INCITS/ISO/IEC 19796-3:2009[2010]

(ISO/IEC 19796-3:2009, IDT)

American National Standard

Information technology - Learning, education and training - Quality management, assurance and metrics - Part 3: Reference methods and metrics

Developed by

incits
SM

Where **IT** all begins

Approved American National Standard

ANSI

INCITS/ISO/IEC 19796-3:2009[2010]

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

INTERNATIONAL **ISO/IEC**

First edition
2009-02-01

Information technology — Learning, education and training — Quality management, assurance and metrics —

Part 3:
Reference methods and metrics

Technologies de l'information — Apprentissage, éducation et formation — Management, assurance et métrologie de la qualité —

Partie 3: Méthodes de référence et métrologie

Reference number
ISO/IEC 19796-3:2009(E)

© ISO/IEC 2009

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

Contents

Page

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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

ISO/IEC 19796-3 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 36, *Information technology for learning, education and training*.

ISO/IEC 19796 consists of the following parts, under the general title *Information technology — Learning, education and training — Quality management, assurance and metrics*:

— *Part 1: General approach*

— *Part 3: Reference methods and metrics*

The following parts are under preparation:

— *Part 2: Harmonized quality model*

— *Part 4: Best practice and implementation guide* [Technical Report]

— *Part 5: How to use ISO/IEC 19796-1* [Technical Report]

Introduction

Quality in the field of distance education and e-learning has become an issue of increasing importance in academia, institutions, and industry. A variety of approaches have been developed and implemented successfully. Generic standards, such as ISO 9000:2005 and/or ISO 14000 have been used also in the educational community. In addition to generic standards related to quality, there are specific quality guidelines that have been developed and used for e-Learning or distance education (such as the ASTD criteria for e-Learning, the BLA Quality Mark, Quality Platform Learning by D-ELAN, or Quality elements by Sloan-consortium). It has become clear that quality management can contribute to improve the performance of organizations in the field of learning, education, and training (LET).

Numerous approaches to quality management and assurance and their different scopes and objectives lead to confusion within communities that depend on information technologies to support and facilitate learning, education, and training. Therefore, a harmonized quality standard, the ISO/IEC 19796 series, has been developed.

ISO/IEC 19796 has five parts as a series. ISO/IEC 19796-1 is the basic framework for quality development in organizations within the field of learning, education, and training (LET). It serves as a framework to describe, compare, and analyze quality management and quality assurance approaches. In addition to providing a descriptive model that can be used to compare and analyze quality approaches, ISO/IEC 19796-1 identifies the components of a seven-part process model within the lifecycle of information and communication systems for learning, education, and training. As a framework it may be used to compare different quality assurance and quality management processes. This part of ISO/IEC 19796 provides reference methods and metrics used in the lifecycle process. It also provides examples of how methods and metrics can be generically described, compared, and used for specific contexts. For each process in the e-learning lifecycle, a set of potential methods and metrics should be specified. This set of methods and metrics can be used during the development of an individual quality approach that is based on defined quality objectives.

ISO/IEC 19796-1 describes the processes for the e-Learning lifecycle. It is a reference model with a high level of abstraction which has to be adapted to a certain organization and to a certain situation. To facilitate the adaptation procedure, two reference models for quality management and quality assurance are described in this part of ISO/IEC 19796:

— reference model for methods;

— reference model for metrics.

To facilitate the adaptation of ISO/IEC 19796-1, as the first step, this part of ISO/IEC 19796 provides reference methods and metrics used in lifecycle processes with the reference models from ISO/IEC 19796-1. It also provides collections of methods and metrics which are generically described and can be used for specific contexts. For each process in the e-Learning lifecycle, a set of potential methods and metrics should be specified. This set of methods and metrics can be used during the development and definition of an individual quality approach based on certain quality objectives.

ISO/IEC 19796-1 provides a description format and a process framework as the reference framework for the description of quality approaches (RFDQ), for the description and development of quality approaches. The RFDQ framework is only a base for quality development – it does not provide specific methods and metrics for particular quality objectives, and also does not provide instruments or procedures.

ISO Guide 72 Guidelines mainly distinguish three types of management system standards; Type A — management systems requirements standards, Type B — management systems guidelines standards, and Type C — management systems related standards. The consensus is to use *ISO Guide 72 Guidelines for the justification and development of management system standards*. Accordingly, this International Standard is Type C, a management systems related standard, as neither requirements are defined nor guidelines are given.