

DRAFT FOR DEVELOPMENT

UK lifelong learner information profile (UKLeaP)

Part 1: Guide

ICS 03.180 ; 35.020

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It is being issued in the Draft for Development series of publications and is of a provisional nature so that information and experience of its practical application can be obtained.

A review of this Draft for Development will be carried out not later than 2 years after its publication.

Notification of the start of the review period, with a request for the submission of comments from users of this Draft for Development, will be made in an announcement in the appropriate issue of Update Standards.

According to the replies received, the responsible BSI Committee will judge whether the Draft for Development can be converted into a British Standard or what other action should be taken.

Observations which it is felt should receive attention before the official call for comments will be welcomed.

These should be sent to the Secretary of BSI Technical Committee IST/43 at British Standards House, 389 Chiswick High Road, London W4 4AL.

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Foreword

Publishing information

This British Standards Draft for Development was published by BSI and came into effect on 1 February 2006. It was prepared by 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.

Information about this document

The draft for development is issued in three parts:

- *Part 1: UK Lifelong Learner Information Profile (UKLeaP) — Guide.*
- *Part 2: Representation and terminology in implementing the UK Lifelong Learner Information Profile (UKLeaP) – Code of practice.*
- *Part 3: UK Lifelong Learner Information Profile (UKLeaP) – Specification.*

Further details are to be found in the Introduction.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 23 and a back cover.

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Introduction

Within the United Kingdom and Europe there has been widespread use of ICT by organizations to develop records of learners and their learning. A priority for each of the governments within the UK is to join up the separate records about learners held by separate organizations in order to create lifelong learner records to form a lifelong learner profile.

DD 8788 is intended to be used to facilitate the exchange of learner information among learning management systems, human resource systems, student information systems, enterprise e-learning systems, knowledge management systems, Curriculum Vitae (CV)/résumé repositories, and other systems used in the learning process. In this Draft for Development such systems are referred to as “learner information systems” regardless of any other functionality they possess or roles they fulfil.

The activities DD 8788 is intended to support and enable include:

- recording and managing learning-related history, goals, and accomplishments;
- engaging a learner in a learning experience;
- discovering learning opportunities for learners;
- developing lifelong learner profiles.

DD 8788 is intended for practitioners who establish and maintain records of learning and profiles of learners (including, but not limited to):

- those who develop and implement e-learning systems, especially systems supporting the personal and educational development of learners and transitions between different periods of learning, including work based learning and training;
- those who develop and implement e-learning content;
- managers, HR professionals, employers, government departments, vendors and developers of administrative and record systems and managed learning environments.

The three separately published Parts of DD 8788 have different purposes and degrees

Part 1: UK Lifelong Learner Information Profile (UKLeaP) — Guide, contains guidance material which explains the relevance of UKLeaP, relates it to wider issues, and sets Parts 2 and 3 of the standard in context. It is primarily for use by decision-makers, who do not necessarily have a fluent understanding of the technicalities of software systems, and who, for example, are:

- responsible for the procurement or development of software which processes information about learners;

- considering whether or not to adopt or apply UKLeaP in their business or organization.

Part 1 references Parts 2 and 3, but it can be used as a stand-alone document by people who are not conversant technically with the contents of Parts 2 and 3. It might also be of general interest to the developers, programmers, and analysts who are the intended users of Parts 2 and 3.

Part 2: Representation and terminology in implementing the UK Lifelong Learner Information Profile (UKLeaP) – Code of practice, is for use by programmers, analysts and others involved in designing, specifying, and implementing records and systems that are to conform to Part 3. Part 2 is closely dependent on Part 3, and references it extensively. It contains:

- recommendations about how to apply Part 3;
- informative annexes concerning the practical application of Part 3, and the relationship between UKLeaP and specifications issued by the IMS Global Consortium, including the IMS LIP 1.0 specification upon which DD 8788 is based.

Part 3: UK Lifelong Learner Information Profile (UKLeaP) – Specification, is primarily for use by programmers who create systems for processing information about learners, and by developers who define the detailed structure of records about learners. It contains:

- the detailed structures, data definitions, and vocabularies against which conformity to the specification can be proven;
- XML schemas for use by developers who choose to represent a learner record using XML.

Other relevant international and national frameworks and emerging standards pertaining to metadata and interoperability include:

- ISO standards, in particular those produced by SC36;
- industry standards and specifications such as those issued by the Institute of Electrical and Electronics Engineers (IEEE), or the Dublin Core Metadata Initiative (DCMI);
- relevant CEN Workshop Agreements;
- public sector standards and specifications, such as the e-Government Metadata Standard (e-GMS) [1] embraced within the UK Government's e-Government Interoperability Framework (e-GIF) [2].

1 Scope

This Draft for Development provides general information about the DD 8788-3 (UKLeaP) specification to help decision makers to develop, select or implement software making use of learner information. It provides those responsible for managing development and implementation of such software with guidance on how to make effective use of DD 8788-2.

This guide identifies how DD 8788-3 can be used to support simple implementations and how these may be further developed to meet more complex needs, such as the emerging need for lifelong learner records, referring to DD 8788-2.

NOTE 1 This guide takes specific account of the need to ensure that initial implementations form an effective basis for meeting long term needs.

This guide provides contextual information and recommendations for how to deploy DD 8788-2 and DD 8788-3, including the circumstances when each will be most relevant.

DD 8788-1 covers:

- the means by which learner information can be packaged in order to be exchanged with disparate systems using DD 8788-3;
- the flexible use of DD 8788-2 to support the development of both simple and complex learner information packages;
- the extensibility offered by the specification;
- the use of bindings;
- the policy and business cases for the use of the specification.

NOTE 2 DD 8788-3 specifies the information model to provide a normative structure which learner information packages can follow. The XML bindings used in the examples throughout this standard are not part of the specification, are not normative and do not exclude the use of other bindings, such as a web services binding, which may be best adapted to some implementations.

DD 8788-1 does not address:

- the structure of the server system providing learner information;
- the processing of learner information, other than for exchange;
- possible and probable future developments such as web services;
- accessibility issues;
- vocabulary issues, beyond those required for initial implementations.

NOTE 3 Although future developments are not explicitly addressed in this guide, the specification in DD 8788-3 is expressed in a way which is intended to facilitate the incorporation of likely developments, such as implementation within a web services architecture, into the specification and therefore into implementations of the specification. DD 8788-2, A.2 reviews current IMS developments.

NOTE 4 DD 8788-2 and DD 8788-3 express structures using the conventions provided by UML [3] since these same conventions will be used by the other specifications with which this standard will interoperate to support complex learner information packages, such as are required for e-portfolio. This also facilitates the development of a web services binding for the specification. This does not imply that users of DD 8788 are required to follow UML conventions.

NOTE 5 DD 8788-2, Annex E provides information and a simple code of practice to support initial implementations. The same controlled vocabularies required to make effective use of the specification will often also be used by other standards and specifications. This issue is not addressed by DD 8788.

2 Terms and definitions

For the purposes of this Draft for Development, the following terms and definitions apply.

2.1 accessibility

extent to which the functionality of a system can be accessed by people from across the range of differing abilities characteristic of the population as a whole

NOTE In the context of DD 8788 this applies particularly to e-learning systems.

2.2 application profile

schemas consisting of data elements drawn from one or more namespaces, optimized for a particular application

NOTE 1 The purpose of an application profile is to adapt or combine existing schemas into a package that is tailored to the functional requirements of a particular application, while retaining interoperability with the original base schemas.

NOTE 2 Application profiles can have application-specific constraints such as the use of specific controlled vocabularies.

2.3 binding

formal method of representing a metadata record using a particular technology

2.4 competency

specific, identifiable, definable, and measurable knowledge, skill, ability and/or other activity-related characteristic (e.g. attitude, behaviour, physical ability) which a person can possess and which is necessary for, or material to, the performance of an activity within a specific context

2.5 document type definition (DTD)

formal definition of the structure of a document, such as an XML document

NOTE The function of a DTD is now commonly satisfied by an XML schema.

2.6**Diploma Supplement**

set of data agreed by the European Commission providing details of a learner who has completed the First Cycle of Higher Education (undergraduate programmes of three or more years) or Second Cycle (taught postgraduate programmes), in particular the units of study completed by the learner

NOTE The Diploma Supplement [4] contains all the information provided for the HE Transcript and some additional information and is to be offered to all students in England on completion of their programme from 2005.

2.7**e-learning**

learning which takes place through exchange between a combination of learning resources, tasks, and support-systems (human or otherwise) where the exchange is mediated through information and communication technologies

2.8**HE Transcript**

details of a learner, and the units of study on which a learner is enrolled, with any results, where the learner is registered on, or has completed, a programme of study of higher education

NOTE 1 The minimum set of data that should appear on an HE Transcript is agreed by the national bodies representing higher education in the UK [5]. HE Transcripts are not generally provided for Research Postgraduates.

NOTE 2 The HE Transcript can be issued before completion of the programme, but from 2005 students completing a programme of study will generally receive a Diploma Supplement.

2.9**learner**

any individual person; but especially, any person consciously and voluntarily engaged in learning or the management of their own learning

2.10**lifelong learning**

learning seen as a continuing set of processes extending throughout a person's life, and not bounded by any particular context

2.11**lifelong learner profile**

record of information about a particular individual typically made up of personal learner information and a competency/skill map

NOTE A lifelong learner profile can contain two parts:

- 1) records about learners that are created and maintained by an organization;
- 2) records that learners develop and maintain about themselves.