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## Information technology — Learning, education and training — Metadata for learning resources —

### Part 5: Educational elements

*Technologies de l'information — Apprentissage, éducation et  
formation — Métadonnées pour ressources d'apprentissage —*

*Partie 5: Éléments pédagogiques*

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Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

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## 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 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 technologies, 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 prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated the 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 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 19788-5 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 36, *Information technology for learning, education and training*.

ISO/IEC 19788 consists of the following parts, under the general title *Information technology — Learning, education and training — Metadata for learning resources*:

- *Part 1: Framework*
- *Part 2: Dublin Core elements*
- *Part 3: Basic application profile*
- *Part 5: Educational elements*

The following parts are under preparation:

- *Part 4: Technical elements*
- *Part 6: Availability, distribution, and intellectual property elements*

*Bindings, Data elements for MLR records, and Data elements for Persons* will form the subjects of future Parts 7, 8, and 9, respectively.

## 0 Introduction

### 0.1 Overall purpose of ISO/IEC 19788

The primary purpose of ISO/IEC 19788 is to facilitate: (1) the description of a learning resource by providing a standards-based approach to the identification and specification of the metadata elements required to describe a learning resource, e.g. as a metadata learning resource (MLR) record; and (2) the search, discovery, acquisition, evaluation, and use of learning resources, for instance by learners, instructors or automated software processes. The interoperability of these functions can be achieved through harvesting or federated search processes, among other technologies and solutions. ISO/IEC 19788 is based on identified user requirements.

ISO/IEC 19788 is modularly structured with all subsequent parts corresponding to a specified set of user requirements for the identification and specification of metadata elements having a particular focus and intended use in the description of a learning resource. This includes categories of metadata elements focused on technical perspectives, pedagogical aspects, availability and intellectual property aspects, bindings, etc.

### 0.2 Purpose and overview of ISO/IEC 19788-5

Educational elements defined in this part of ISO/IEC 19788 provide a means to describe learning resources related to their use in learning activities, their relation to curricula or programs of teaching, their relation to specific target groups, etc.

This part of ISO/IEC 19788 provides a set of data elements to describe the educational use of learning resources. In the Information Technology for Learning Education and Training (ITLET) context, resources are often used to attain a specific educational outcome that can be described in some form of educational framework, for example as part of a curriculum, lesson plan, study program, etc. Information about a resource may include a curriculum topic, often associated with a specific educational level, and sometimes with a related description of a teaching method. Moreover, the achievement of the educational outcome can also be measured or ascertained through some form of assessment.

The data elements defined in this part of ISO/IEC 19788 can be used in combination with elements from other parts of ISO/IEC 19788, and/or in combination with elements from other standards, such as ISO 15836:2009 [5], IEEE 1484.12.1-2002 [3] or other metadata schemas. Accordingly, a great number of refinements of the data elements defined in this part of ISO/IEC 19788 are under the responsibility of communities.