectives, including the required competence of its personnel, may be derived from a variety of internal and external sources, such as:

- organizational or technological change that affects work processes or impacts on the nature of products supplied by the organization;
- data recorded from past or current training processes;
- the organization's appraisal of the competence of the personnel to perform specified tasks;
- turnover or seasonal fluctuation records involving temporary personnel;
- internal or external certification needed for the performance of specific tasks;

- requests from employees identifying opportunities for personal development which contribute to the organization's objectives;
- the result of process reviews and corrective actions due to customer complaints or reports of nonconformities;
- legislation, regulations, standards and directives affecting the organization, its activities and resources; and
- market research identifying or anticipating new customer requirements.

#### 4.2.4 Reviewing competence

A regular review should be conducted of documents that indicate the competence required for every process and the records that list the competence of every employee.

Methods used for reviewing competence might include the following:

- interviews/questionnaire with employees, supervisors, managers;
- observations;
- group discussions; and
- inputs from subject matter experts.

The review is related to task requirements and task performance. **PREVIEW** 

# 4.2.5 Defining competence gaps (standards.iteh.ai)

A comparison of the existing competencies with <u>Isthose</u> <u>required</u> should be made to define and record the <u>https://standards.iteh.ai/catalog/standards/sist/f868b2fb-016c-46f1-827f-</u>

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#### 4.2.6 Identifying solutions to close the competence gaps

The solutions to close the competence gaps could be found through training or other actions of the organization, such as redesigning processes, recruitment of fully trained personnel, outsourcing, improving other resources, job rotation or modifying work procedures.

### 4.2.7 Defining the specification for training needs

When a training solution is selected to close the competence gaps, training needs should be specified and documented.

The specification for training needs should document the objectives and the expected outcomes of the training. The input to the specification for training needs should be provided by the list of competence requirements found in 4.2.3, the results of previous training, and current competence gaps and requests for corrective action.

This document should become part of the training plan specification and should include a record of the organization's objectives which will be considered as inputs for designing and planning training and for monitoring the training process.

# 4.3 Designing and planning training

### 4.3.1 General

The design and plan stage provides the basis for the training plan specification.

This stage includes:

- a) design and planning of actions which should be taken to address the competence gaps identified in 4.2.5; and
- b) definition of the criteria for evaluating the training outcomes and monitoring the training process (see 4.5, clause 5 and Table A.2).

# 4.3.2 Defining the constraints

Relevant items which constrain the training process should be determined and listed.

These might include:

- regulatory requirements imposed by laws;
- the policy requirements, including those relating to human resources, imposed by the organization;
- financial considerations;
- timing and scheduling requirements;
- the availability, motivation and ability of the individuals to be trained;
- factors such as the availability of in-house resources to perform the training, or the availability of reputable training providers; and iTeh STANDARD PREVIEW
- constraints on any other available resources dards.iteh.ai)

The list of constraints should be used in the selection of training methods (4.3.3) and training provider (4.3.5) and for the development of a training plan specification (4.3.4).

4.3.3 Training methods and criteria for selection

Potential training methods to meet the training needs should be listed. The appropriate form of training will depend

Training methods might include:

— courses and workshops on or off site;

on the listed resources, constraints and objectives.

- apprenticeships;
- on-the-job coaching and counselling;
- self-training; and
- distance learning.

Criteria for selection of the appropriate methods, or combination of methods, should be defined and documented.

These may include:

- date and location;
- facilities;
- cost;