



BSI Standards Publication

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

Part 4: Privacy and data protection policies

National foreword

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**Part 4:
Privacy and data protection policies**



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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Abbreviated terms	3
5 Privacy and data protection requirements	4
5.1 General	4
5.2 The concept of privacy and data protection in LET	4
5.3 Privacy and data protection issues related to learning analytics	6
5.4 Privacy framework requirements	7
6 Learning analytics privacy and data protection attributes	8
7 LA privacy and data protection attribute specifications	11
7.1 General	11
7.2 Specification of required information on core privacy and data protection characteristics of LA system	11
7.2.1 Core LA privacy and data protection requirements	11
7.2.2 Institutional code of practice for use of LA	12
7.2.3 Information collection principles for LA	13
7.2.4 Information processing principles	13
7.2.5 Information dissemination principles for LA	15
7.3 Principles and data requirements for consent to share data for learning analytics	15
7.3.1 General requirements	15
7.3.2 Timing of consent	16
7.3.3 Consent frameworks and types of consent	17
7.3.4 Minimum data requirements for documentation of consent	17
7.4 Accountability and governance related to privacy and data protection for LA	18
Bibliography	19

Foreword

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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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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.

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.

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

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.