PD ISO/IEC TS 20748-4:2019

BSI Standards Publication

Information technology for learning, education and training — Learning analytics interoperability

Part 4: Privacy and data protection policies

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Full document details: PD ISO/IEC TS 20748-4:2019

National foreword

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The UK participation in its preparation was entrusted to Technical Committee IST/43, Information technology for learning, education and training.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Published by BSI Standards Limited 2019

ISBN 978 0 539 06540 4

ICS 03.100.30; 03.180; 35.240.90

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This Published Document was published under the authority of the Standards Policy and Strategy Committee on 30 September 2019.

Amendments/corrigenda issued since publication

Date	Text affected

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TECHNICAL SPECIFICATION

ISO/IEC TS 20748-4

First edition
2019-09

Information technology for learning, education and training — Learning analytics interoperability —

Part 4: Privacy and data protection policies

Reference number
ISO/IEC TS 20748-4:2019(E)

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Published in Switzerland

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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 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.

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 document 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 Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 36, *Information technology for learning, education and training*.

A list of all parts in the ISO/IEC 20748 series can be found on the ISO website.

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.

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Introduction

The ISO/IEC 20748 series clarifies and regularizes the behaviour of components related to learning analytics interoperability. Privacy and data protection are identified as important cross-cutting requirements impacting all sub-processes of learning analytics (LA). Even if privacy and data protection are regulated by law in some jurisdictions, there is a need to specify privacy requirements as part of this series to establish principles that can influence design and operation of learning analytics systems.

The concepts of privacy and data protection are used differently around the world. In this document, which is designed to be used in an educational setting, 'privacy and data protection' are used as one concept to capture both the social and contextual aspects of privacy and the more technical and managerial aspects of data protection for learning, education and teaching (LET). Privacy and data protection requirements for learning analytics can be derived from multiple sources, both written and non-written, including educational policy frameworks, ICT infrastructure principles, international privacy frameworks (e.g., OECD, APEC, European Union), trade agreements, national legal frameworks, ethical principles observed in LET, etc. These requirements are often expressed as high level principles that different constituencies could agree upon. This document develops detailed privacy and data protection attributes pertaining to the learning analytics process cycle (described in ISO/IEC TR 20748-1). This document enables the development of LA privacy and data protection attribute specifications, which detail how information exchange should be performed to fulfil the aims of LA operations without compromising privacy and data protection of the individual.

This document is intended to inform system developers in designing LA systems and processes supporting inclusive privacy and data protection policies. The primary beneficiaries of privacy and data protection policies are the individuals who share their PII, in this case the students (and their parents or guardians), teachers and other actors who take part in learning, education and training. Educational organizations and third party providers are also target user groups.

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Part 4: Privacy and data protection policies

1 Scope

This document specifies privacy and data protection requirements and attributes to inform design of learning analytics systems and learning analytics practices in schools, universities, workplace learning and blended learning settings.

2 Normative references

There are no normative references in this document.

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:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
accountability
principle that individuals, organizations, and the community are responsible for their actions and may be required to explain them to others

[SOURCE: ISO/TS 14441:2013, 3.1, modified — Note 1 to entry has been deleted]

3.2
anonymization
process by which personally identifiable information (PII) is irreversibly altered in such a way that a PII principal can no longer be identified directly or indirectly, either by the PII controller alone or in collaboration with any other party

[SOURCE: ISO/IEC 29100:2011, 2.2]

3.3
consent
process that provides the data subject (learner, teacher, instructor, or other natural person participating in LET) with explanations that will help that data subject in making educated decisions about whether to begin or continue participating in data collection, use or disclosure of personally identifiable information (PII) (3.9)

Note 1 to entry: Consent is an ongoing, interactive process over the lifetime of the data rather than a one-time information session.

Note 2 to entry: For the collection, use or disclosure of PII for individuals who are not of legal age or cannot consent for other reasons, depending on the nature of the data, additional consent requirements may apply, e.g., permission from a responsible adult or guardian.

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