INTERNATIONAL STANDARD

ISO 29994

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Education and learning services — Requirements for distance learning

Éducation et services de formation — Exigences relatives aux services d'enseignement à distance





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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 232, *Education and learning services*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document is intended to provide specific requirements for distance learning services. The aims of this document are to improve transparency and enhance the credibility of distance learning services, to protect consumers by preventing prejudicial practices and to improve the quality of distance learning services for all interested parties.

The structure of this document reflects a typical sequence of experiences of learners and sponsors in prototypical distance learning services. This document is intended to be used alongside ISO 29993. Distance learning service providers (DLSP) can implement this document and ISO 29993 to ensure the consistent delivery of distance learning services.

Education and learning services — Requirements for distance learning

1 Scope

This document specifies requirements for distance learning services not specified in ISO 29993.

It is applicable to any distance learning services that are addressed to learners themselves as well as to sponsors who are acquiring the services on behalf of the learners.

In cases where the distance learning services are provided by an organization that delivers other methods of learning services, this document only applies to distance learning services.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 29993:2017, Learning services outside formal education — Service requirements

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at http://www.electropedia.org/

3.1

distance learning services

sequence of activities, designed to enable learning, delivered while learners and facilitators are separated by time, space or both

EXAMPLE Correspondence courses, digital learning, online learning, mobile learning.

3.2

distance learning service provider

organization or individual providing *distance learning services* (3.1), including any associates involved in the provision of the distance learning services

3.3

curriculum

course of study prepared by the distance learning service provider (3.2) which describes the aims, content, learning outcomes, learning and teaching methods, the amount of time required and assessment processes

[SOURCE: ISO 29995:2021, 3.6.6¹], modified]

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¹⁾ Under preparation. Stage at the time of publication: ISO/FDIS 29995:2021.

ISO 29994:2021(E)

3.4

evaluation

systematic gathering of information in order to make decisions about possible adjustments to the distance learning service

[SOURCE: ISO 29995:2021, 3.5.2, modified]

3.5

instructional designer

person who crafts content for a learning experience, using systematic methodologies and instructional theory

Note 1 to entry: Instructional designers may work alone or lead teams that include writers, editors, graphic designers, artists, subject matter experts, assessment specialists and other professionals tasked with the work of content and curriculum development. In a small enterprise or institution, a single individual may play the roles of both instructional designer and facilitator.

3.6

learner

person engaged in distance learning

[SOURCE: ISO 29995:2021, 3.2.8, modified]

3.7

learning

acquiring knowledge, behaviour, skills, values, preferences or understanding

[SOURCE: ISO 29995:2021, 3.3.2]

3.8

learning environment

physical or virtual environment in support of a learner

[SOURCE: ISO/IEC 2382-36:2019, 3.3.5]

3.9

technical literacy

ability to use, manage, understand and assess technology

3.10

sponsor

organization or individual that acquires a *distance learning service* (3.1) on behalf of learners, provides financial or other support for them or has a vested interest in the outcome of the learning

EXAMPLE Corporations, government agencies, persons.

[SOURCE: ISO 29995:2021, 3.2.17, modified]

3.11

facilitator

person who works with learners to assist them with *learning* (3.7)

Note 1 to entry: A facilitator is also often referred to as a teacher, a trainer, a coach, a tutor or a mentor.

[SOURCE: ISO 29995:2021, 3.11]

3.12

learner support

assistance provided to help learners with their *learning* (3.7)

Note 1 to entry: Learner support may be provided by administrators, counsellors, technical support staff, facilitators or technology (e.g. artificial intelligence).

4 General information provided by the DLSP

- **4.1** The general information provided by the DLSP shall meet the general requirements as detailed in ISO 29993:2017, Clause 4, except ISO 29993:2017, 4.2 a).
- **4.2** The DLSP shall provide information on learner support and learning environment.

5 Proposal development

- **5.1** The proposal development shall meet the general requirements as detailed in ISO 29993:2017, Clause 5.
- **5.2** When learning takes place via a technology interface, DLSP shall provide the following:
- technical prerequisites to access and fully use the interface;
- technical support policy.
- **5.3** The DLSP should provide a trial period.

6 Information provided prior to the acquisition of the distance learning services

- **6.1** The information provided prior to the acquisition of the distance learning services shall meet the general requirements as detailed in ISO 29993:2017, Clause 6.
- **6.2** The DLSP shall provide a personal data protection policy.
- **6.3** The DLSP shall provide information regarding its learner support, including:
- the type of learner support (synchronous, asynchronous or both);
- how to access learner support (e.g. phone numbers, email addresses);
- when learner support is available (e.g. days and hours of availability);
- a learner-support response policy (e.g. estimated response times).
- **6.4** The DLSP shall specify minimum requirements for the environment where the distance learning takes place.

7 Needs analysis

- **7.1** The needs analysis shall meet the general requirements as detailed in ISO 29993:2017, Clause 7, except for ISO 29993:2017, 7.2.
- **7.2** Prior to delivering distance learning services, the learning needs should be analysed by qualified staff, technology-based tools or both to provide learning services within the specified scope.
- **7.3** When learning takes place via a technology interface, DLSP needs analysis can include:
- the learner's technological environment: what tools and media the learner has access to;
- the learner's technical literacy.

8 Design of the distance learning services

- **8.1** The design of the distance learning services shall meet the general requirements as detailed in ISO 29993:2017, Clause 8.
- **8.2** The distance learning service shall, where applicable:
- support personalization and adaptive learning pathways through the curriculum;
- enable active participation by learners (e.g. via participation in collaborative learning environments, participation in synchronous conversations, adherence to study plans);
- provide the design which is created by instructional designers with competences in instructional design theories and instructional design methodologies;
- regularly provide learners, facilitators, learner-support staff and learner-support tools with actionable data regarding learner progress, including guidance for how to further support the learning (e.g. scores on summative assessments, responses to free-response items, amount of time spent in the course).
- **8.3** The DLSP shall ensure that instructional designers construct a learning service appropriate to the goals and needs of targeted learners:
- by specifying the learning modes, media and other interactions (e.g. video, virtual reality, text) that
 are appropriate to the learning activity);
- by providing accessibility for individuals with special needs who require special accommodations.

NOTE Special needs include disability and impairment but also giftedness.

9 Information about the distance learning services for enrolled learners or their sponsors

- **9.1** The information about the learning services for enrolled learners or their sponsors shall meet the general requirements as detailed in ISO 29993:2017, Clause 9.
- **9.2** In the case of technology-supported distance learning services, the information provided shall detail technical requirements, such as necessary equipment, internet access and bandwidth, and minimum computer skills.

10 Service delivery

10.1 Technology-supported distance learning

- **10.1.1** Technology-supported distance learning shall provide teaching and learning content to facilitators and learners and collect, store and provide data on learner activity, learning path and achievement.
- **10.1.2** Technology-supported distance learning shall provide easy and secure access for learners and facilitators.
- **10.1.3** Technology-supported distance learning shall facilitate and ensure contact with facilitators and, when appropriate, external experts, professionals or peers.

- **10.1.4** Technology-supported distance learning providers shall ensure their own network security, data security and integrity via technical measures that prevent information leakage, system damage and other threats.
- **10.1.5** Technology-supported distance learning providers shall maintain their technology to ensure reliability and stability. Technical performance and efficiency should be monitored and opportunities for performance improvement identified and acted upon. Backwards compatibility should be ensured as much as possible.

10.2 Learning materials available via distance learning

- **10.2.1** Learning materials shall meet the requirements specified in ISO 29993:2017, 8.4 and 10.2.2.
- **10.2.2** Technology-based learning materials shall:
- be interactive when appropriate, easily navigated and well organized;
- promote learner participation and engagement;
- include remediation and self-assessment opportunities;
- be selected after considering the possible health effects on learners;
- be selected after considering each individual's special needs, e.g. disabilities, impairment or giftedness
- **10.2.3** The DLSP shall ensure that any copyrighted materials take into account applicable regulations.

10.3 Learner support

The DLSP shall provide:

- support according to its support policies when learners encounter issues, whether these are technical, administrative or learning-related;
- means for communication and feedback that are accessible to learners, facilitators and those providing learning support;
- necessary information and support to learners, facilitators and those providing learner support for optimal use of distance learning;
- feedback to learners individually or in groups based on relevant data;
- appropriate support in the consideration of learners' special needs, i.e. disabilities, impairment or giftedness.

Support should be delivered within a reasonable timeframe whether it is provided by a human being or via technology.

The DLSP shall adapt the learning activities according to relevant data.

11 Personnel

11.1 Facilitators

11.1.1 The facilitators shall meet the requirements specified in ISO 29993:2017, 10.1.1, 10.1.3 and Clause 11.

11.1.2 The DLSP shall ensure that facilitators:

- understand the needs and challenges faced by distance learners and are equipped to provide appropriate support;
- have technical competency as defined by the DLSP appropriate to using the technology available in the distance learning environment.

11.2 Learner-support staff

- **11.2.1** Learner-support staff shall meet the requirements specified in ISO 29993:2017, 10.1.2.
- **11.2.2** The DLSP shall ensure that learner-support staff:
- understand the needs and challenges faced by distance learners and provide appropriate support;
- have technical competency as defined by the DLSP appropriate to using the technology available in the distance learning environment.

12 Assessment of learning

- **12.1** Assessment of learning shall meet the general requirements as detailed in ISO 29993:2017, Clause 12. ISO 29992 can be consulted as appropriate.
- **12.2** Where applicable, technology-based tools should be used:
- in the monitoring of the process and progress of learners through technology-supported distance learning programmes;
- in summative or formative assessments administered along the course of learning.

13 Monitoring and evaluation of the distance learning services

- **13.1** The evaluation of the distance learning services shall meet the requirements detailed in ISO 29993:2017, Clause 13.
- **13.2** Where applicable, technology-based tools should be used:
- in the monitoring of the delivery of the distance learning service through technology-supported distance learning programmes;
- to conduct evaluations.

14 Payment

Payment for the distance learning service shall meet the requirements detailed in ISO 29993:2017, Clause 14.

Bibliography

- [1] ISO/IEC 2382-36:2019, Information technology Vocabulary Part 36: Learning, education and training
- [2] ISO 21001, Educational organizations Management systems for educational organizations Requirements with guidance for use
- [3] ISO/TR 22411, Ergonomics data for use in the application of ISO/IEC Guide 71:2014
- [4] ISO 29990, Learning services for non-formal education and training Basic requirements for service providers²)
- [5] ISO 29991, Language-learning services Requirements
- [6] ISO 29992, Assessment of outcomes of learning services Guidance
- [7] ISO 29995:2021, Learning services Vocabulary³⁾

²⁾ Cancelled and replaced by ISO 21001 and ISO 29993.

³⁾ Under preparation. Stage at the time of publication: ISO/FDIS 29995:2021.

