







DELIVERABLE

Project Acronym: LINKED HERITAGE

Grant Agreement number: 270905

Project Title: Coordination of standard and technologies for the

enrichment of Europeana

D 7.4 Virtual Learning Environment

Revision: 2.0

Authors:

Antonella Zane (UNIPD) Elena Bianchi (UNIPD)

Contributors:

Cristiana Bettella (UNIPD) Lisa Dainese (UNIPD) Gianluca Drago (UNIPD)

Reviewers:

Ciaran Clissmann (PL) LajosVonderviszt (NSL)

Project co-funded by the European Commission within the ICT Policy Support Programme					
	Dissemination Level				
Р	Public	Х			
С	Confidential, only for members of the consortium and the Commission Services				



Revision History

Revision	Date	Author	Organisation	Description
0.1	22/3/2013	Antonella Zane, Elena Bianchi	UNIPD	First draft
0.2	23/03/2013	Ciaran Clissmann Lajos Vonderviszt,	PL NSL	Peer review
0.3	02/04/2013	Antonella Zane, Elena Bianchi	UNIPD	Second draft after peer review by Ciaran Clissmann and Lajos Vonderviszt
0.4	04/04/2013	Antonella Zane, Elena Bianchi	UNIPD	Third draft after review by Ciaran Clissman
0.5	05/04/2013	Antonella Zane, Elena Bianchi	UNIPD	Final version
1.0	07/04/2013	Claudio Prandoni	PROMOTER	Formal check
1.1	13/09/2013	Antonella Zane, Elena Bianchi	UNIPD	First draft of the final version
1.2	26/09/2013	Antonella Zane, Elena Bianchi	UNIPD	Second draft of the final version after peer review by Ciaran Clissmann and Lajos Vonderviszt
1.3	27/09/2013	Antonella Zane, Elena Bianchi	UNIPD	Final version
2.0	30/09/2013	Claudio Prandoni	PROMOTER	Formal check

Statement of originality:

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.



TABLE OF CONTENTS

E	XECUTIV	VE SUMMARY	4
1	INTE	RODUCTION: WHY E-LEARNING	5
	1.1	EU STRATEGY	5
	1.2	THE LINKED HERITAGE TRAINING PROGRAMME	5
2	THE	VIRTUAL LEARNING ENVIRONMENT	7
	2.1	What is a Virtual learning environment?	7
	2.2	Moodle	7
	2.3	THE UNIVERSITY OF PADOVA AND MOODLE	9
	2.3.	1 Why University of Padova chose Moodle as a VLE	12
	2.4	LINKED HERITAGE ON MOODLE	13
	2.4.	1 Which e-learning model?	16
	2.5	RELEVANT TECHNICAL FEATURES OF THE LINKED HERITAGE COURSEWARE	17
	2.5.	1 Access to the LH course on Moodle	19
	2.5.2	2 Linked Heritage course user roles	20
	2.5.	3 User interfaces for different roles	20
	2.5.4	4 The Linked Heritage courseware structure	23
	2.5.	5 The Learning package: relevant Moodle tools used	26
	2.5.0	6 Other resources and services	26
	2.6	ACTIVITIES MONITORING AND STATISTICS	27
	2.6.	1 Moodle Reports	27
	2.6.2	2 Web server log analyser	31
	2.7	PARTICIPANTS' FEEDBACK ANALYSIS	32
3	CON	NCLUSIONS AND FUTURE STEPS	34
4	BIRI	LIOGRAPHY	35
А	NNEX 1	L: THE LINKED HERITAGE VLE IN PRINTABLE PDF FILES	36









EXECUTIVE SUMMARY

This document is the **final version of the Deliverable D7.4**. It integrates and substitutes the D7.4 intermediate version released on month 24 as scheduled by the Linked Heritage Document of Work (DOW).

D7.4 includes a description of the Virtual Learning Environment (VLE) developed by the University of Padova (UNIPD) in collaboration with the Linked Heritage e-learning Working Group. The VLE is fully appreciable on the web at https://elearning.unipd.it/cab/course/view.php?id=4. Furthermore, it is also available in printable PDF files in Annex I.

This deliverable focuses on the web platform which hosts the training programme. It **is complementary to D7.3 Training materials**, which is focused on the *content* of the LH comprehensive programme. We invite the reader to read both the documents in order to have the overall picture of the activities carried out and the results obtained in the WP7 Task 7.2 - Training.

WP7 Task 7.2-Training complements Task 7.1-Dissemination, and builds on the results and outputs of all the other Work Packages:

1. WP2: Linking Cultural Heritage information

2. WP3: Terminology

3. WP4: Public Private Partnership

4. WP5: Technical integration

5. WP6: Coordination of content

This task T7.2 (and the deliverables D7.3 and D7.4) elaborates and is strictly connected to the outputs of all the other Linked Heritage Work Packages. In order that these deliverables fully reflect the work across the project, their final versions are submitted on Month 30, and not on month 24 as planned by DOW as if it was agreed upon between the Linked Heritage project technical coordinator and the EU Project officer.

The present Deliverable describes the approach adopted by the LH team to deliver Training content and sessions to the users, as stated in the Description of Work-Annex 1 "In addition, users will be able to perform training sessions also through a Virtual Learning Environment developed specifically for this project by means of open source tools (i.e. Moodle, Sakai)."

The deliverable is structured as follows:

- Chapter 1 provides an introduction to the role of e-learning and to the Linked Heritage training programme
- Chapter 2 presents the Linked Heritage VLE running on Moodle v.2.3.
- Chapter 3 summarises the main output of the Training task, the next steps and our plans for VLE sustainability.



1 INTRODUCTION: WHY E-LEARNING

1.1 EU STRATEGY

The introduction of e-learning in education and training represents a strategic goal for the EU, as it plays a key role in creating knowledge, innovative learning and content services.

Since the adoption of the Lisbon Strategy in 2000, the EU has recognised that "knowledge, and the innovation it sparks, are the EU's most valuable assets, particularly in light of increasing global competition."

The strategic framework for European cooperation in education and training ("ET 2020") recognises that high-quality pre-primary, primary, secondary, higher and vocational education and training are fundamental to Europe's success and that "lifelong learning needs to be a priority - it is the key to employment, economic success and allowing people to participate fully in society".

The activities related to the above-cited policies are synergistic with other actions involving all levels of education: "promoting multilingualism, innovation, creativity and adoption of ICT (Information and Communication Technology)"¹.

Moreover, the European Commission has funded important projects aiming to develop and share open educational resources (Learning objects), e.g. CELEBRATE², SLOOP³, SLOOP2desc⁴, Open Discovery Space⁵ through specific repositories.

Special attention is also paid to **lifelong learning** for professionals and learners that change job over their lifetimes, moving towards different levels of qualifications, as is illustrated in the European Qualification Framework for Lifelong Learning⁶.

1.2 THE LINKED HERITAGE TRAINING PROGRAMME

Aligned with the EU policy on e-learning education and training, Linked Heritage included in its scope the development of an **educational training programme** on a virtual learning environment, or **VLE.** This takes advantage of the expertise and technical capacity of University of Padova on distance learning online courses to leverage the research of the project for educational purposes, and also to build capacity in the community of common interest which has coalesced around the project.

Due to this competence and experience, University of Padova Centre for Libraries (CAB) has led the Linked Heritage work to design, develop and implement a **training programme**, or **syllabus**, addressing topics relevant to the project. This syllabus is delivered via a virtual learning environment.

The Syllabus focuses on key aspects of the Linked Heritage project (Europeana, aggregation, metadata standards, linked data, permanent identifiers, multilingual terminologies, public-private partnerships). It is delivered via a VLE in order to:

- Provide a flexible learning approach so that the user can follow the path that best fits his own needs, whether as a self-taught learner, attending a course, or as a professional;
- Serve remote, multi-country and multilingual users with different skills, backgrounds and purposes;

www.sloop2desc.eu/

http://ec.europa.eu/education/lifelong-learning-policy/framework_en.htm

² http://celebrate.eun.org/eun.org2/eun/en/index_celebrate.cfm

³ www.sloop2desc.eu/

⁵ www.opendiscoveryspace.eu/

http://ec.europa.eu/education/lifelong-learning-policy/eqf_en.htm

LINKED HERITAGE Deliverable D7.4

Title: Virtual Learning Environment



- Contribute to e-learning projects with high-quality content that could be reused by other course developers, schools, and universities.
- Disseminate the project results and share the important knowledge gained by Linked Heritage across the broader digital cultural heritage community.



2 THE VIRTUAL LEARNING ENVIRONMENT

The courseware "EU project: Linked Heritage" is available in the virtual learning environment (VLE) of the University of Padova, which runs on the *Moodle* platform. The courseware is implemented as a set of Moodle modules, as can be seen at: https://elearning.unipd.it/cab/course/view.php?id=4

2.1 WHAT IS A VIRTUAL LEARNING ENVIRONMENT?

A virtual learning environment or VLE is a "software system designed to help teachers by facilitating the management of educational courses for their students. It is an education system based on the web that models conventional real-world education by providing equivalent access to classes, class content, tests, homework, grades, assessments, and other external resources such as academic or museum links. It is also a social space where students and teachers can interact through threaded discussions or chat. It typically uses Web 2.0 tools for 2-way interaction, and includes a content management system."⁷

Moodle, Blackboard, Angel, Sakai and Oncourse are some examples of well-known VLEs.

In the context of Linked Heritage, the VLE is a central component of the project's **training** strategy, enabling the dissemination of the new knowledge generated by Linked Heritage, its appreciation and utilisation across national and disciplinary boundaries. The unique strengths of education via a VLE (which can be further improved by blending with other forms and channels of education) make it particularly suitable for the geographically-distributed and variably-skilled audiences that we seek to serve. In particular, education via a VLE is scalable and can serve very large populations; in addition it is available ubiquitously and at any time, making it ideal for self-guided learning and continuous professional development.

2.2 MOODLE

Moodle (Modular Object-Oriented Dynamic Learning Environment) is an Open Source VLE. It is sometimes referred to as a Course Management System (CMS), or a Learning Management System (LMS). Moodle is the most popular of the (several) open-source VLEs; there are many others which are customised for a particular audience or application (e.g. OpeneLMS for business, Docebo for the corporate sector, eFront for a more light-weight approach).

User Base: Moodle is designed on the basis of pedagogical principles. This has led to its broad popularity in the educational sector, though it is also used in many other domains. It is widespread in more than 200 countries and about 80 languages.

Moodle is used by a variety of institutions and individuals, including:

- Universities
- High schools
- Primary schools
- Government departments
- · Healthcare organisations
- Military organisations
- Airlines

http://en.wikipedia.org/wiki/Virtual learning environment



- Oil companies
- Independent educators
- Special educators

More information on Moodle is available on www.moodle.org and https://moodle.org/stats



Figure 1 – Examples of the many Moodle users and resources worldwide

Licence: Moodle is provided as Free Software (under the GNU General Public License). You are allowed to copy, use and modify Moodle provided that you agree to: provide the source to others; not modify or remove the original license and copyrights, and apply this same license to any derivative work. Moodle can be downloaded from: http://download.moodle.org.

Platform Requirements: Moodle can be installed on any computer that can run PHP, and can support an SQL type database (for example MySQL). It can be run on Windows and Mac operating systems and many flavours of GNU/Linux. As a result, almost all the servers connected to the Internet can support Moodle, including commercial hosting companies, universities, etc.

Access Control: Access to Moodle may be open to anybody or restricted to registered users. The most commonly used Moodle authentication modes are:

- Manual accounts (accounts are manually created by the system administrator)
- Shibboleth (an open source software for web single sign-on across federated organisations)
- Email-based self-registration (which enables users to create their own account upon registration)

Once users authenticate themselves, the system recognises their roles as teachers and/or students and the privileges they have been granted. They can therefore view the content and access the functions for which they are authorised to by system administrators.

The Moodle structure

The key elements of the Moodle structure are online **courses**. Online courses are areas in which educators may arrange and publish their teaching resources and organise support activities for their



students, such as discussion forums, assessment tests, chat rooms, surveys, and many more. Courses are divided into primary categories and sub-categories.

Moodle courses are usually made up of a central section containing the educational **programme** (topics, resources and activities) and side blocks to support teaching **activities** (e.g., Calendar, Comments, Quiz Results, My Private Files, etc.)

Course teachers and platform administrators manage course **enrolment**. For instance, students can self-enrol, be enrolled manually by their teachers or automatically by the admin.

2.3 THE UNIVERSITY OF PADOVA AND MOODLE

Since the end of the 1990s, the University of Padova has been using different Learning Environments for its online courses. These include First Class⁸ (by SoftArc / Centrinity), the in-house made Chirone⁹, Claroline¹⁰ (Catholic University of Louvain), Sinfodia¹¹ (CINECA), Lotus Learning Space¹² (IBM). Starting from 2003 some of University of Padova Faculties adopted Moodle as a VLE for their e-learning courses. In 2011 Moodle became the e-learning platform used by all Departments of University of Padova for online courses. The Centro Multimediale e E-Learning di Ateneo (CMELA) is now the University Moodle manager. It has developed in-depth expertise and it supports the broader university community in its use of Moodle. All of the University's Moodle learning sites are hosted at Centro Servizi Informatici di Ateneo (CSIA) server farm and are administered by CMELA.

In the past couple of years, centralised platform management has created a breakthrough within the university in the diffusion and use of the platform for teaching and informative use.

Although there is only one Moodle platform, each UNIPD structure has its own learning site hosting teaching materials and information about courses divided into academic years. All learning sites can be visited by institutional users via Single Sign On authentication which enables all the teachers, students and staff of the University of Padova to access the contents of any learning site by using the same details of their university email address.

The learning site graphic layout has to comply with the guidelines of the university Public Relations Service. This is why the Linked Heritage courseware graphic layout couldn't completely adapt with the layout of the Linked Heritage project Web site.

⁸ http://www.firstclass.com

http://www.formazione.unipd.it/master/meam/piattaforma.htm

http://www.claroline.net/?lang=en

http://www.cineca.it/sis_info/sinfodia.html

ftp://ftp.software.ibm.com/pub/lotusweb/mindspan/ltQstart.pdf





MOODLE – CENTRO DI ATENEO PER LE BIBLIOTECHE

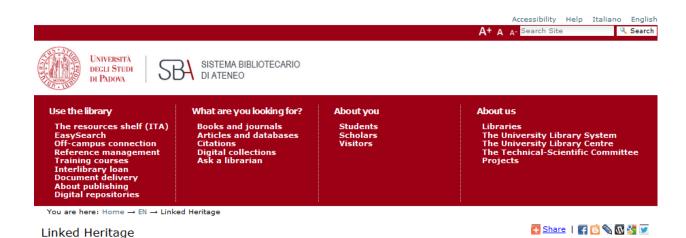
EN IT

Webmail Uniweb

Available courses Linked Heritage: Coordination of Standards and Technologies for the EU project: Linked Heritage enrichment of Europeana (April 2011 - Sept. 2013) is a project funded by the EU as part of its CIP (2007 - 2013) programme. LH project involved 38 partners from 20 countries, including EU member states, Israel and Russia. The course "EU project Linked heritage" is focused on the key aspects of the project Europeana, metadata standards, linked data, permanent identifiers, multilingual terminologies, public-private partnerships. The course is in English but Learning Objects have been translated in several languages. Further information can be found in the project Website and in the University of Padova Website Social media e giornalismo scientifico Il corso descrive l'utilizzo dei social media per la diffusione delle informazioni scientifiche 3 5 2 You are currently using guest access (Login)

Figure 2 - CAB Moodle learning site

You are currently using guest access (Login)



Linked Heritage is a project funded by the European Union as part of its Competitiveness And Innovation Framework Programme (CIP, 2007 -2013). The project began 1 April 2011 and will finish 30 September 2013. It involves 38 partners from 20 countries, including EU member states, Israel and Russia.

Goals of the project

Linked Heritage has 3 main goals:

- to contribute large quantities of new content to Europeana, from both public and private sectors
- to enhance the quality and richness of Europeana metadata
- to improve the functionalities available for search, retrieval and use of Europeana content.

Expectations

The project seeks to enable a significant expansion and enrichment of Europeana content and services:

- providing access to 3 million new digital objects
- · facilitating the comprehension and spread of key Digital Library concepts through the creation of new dissemination, information and training tools (websites, posters, leaflets and learning objects)
- developing new open source web applications to facilitate the flow of data to Europeana.

Figure 3 - CAB Web site



The CAB, just like any UNIPD structure, takes care of and manages the teaching content of its learning site by customising it within the limitations provided by the University of Padova graphic layout.

With the needs of Linked Heritage project course users in mind, the CAB learning site devised a personalised authentication mode with associated web interface that includes visitor authentication (through email-based self-registration) and free login access (guest access) in addition to the Single Sign On System.

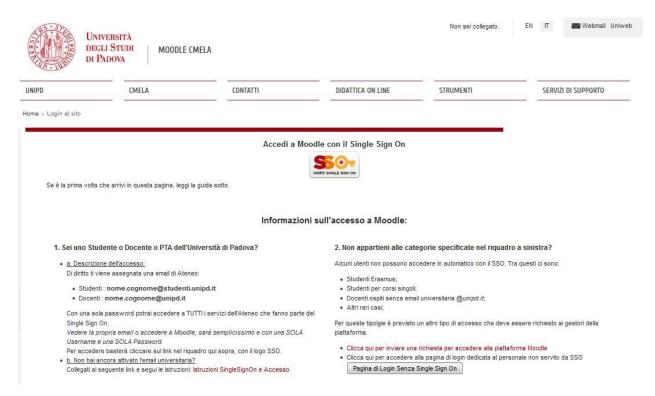


Figure 4 - University of Padova Moodle's login page





MOODLE - CENTRO DI ATENEO PER LE BIBLIOTECHE

Webmail Uniweb

You are currently using guest access

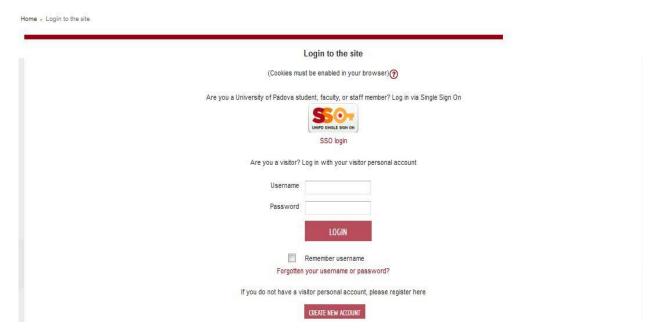


Figure 5 – CAB Moodle's login page, customised for the Linked Heritage needs

Why University of Padova chose Moodle as a VLE 2.3.1

The choice of Moodle was based mainly on the results of UNIPD's practical experience across the platforms First Class, Chirone, Claroline, Moodle, Sinfodia, and Lotus Learning Space. Several international surveys¹³ were also taken into consideration. The main requirements analysed by the surveys can be categorized as follows:

Features & Functionalities, Cost of Ownership, Maintainability, Usability, Adoption, Openness, Standards, Integration capability, LOM support, Reliability, Scalability, IP security, Hardware & Software, Multilingual.

University of Padova chose Moodle for the following reasons:

- first of all because it is a Free Software platform with a dynamic **community** of developers;
- it is easy and intuitive to use both by learners, teachers and administrators;
- its web interfaces are highly usable and can be easily customised by institutions;
- furthermore, it supports international content standards such as SCORM (Shareable Content Object Reference Model) and AICC.

Another important issue for University of Padova was the possibility to use a secure environment provided with an authentication system.

UNIPD appreciates the Moodle social constructivist pedagogical approach, whose main features are a collaborative environment, an active role in learning, learning by doing or learning by observing peers

¹³

LINKED HERITAGE Deliverable D7.4

Title: Virtual Learning Environment



activities approach, ability to support different styles of learning, flexible and adaptable learning environment quickly responding to the needs of the participants.

We highlight that the University of Padova did not only adopt Moodle as a VLE but also plays an active part in Moodle **community**.

In fact, one of the first Italian *MoodleMoots*, the conferences dedicated to users, developers and administrators of Moodle, took place at the University of Padova in May 2008 and CAB participated with a poster. ¹⁴

In spring 2013, University of Padova VLE migrated from Moodle version 1.9 to the new version 2.3 which presents also a new graphic layout as described in chapter 2.3. The migration included also the Linked Heritage users database.

The new Moodle interface with the new graphic layout can be seen in the promotional video realised by University of Padova –CMELA hosted on the CMELA Moodle platform¹⁵.

Therefore, chapter 2 of this deliverable has been completed revised with respect to the previous intermediate version, and describes the Linked Heritage course running on the new Moodle v.2.3.

2.4 LINKED HERITAGE ON MOODLE

The course "EU project: Linked Heritage" is available on Moodle at:

https://elearning.unipd.it/cab/course/view.php?id=4

The **main characteristics** of the Linked Heritage Courseware are:

- it can be defined as a "peer to peer course" with high quality content developed by LIS and Cultural Heritage professionals useful for professional update by their peers within Lifelong Learning initiatives;
- 2) no certification is provided;
- 3) it provides **autonomous learning** paths and learners explore only those topics which are of particular interest for them;
- **4)** it is addressed mainly to **entry-level** users but it offers also **advanced** readings and further materials.

The LH Moodle and Content Team

A large team from across the LH consortium has been involved in the online learning programme development, including: educators, content experts, instructional, visual and multimedia designers, system administrators, usability and accessibility testers, translators.

Thanks to the very well established network relationships among Linked Heritage project partners, the collaboration between the UNIPD team and the WP7 Working Group members in planning, developing and evaluating the Linked Heritage VLE was very fruitful.

The rich composition of this multi-country and multilingual team, whose members are representative of different types of cultural organisations and experts on specialised sectors of cultural heritage, constitutes a precious and distinctive added value of the Linked Heritage Courseware.

The following two pages give a picture of this multidisciplinary team and its participation in the activities carried out on the VLE.

http://eprints.rclis.org/11520

http://www.livestream.com/unipdcmela/video?clipId=flv_fe2741b6-a06c-4a25-a9d1-d7eee7e13d22



LINKED HERITAGE Learning objects

The LH Virtual Learning Environment implementation. Overview of the activities carried out and people involved.

LH Comprehensive training programme educational content

Definition of user needs and learning outcomes Unipd LH team, e-learning WG

> Outline of the comprehensive Unipd LH team, e-learning WG, training programme structure learning resources designer

Planning of the learning packages structure Unipd LH team

Developing of the Learning packages units content Unipd LH team

Planning and development of the assessment plan Unipd LH team

> Planning and development of the usability Unipd LH team and accessibility evaluation test

Graphic design and realisation Unipd LH team, multimedia project expert of the Learning Objects HTML template

Unipd LH team, WP2-WP6 Leaders LOs content editing and curation; linguistic revision

> LOs video editing Unipd LH team, UniPD staff, multimedia project expert, set designers and illustrators, camera

operators, photographer, young geek

LOs music editing and recording; Music composers and performers sound effects collation

> LOs translation Unipd LH team, e-learning WG

LOs enhancements after evaluation tests Unipd LH team

Training materials gathering and organisation Unipd LH team, e-learning WG

Legenda

- GREEN: Unipd LH team, e-learning WG, WP Leaders
 BLUE: UniPD staff, Public of the "Italian Workshop on LH, 6/3/13"
- RED: External specialists who gave the project their talents availability and work for free



LINKED HERITAGE Learning objects

The LH Virtual Learning Environment implementation. Overview of the activities carried out and people involved.

2 • LH Comprehensive training programme on Moodle

Creation in Moodle v. 1.9 UniPD staff of the "EU Project: Linked Heritage" courseware

Implementation of the prototype Unipd LH team of the comprehensive training programme structure

of the assessment questionnaires

Activation of the following Moodle tools Unipd LH team to host the training programme units: Books, Feedback, Quizzes, External Resources

Design and develoment of the evaluation questionnaire

Design and development

Testing of LOs usability and accessibility e-learning WG, UniPD staff, Public of the "Italian with filled in evaluation questionnaires Workshop on LH, 6/3/13"

Unipd LH team

Unipd LH team, UniPD staff

Unipd LH team, WP2 Leader, UniPD staff

Migration of UniPD VLE from Moodle v.1.9 to v.2.3 UniPD staff and set up of the new CAB learning site

> Configuration of the CAB learning site. Unipd LH team, UniPD staff Migration and upgrade of the LH Course

> from Moodle v. 1.9 to v.2.3 Customisation of the CAB learning site

authentication page

Update and graphic customisation Unipd LH team of the LH Course main page

Integration of the Google Custom Search Unipd LH team in the LH Course main page

> Design and development Unipd LH team, WP Leaders of the Linked Heritage Glossary

Additional features: UniPD staff support of the UniPD Library System Help Desk

Legenda

- GREEN: Unipd LH team, e-learning WG, WP Leaders
 BLUE: UniPD staff, Public of the "Italian Workshop on LH, 6/3/13"
- RED: External specialists who gave the project their talents availability and work for free



2.4.1 Which e-learning model?

The concept of E-learning encompasses different models having in common the presence of technology as intermediate between the teaching and the learning role, and the shift from an instructor-centered to a student-centered paradigm. This feature is consistent with a constructivist approach to learning and favours lifelong learning by enabling learners to have full control over their learning process. The following model is taken from Ravotto's [Ravotto 2012] who describes online learning methods by positioning them on three axes according to different levels of interaction between the individuals involved and the potentiality for production of new materials during the learning process.

The axes represent:

- relationships with teachers/tutors
- relationships with peers,

A third axis indicates the relationship with content. This relationship can range, from basic acquisition - based on a transmission model - to content production in a constructivist content elaboration.

As the paper explains, the eight corners of the cube in Figure 7 represent different modalities of elearning courses (in red the main ones):

- A. **Self-learning**: individuals acquire contents from online materials (without interacting with other people);
- B. **Assisted self-learning**: individuals acquire contents from online materials assisted by teachers/tutors who provide advice, answers and corrections.
- C. **Non-isolated self-learning:** similar to A but with the addition of forums, chat sessions and Facebook groups that are largely independent of learning activities and provide relief from isolation.
- D. **Virtual classrooms**: a group of students participates in activities with one or more teachers/tutors. Activities include discussions or issue of results of individual exercises to public institutions. Tutors correct, advise and provide additional explanations and exercises, and students learn also from what their peers do. The group provides motivation and sometimes chat sessions and video-conferences are scheduled.
- E. Informal learning: individuals carry out research and content elaboration independently.
- F. **Mentor-assisted research and elaboration** like, for instance, writing university theses when contacts with supervisors only occur online.
- G. Collaborative learning in a community of practice: researchers working on a project.
- H. **Collaborative learning in virtual classrooms**: in addition to transmission activities, virtual classroom courses include research projects, analyses, prototype production, etc.

Ravotto underlines that any of these models can be "correct". It depends on the reasons for choosing elearning and the resources available, and more than one model may be used in the same course [Ravotto 2012].

Linked Heritage course is positioned between A and B models.

In fact, the Linked Heritage course offers self-learning assisted by teachers/tutors who provide organised training materials from authoritative sources, open educational resources created *ad hoc* for the Linked Heritage syllabus and assessment questionnaires where correct answers are automatically displayed as soon as the student submits his questionnaire (cf. D7.3, §3.1.6).

This intermediate model between A and B can be useful for potentially massive courses characterised by wide remote audiences; the Linked Heritage course has these characteristics. Moodle represents a good environment for these kind of projects.



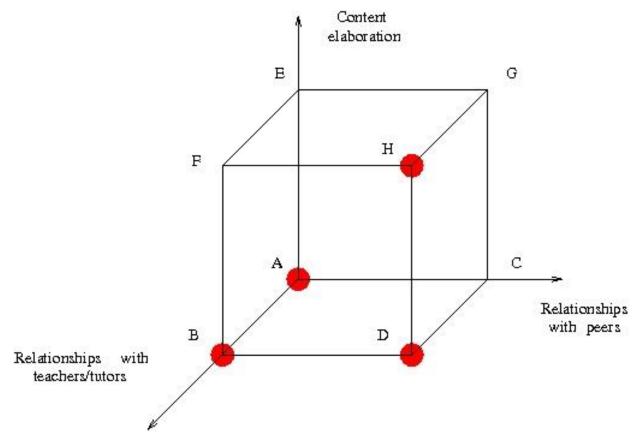


Figure 6 -The cube of e-learning (based on Ravotto 2012, p.12)

2.5 RELEVANT **TECHNICAL FEATURES** OF THE LINKED **HERITAGE** COURSEWARE

The first prototype of the course EU project: Linked Heritage was originally realised on Moodle v.1.9 as described in the intermediate version of the Deliverable D7.4 submitted to the EU commission on the 8th of April 2013.

Since May 2013, the course runs on Moodle v.2.3. The complete Moodle v.2.3 user manual, developed by the Moodle Community, supplies exhaustive information about Moodle features and functionalities¹⁶.

In addition, the current Linked Heritage course has been enhanced and now includes a Glossary, a Google Custom Search box and a link to the UNIPD Libraries Centre helpdesk. All the relevant features of the Linked Heritage courseware are described in the following chapters.

http://docs.moodle.org/23/en/Main_page



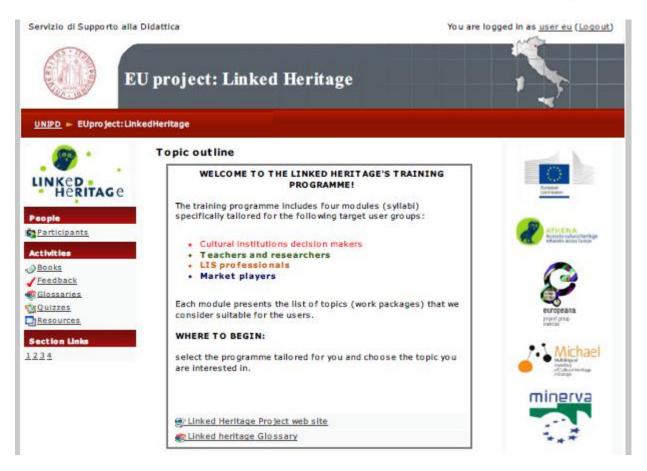


Figure 7 – The Linked Heritage course in Moodle v.1.9



Digitalmeetsculture newsletter

Uncommon culture

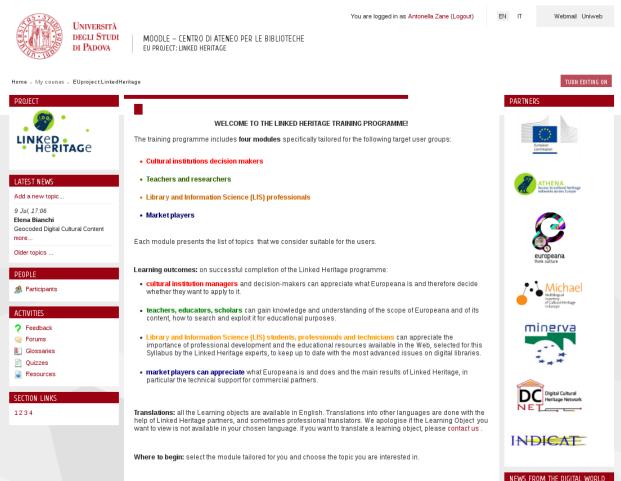


Figure 8 – The Linked Heritage course in Moodle v.2.3

Linked heritage Glossary

2.5.1 Access to the LH course on Moodle

Users can connect to the course through several access points, e.g. the Linked Heritage project or the partners Institution Web sites (cf. D7.3, §4.1).

As Guests, the Linked Heritage courseware is freely browsable by any drop-in user at any time. However, to perform the full learning process, users are required to log in to the CAB Moodle Learning Site and self enroll in the LH Course.

Considering the potentially wide audience interested in joining the course, we provide 3 different types of access to the Moodle Learning Site through a new authentication Web page specifically customised for the Linked Heritage project.

- 1) Free login access (guest access) for the general public
- 2) Shibboleth access (Single Sign On) for UNIPD institutional users
- 3) Local Access for **visitors**. If you are not a UNIPD institutional, the first step is to register to the Moodle Learning Site via the "Email-based self-registration". The system will automatically e-mail you your personal username and password to login to the VLE.

After logging in to the CAB Moodle Learning Site, users interested in participating to the Linked Heritage course will be required to **self-enroll in the "Eu project: Linked Heritage" course**. After registration to



the Moodle Learning Site and enrolling in the Linked Heritage course, users join the LH course and can perform all its activities.

2.5.2 Linked Heritage course user roles

In the Linked Heritage Course, users can have the following **roles**, each one with specific authorisations:

- Guests: these are users accessing the course without authentication. Guests can only browse
 the course (all the modules, topics and learning packages) and fill in the evaluation
 questionnaires. They cannot perform the assessment and the evaluation sessions, keep track of
 their logs or view the forum news.
- 2. Participants: these are authenticated learners after enrollment in the "Eu project: Linked Heritage" course. Participants can browse the course, fill in the Assessment and the Feedback questionnaires. In addition, they can track their own logs, activity reports and statistics. Everyone interested in LH topics (LH participants, LIS professionals, institution decision makers, teachers, etc.) can self-enroll in the LH course and participate in all the Course activities.
- 3. Teachers: these users can add and delete resources in the Linked Heritage course, track the course activity report, export logs and statistics of all participants. Teachers of the LH Course are the Unipd e-learning people who designed and implemented the LH courseware on the Moodle Learning Site.
- 4. Administrators: this role gives full access to the entire learning site and to all courses. CMELA are Unipd Moodle Leaning Site General Administrators, whereas the WP7 project manager is the administrator for the CAB Moodle Learning site hosting the Linked Heritage course.

2.5.3 User interfaces for different roles

The **main page** is organised in three columns.

In the central column you can find a short overview of the Linked Heritage training course, the learning outcomes expected for each user group and instructions on how to translate or customise for different needs the Linked Heritage LOs (cf. D7.3, §3.1.5).

There you may also find the course sections (called Modules), which compose the Linked Heritage training programme.

The modules are tailored for each targeted user group:

- Module n° 1 Cultural Institutions Decision Makers
- Module n° 2 Teachers and Researchers
- Module n° 3 Library and Information Science Professionals
- Module n° 4 Market players.

Each module offers the participant dedicated resources (books and links) and activities (feedback, quizzes, etc.) specifically related to the subject.

Useful information related both to the Linked Heritage project and sister projects and to users' activities is given in the side blocks.

The blocks in the **left column** host:

- Linked Heritage logo
- Participants
- Activities: Feedback, Forums, Glossaries, Quizzes,
- Resources: es. Books and URL



EN IT

• The Setting tools section.

The blocks in the right column host:

Università degli Studi

- Linked Heritage sister project logos
- Links to the publications and newsletters related to the Linked Heritage project and its sister projects (News from the digital world)

The pages displayed by a mobile device have a slightly different structure (see examples in Annex 1).

Figures 9-11, give an overview of how the Linked Heritage course main page: Moodle interfaces changes for each type of user role:

The Guest user interface provides a very limited set of activities and resources. Guests can practically only browse the course content.

MOODLE - CENTRO DI ATENEO PER LE BIBLIOTECHE

You are currently using guest access (Login)

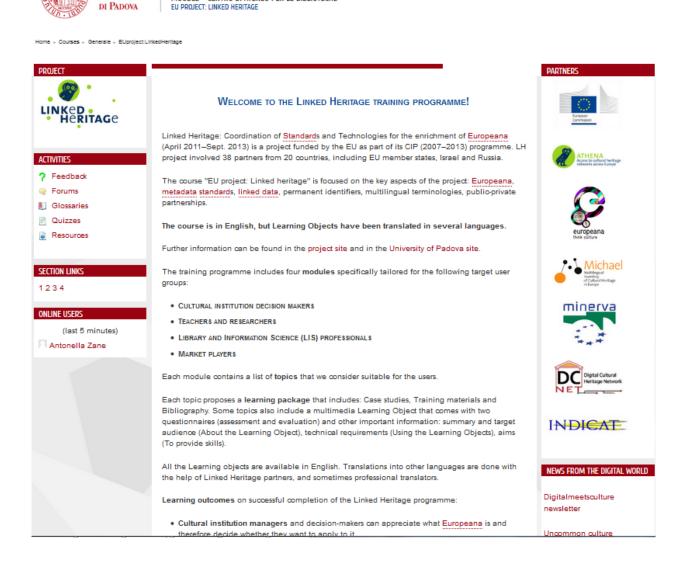


Figure 9 – The Guest Moodle interface



The Participant user interface provides navigation tools that facilitate the exploration of the resources (Books, Feedback, Glossaries, Quizzes) inside the modules of Linked Heritage course. In addition, the Linked Heritage interface offers some settings options, a jump menu which helps users to move around the modules and the block People which shows who are the participants attending the course and how to communicate with them.

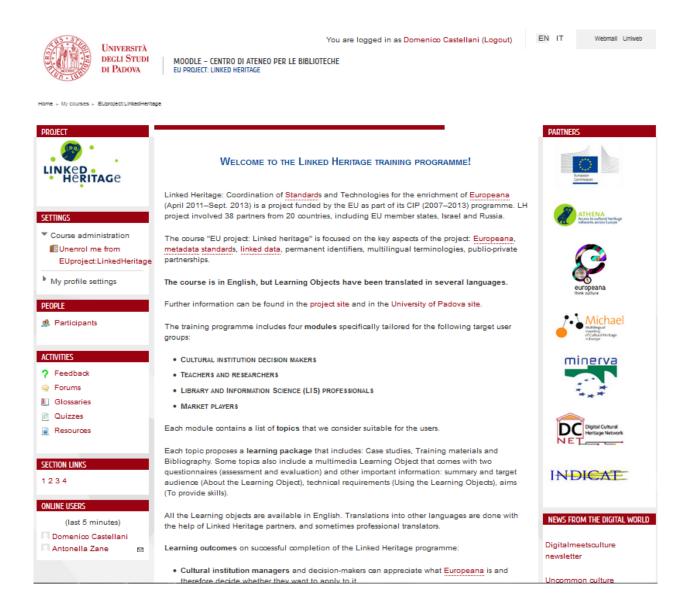


Figure 10 - The Participant Moodle interface

The **Teacher** interface looks quite similar to that of the System **Administrator**. However the teacher, in Linked Heritage course, can only manage the course, create quizzes and feedback questionnaires and generate both on course and participants activity logs and statistics.

partnerships.



EN IT

You are logged in as Antonella Zane (Logout)



SETTINGS

PEOPLE

ACTIVITIES

7 Feedback

Forums Glossaries

Quizzes

SECTION LINKS

ONLINE USERS

(last 5 minutes)

Participants

Course administration

Switch role to..

My profile settings

Site administration

My courses ← EUproject:LinkedHeritage

MOODLE - CENTRO DI ATENEO PER LE BIBLIOTECHE EU PROJECT: LINKED HERITAGE

. CULTURAL INSTITUTION DECISION MAKERS

. LIBRARY AND INFORMATION SCIENCE (LIS) PROFESSIONALS

Each module contains a list of topics that we consider suitable for the users

the help of Linked Heritage partners, and sometimes professional translators

Learning outcomes on successful completion of the Linked Heritage programme:

Each topic proposes a learning package that includes: Case studies, Training materials and

Bibliography. Some topics also include a multimedia Learning Object that comes with two

TEACHERS AND RESEARCHERS

MARKET PLAYERS

(To provide skills).

Linked Heritage: Coordination of Standards and Technologies for the enrichment of Europeana (April 2011-Sept. 2013) is a project funded by the EU as part of its CIP (2007-2013) programme. LH project involved 38 partners from 20 countries, including EU member states, Israel and Russia. The course "EU project: Linked heritage" is focused on the key aspects of the project: Europeana, metadata standards, linked data, permanent identifiers, multilingual terminologies, publio-private The course is in English, but Learning Objects have been translated in several languages. The training programme includes four modules specifically tailored for the following target user questionnaires (assessment and evaluation) and other important information: summary and target INDICAT audience (About the Learning Object), technical requirements (Using the Learning Objects), aims All the Learning objects are available in English. Translations into other languages are done with NEWS FROM THE DIGITAL WORLD Digitalmeetsculture

newsletter



Cultural institution managers and decision-makers can appreciate what Europeana is and

WELCOME TO THE LINKED HERITAGE TRAINING PROGRAMME!

Further information can be found in the project site and in the University of Padova site

2.5.4 The Linked Heritage courseware structure

The structure of the Linked Heritage courseware reflects and supports the organisation of the comprehensive training programme (cf. D7.3, §2) and consists of four modules specifically targeted to the following discrete user groups:

- A) Cultural institution managers and decision-makers
- B) Teachers, educators, scholars
- C) Library Information Science professionals: entry-level students and culture and information specialists from museums, libraries and archives
- D) Market players from the private sector



Each module has been set up in Moodle with the "Moodle Topic Section Format". In order to avoid the need to scroll the course Main page, the Block "Section Links" with direct links to the Modules has been provided in the column on the left.

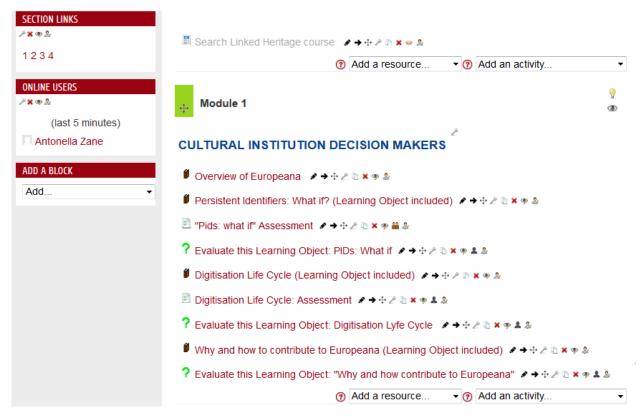


Figure 12 - Building the Moodle modules

Each module is composed of a set of topics which has been prepared and selected – in collaboration with the Linked Heritage e-learning Working Group - to be suitable for each target group of users.

Each topic can be accessed separately. This allows the student to choose his/her own route through the learning materials and to experience personalised learning.

Each topic proposes a **learning package**, which comprises:

- Training materials
- Case studies
- Bibliography

Some topics also include a multimedia Learning Object that comes with questionnaires for assessment and evaluation.

The courseware is in English. However, most of the Learning objects have been translated into several languages by the partners from Bulgaria, Germany, Greek, France, Italy, Latvia, Poland, Spain, Sweden.

A more detailed description of the Training materials included in the Linked Heritage course is presented in the Deliverable D7.3 "Training materials", § 3).





You are currently using guest access (Login)

EN IT

Webmail Uniweb

MOODLE - CENTRO DI ATENEO PER LE BIBLIOTECHE

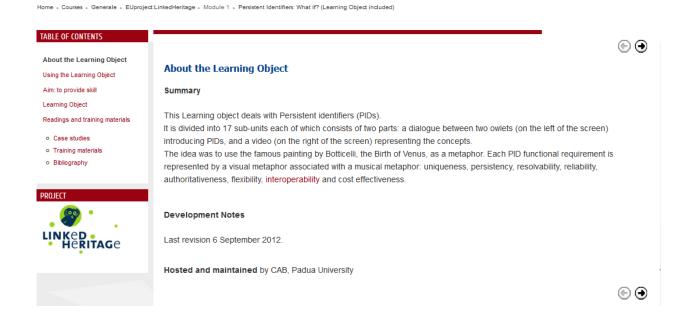


Figure 13 - Example of a Learning Package

In the "EU project: Linked Heritage" courseware, the structure of the training programme, the Learning packages, Quizzes and Feedbacks, Bibliographies and the Glossary have been **integrated in the Moodle platform**, whereas the Learning objects and the Training materials in the strict sense are **external resources** accessible through active links edited in the Moodle pages. In particular:

- multimedia Learning objects are: 1) available via the web server of the UNIPD Library System (SBA) and the YouTube videos repository, 2) preserved as ZIP files in PHAIDRA, the digital asset management system with long-term archiving functions adopted by the University of Padova (cf. D7.3, § 3.7);
- the training materials themselves are available and preserved as PDF files in PHAIDRA;
- for case studies and bibliography, a link to the original sources is provided.

All Learning objects are and will be hosted and maintained, even after the end of the Linked Heritage project, by the CAB server farm. All embedded videos (46 so far) are hosted under a proper account by YouTube that offers streaming services not yet available at CAB.



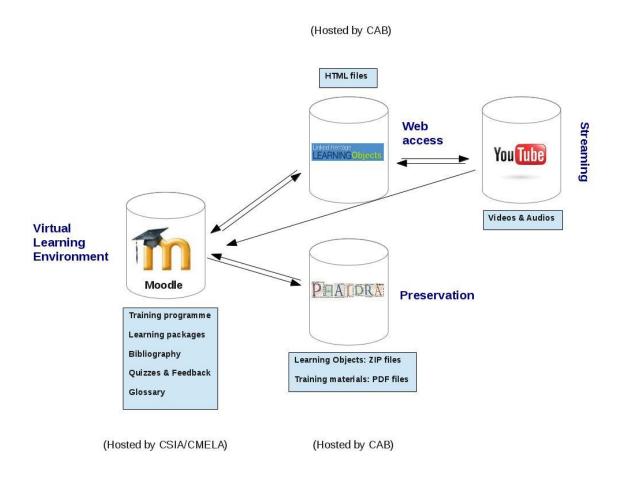


Figure 14 - schema of Linked Heritage Moodle VLE linked to external resources

2.5.5 The Learning package: relevant Moodle tools used

The Book resource

The Learning Packages have been structured with the Moodle Resource Book in order to present all the information about a topic linked together in an easily browsable interface with a Table of Contents, Chapters and Pages. Among its features is a possibility to browse pages (next or previous), print a chapter and print the complete book.

Quizzes and Feedback activities

The Quizzes and Feedback activities are used to create questionnaires that can provide information on the user experience and on the progress of the students in the form of statistics. Quizzes and Feedback modules can be filled in online and the results can be tracked and exported to a spreadsheet file.

For the Linked Heritage Course, UNIPD used the Quiz and Feedback modules to design questionnaires made up with multiple choice, true/false, and short answer questions (for more details, please see Linked Heritage deliverable D7.3). These questions can be re-used within courses and even between courses. Feedback is given automatically to the users.

2.5.6 Other resources and services

The Glossary Training Activity



The Linked Heritage Glossary provides access to the definitions of terms used in the Linked Heritage online training programme. It has been implemented in order to provide learners with an easy-to-use reference tool. We used the "Glossary" Moodle resource to publish the definitions of the main concepts required to understand the programme. The glossary has been drawn up in collaboration with the project partners: UNIPD prepared a list of specialised words with definitions taken from Linked Heritage partners' authoritative works, e.g. project deliverables and booklets.

In addition, UNIPD set up and integrated in the Linked Heritage course main page the following services:

- the **Google custom search**, which indexes the Linked Heritage course content in Moodle (e.g. bibliography) and allows users to search it by keywords.
- a link to the UNIPD **Library System Helpdesk service** has been provided to support Linked Heritage course participants even after the end of the project,

2.6 ACTIVITIES MONITORING AND STATISTICS

The Linked Heritage courseware in the CAB learning site is freely accessible to all the users, both authenticated and not. In fact, Guests are allowed to browse some educational content without authentication.

The drawback of this inclusive access policy is that Guest usage of the Linked Heritage course cannot be tracked by means of the Moodle software.

Therefore, in order to have a complete overview of user activities and statistics, two different information sources are needed for the Linked Heritage course: **Moodle Reports** and **Web server logs**.

In addition, we are going to collect also statistics on Linked Heritage training videos created to be embedded in the Linked Heritage Learning objects or to promote the Linked Heritage training programme and hosted in the YouTube streaming servers.

2.6.1 Moodle Reports

This functionality offers different types of tools: Course activity report, Logs of course activity, Statistics.

Course Activity Report

The Course Activity Report shows the **number of views** for each activity and resource. See for example the activity report shown below, which reports on the LOs evaluation tests carried out in winter 2012-2013 by WP7: the total number of views of the activity "*Persistent Identifiers: What if?*(*Learning object included*)" in Topic1 is 2123 and the number of views of the activity "*Pids: what if?*" Assessment is 193. The page layout refers to Moodle 1.9.





EU project: Linked Heritage

Views Linked Heritage Project web site 153 Linked heritage Glossary Topic 1 380 Overview of Europeana Persistent Identifiers: What if? (Learning Object included) 2123 "Pids: what if" Assessment 193 Evaluate this Learning Object: PIDs: What if Digitisation Life Cycle (Learning Object included) 1211 <u>Digitisation Life Cycle: Assessment</u> 64 ✓ Evaluate this Learning Object: Digitisation Lyfe Cycle 228 Why and how contribute to Europeana (Learning Object - draft) ✓ Assessment "Why and how contribute to Europeana" (under construction) Evaluate this Learning Object: "Why and how contribute to Europeana" Topic 2 25 General overview of Europeana Tutorial for searching on Europeana 42

Computed from logs since giovedì, 17 giugno 2010, 04:43.

Figure 15 - Activity report

Logs of Course Activity

Logs can be generated by a Teacher combining different options: group, individual participant, guest, date, activity, and so provide information about various aspects of the course.



Figure 16 - Choose which logs you want to see

Logs can be generated to see what pages the students accessed, the time and date they accessed it, the IP address they came from, and their actions (book view, course view, feedback start complete, etc.) Logs can be displayed on a web page or downloaded in text, ODS or Excel format.



The Logs page contains active links to Geolocation services (IP Address), participants' profile (Full name), pages visited by the participants (Action). Logs analysis reveals that participants attending the second and third evaluation tests logging in with a personal account, performed their session mainly visiting the learning packages pages (book view is the action with the highest score) and the quiz questionnaires (action "quiz view"). The most popular topics are: Persistent Identifiers and Digitisation Life Cycle.

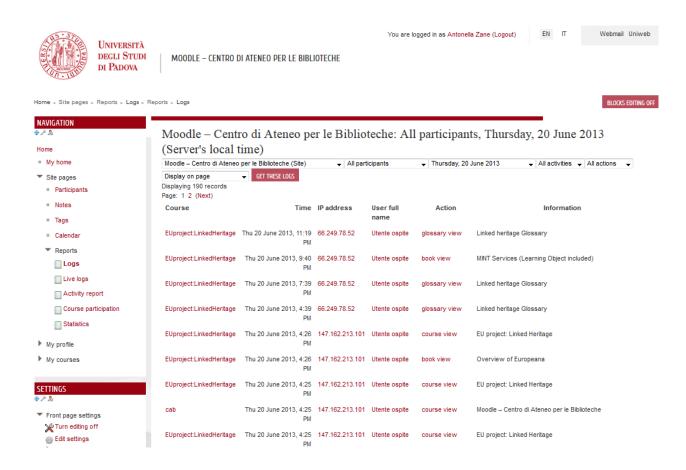


Figure 17 - Logs of course activity for all participants

Statistics Report

The Statistics Report describes the **user activity** through tables and graphs. They show how many hits there have been on the Linked Heritage courseware on a daily basis (see example statistics of Linked Heritage course below).



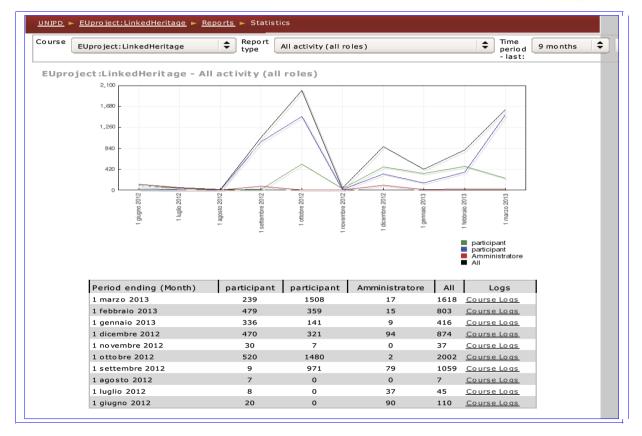


Figure 18 - From the Statistics report

Moodle can generate reports for each participants of the Linked Heritage Course as shown in Figure 17.



You are logged in as Antonella Zane (Logout)

EN IT

Webmail Uniweb



MOODLE - CENTRO DI ATENEO PER LE BIBLIOTECHE

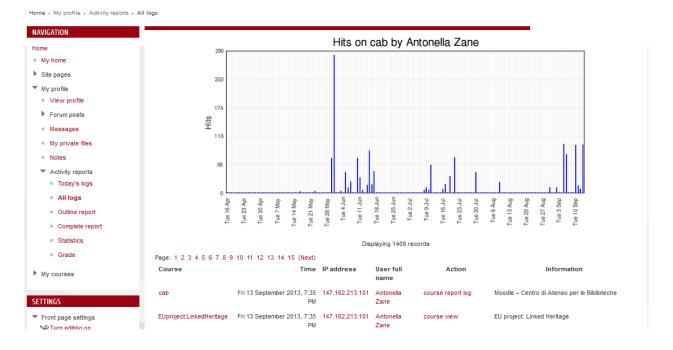


Figure 19 - Example of Participant Activity Report - All logs

2.6.2 Web server log analyser

In January 2013 a Web server analyser has been activated in order to keep track of the usage of the Web site linkedheritage.cab.unipd.it which hosts all the Learning objects HTML pages.

The statistics are implemented with Advanced Web Statistics 6.95, a free software (GNU GPL) server logfile analyzer by AWStats¹⁷.

AWStats generates advanced web, streaming, ftp or mail server statistics, with graphic views. A full log analysis enables AWStats to show the following information:

- Number of visits and number of unique visitors
- Visit duration and last visits
- Authenticated users and last authenticated visits
- Days of week and rush hours (pages, hits, KB for each hour and day of week)
- Domains/countries of hosts visitors (pages, hits, KB, 269 domains/countries detected, Geolp detection)
- · Hosts list, last visits and unresolved IP addresses list, Most viewed, entry and exit pages
- Files type
- Web compression statistics (for mod_gzip or mod_deflate)
- OS used (pages, hits, KB for each OS, 35 OS detected)
- Browsers used (pages, hits, KB for each browser, each version (Web, Wap, Media browsers: 97 browsers, more than 450 if using browsers_phone.pm library file)
- Visits of robots (319 robots detected)
- Worms attacks (5 worm's families)
- Search engines, keyphrases and keywords used to find your site
- HTTP errors (Page Not Found with last referrer, ...)
- Other personalized reports based on url, url parameters, referer field for miscellanous / marketing purpose
- Number of times your site is "added to favourite bookmarks"

¹⁷



- Screen size (need to add some HTML tags in index page)
- · Cluster report for load balanced servers ratio.

Statistics are managed by the Moodle CAB learning site system administrator who can provide statistical reports on Linked Heritage course usage to the Linked Heritage Technical Coordinator or to any other partner on demand.

2.7 PARTICIPANTS' FEEDBACK ANALYSIS

From September 2012 to March 2013 UNIPD organised a set of evaluation sessions aiming to test the usability and accessibility of the Linked Heritage Learning objects.

For the evaluation test sessions participants were provided with a **personal account and enrolled for the course**.

In these occasions tracked users activities were the following:

- 1) Connecting to Moodle;
- 2) Logging in to Linked Heritage course with a personal account or guest username and password (usereu usereu);
- 3) Using the following Learning objects: "Pid's: what if"; "Digitisation life cycle"; "Mint services"; "Why and how to contribute to Europeana";
- 4) Filling in the evaluation questionnaire to give us feedback on each LO usability.

58 participants logged in with their personal accounts and, at least once, browsed the learning content and filled in the evaluation questionnaire.

6 participants logged in with the guest account and filled-in a printed evaluation questionnaires.

At the end of the evaluation test sessions we received **59 sets of responses.**

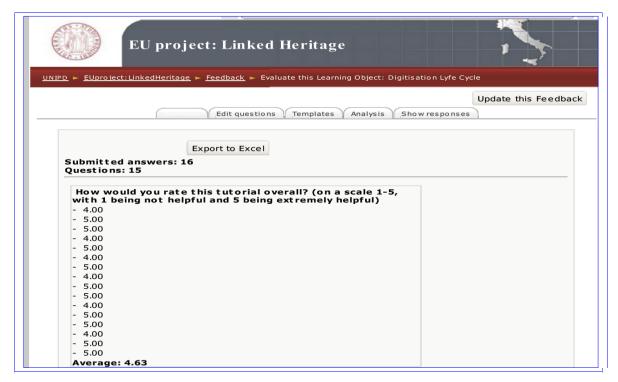


Figure 20 - Example of user feedback

LINKED HERITAGE Deliverable D7.4

Title: Virtual Learning Environment



Participants' feedback and comments collected through the Moodle evaluation questionnaires and during meetings with the Linked Heritage partners, were carefully analysed in order to:

- improve the navigation in the Linked Heritage LOs template (see the list of enhancements in D7.3: Training materials);
- revise the first four Learning objects content;
- revise the "EU project: Linked Heritage" course Main page;
- test the evaluation questionnaire.

As agreed with the partners at the plenary meeting held in Padova on 8th March, the upgrade of the tested LOs ended on 30th April 2013. The remaining 4 LOs and the partner translations were gradually released during summer 2013.

The administrative, organisative and technical activities, necessary to set up a new learning site for CAB and to migrate the structure and content of the Linked Heritage course to Moodle v.2.3 ended on 30th May 2013.



3 CONCLUSIONS AND FUTURE STEPS

The University of Padova VLE currently runs on Moodle v.2.3. The recently upgraded version presents improved functionalities and a new user interface with increased reading performance.

The CAB new learning site, has been **customised** to meet the Linked Heritage project requirements: hosting a potentially massive open Courseware addressed to a multi-country and multilingual audience from the digital cultural heritage sectors, willing to perform flexible training sessions on high quality educational materials. The Course is freely accessible by any user at any time.

A plan for the **dissemination** of the of the WP7.2 Trainings results has been already put in place in collaboration with the WP7.1 Dissemination and will become more intense starting from the next weeks.

The **experience** gained and the output produced by UNIPD Linked Heritage team and the e-learning Working Group members during the participation in Linked Heritage project will become a breeding ground for future projects and a fundamental opportunity for knowledge growth and skills development of all the partner institutions.

CAB has always invested resources in **training** and professional update for its staff. The "Eu project: Linked Heritage" courseware will be used by CAB to trainee UNIPD librarians at the forefronts of digital collections management. At the same time, the training programme and the Learning objects will be promoted also among UNIPD museum curators and archivists and the staff of local cooperating institutions involved in digitisation and digital collections management. The course will be presented also to Cultural Heritage Studies students.

This is why CAB is highly interested in **maintaining**, even after the end of the project, the access to the Moodle "EU project: Linked Heritage" and the availability and preservation of the external educational resources (multimedia Learning objects and related audio and videos) as long as possible.



4 BIBLIOGRAPHY

This is the comprehensive bibliography of the D7.3 "Training materials" and the D7.4 "Virtual Learning Environment" deliverables.

Akeroyd, A. 2005, "Information management and e-learning: some perspectives", *Aslib Proceedings: New Information Perspectives*, Vol. 57, No. 2, pp.157-167.

Anderson, T. & Elloumi, F. (eds.) 2004, *The Theory and Practice of Online Learning*, Athabasca University Press.

Blaschke, L. M. 2012, "Heutagogy and Lifelong Learning: A Review of Heutagogical Practice and Self-Determined Learning", The International Review of Research in Open and Distance Learning, Vol.13, No.1, pp. 56-71. Available at: http://www.irrodl.org/index.php/irrodl/article/view/1076/2087 [accessed 26/09/2013]

European Union: European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Rethinking Education: Investing in skills for better socio-economic outcomes, 20 November 2012, COM(2012) 669 final. Available at:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0669:FIN:EN:PDF [accessed 26/09/2013]

Council of the European Union, Council conclusions on investing in education and training — a response to 'Rethinking Education: Investing in skills for better socio-economic outcomes' and the '2013 Annual Growth Survey' 2013, OJ C 64 5.3.2013. Available at:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2013:064:0005:0008:EN:PDF [accessed 26/09/2013]

Council of the European Union, Council conclusions of 26 November 2012 on education and training in Europe 2020 — the contribution of education and training to economic recovery, growth and jobs, OJ C 393 19.12.2012. Available at:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2012:393:0005:0007:EN:PDF [accessed 26/09/2013]

European Commission 2008, *Explaining the European Qualifications Framework for Lifelong Learning*. Available at: http://ec.europa.eu/education/lifelong-learning-policy/doc/eqf/brochexp_en.pdf [accessed 26/09/2013]

European Commission 2006, *Information Society and Education: Linking European Policies*, Luxembourg: Off. for Official Publ. of the Europ. Communities, 15 p.

European Union: European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Rethinking Education: Investing in skills for better socio-economic outcomes, 20 November 2012, COM(2012) 669 final. Available at:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0669:FIN:EN:PDF [accessed 26/09/2013]

Fidishun, D. (no date, circa 2005), *Andragogy and technology: Integrating adult learning theory as we teach with technology*, Malvern, PA: Penn State Great Valley School of Graduate Professional Studies.

Ravotto, P. 2012, "Dal corso eLearning alla comunità di pratiche. Esperienze di formazione insegnanti con Moodle in progetti europei", *Brick*, Vol. 1, pp.106-115.

Web Content Accessibility Guidelines WCAG 2.0, World Wide Web Consortium (W3C) recommendation, 11 December 2008. Available at: http://www.w3.org/TR/WCAG20/ [accessed 26/09/2013]



ANNEX 1: THE LINKED HERITAGE VLE IN PRINTABLE PDF FILES

- 2_participant-interface.pdf

 3_admin-interface.pdf

 4_glossary.pdf

 5_learning-package.pdf

 6_assessment-questionnaire.pdf

 7_evaluation-questionnaire.pdf
- 8_activity-report.pdf

1_guest-interface.pdf

9_logs.pdf

Home ► Courses ► Generale ► EUproject:LinkedHeritage

di Padova

WELCOME TO THE LINKED HERITAGE TRAINING PROGRAMME!

Linked Heritage: Coordination of Standards and Technologies for the enrichment of Europeana (April 2011–Sept. 2013) is a project funded by the EU as part of its CIP (2007–2013) programme. LH project involved 38 partners from 20 countries, including EU member states, Israel and Russia.

The course "EU project: Linked heritage" is focused on the key aspects of the project: Europeana, metadata standards, linked data, permanent identifiers, multilingual terminologies, public-private partnerships.

The course is in English, but Learning Objects have been translated in several languages.

Further information can be found in the project site and in the University of Padova site.

The training programme includes four **modules** specifically tailored for the following target user groups:

- Cultural institution decision makers
- Teachers and researchers
- Library and Information Science (LIS) professionals
- Market players

Each module contains a list of **topics** that we consider suitable for the users.

Each topic proposes a **learning package** that includes: Case studies, Training materials and Bibliography. Some topics also include a multimedia Learning Object that comes with two questionnaires (assessment and evaluation) and other important information: summary and target audience (About the Learning Object), technical requirements (Using the Learning Objects), aims (To provide skills).

All the Learning objects are available in English. Translations into other languages are done with the help of Linked Heritage partners, and sometimes professional translators.

Learning outcomes on successful completion of the Linked Heritage programme:

- **Cultural institution managers** and decision-makers can appreciate what Europeana is and therefore decide whether they want to apply to it.
- **Teachers**, **educators**, **scholars** can gain knowledge and understanding of the scope of Europeana and of its content, how to search and exploit it for educational purposes.
- Library and Information Science (LIS) students, professionals and technicians can appreciate the importance of professional development and the educational resources available in the Web, selected for this Syllabus by the Linked Heritage experts, to keep up to date with the most advanced issues on digital libraries.
- Market players can appreciate what Europeana is and does and the main results of Linked Heritage, in particular the technical support for commercial partners.

Learning Objects Reuse and Translations

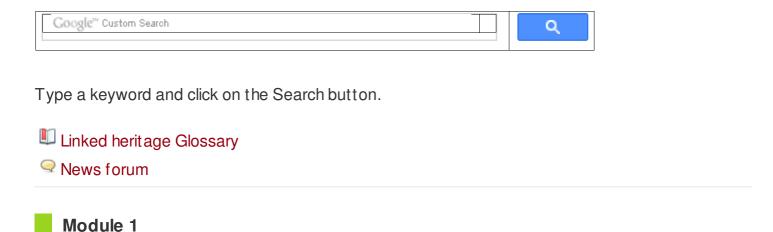
The Linked Heritage Learning Objects are reusable. Read the instructions on how to modify or translate them.

Where to begin

Select the module tailored for you and choose the topic you are interested in. The course is available to all visitors at all times as Guests. Be aware that some tools and activities are reserved only to registered users. This is why we invite you to register here and then login with your personal account here, after email confirmation.

Contact us for more information or comments on the course

SEARCH THE LINKED HERITAGE TRAINING PROGRAMME



CULTURAL INSTITUTION DECISION MAKERS

- Overview of Europeana
- Persistent Identifiers: What if? (Learning Object included)
- Pids: what if" Assessment

- Course: EU project: Linked Heritage
- ? Evaluate this Learning Object: PIDs: What if
- Digitisation Life Cycle (Learning Object included)
- Digitisation Life Cycle: Assessment
- ? Evaluate this Learning Object: Digitisation Lyfe Cycle
- Why and how to contribute to Europeana (Learning Object included)
- ʔ Evaluate this Learning Object: "Why and how contribute to Europeana"

Module 2

TEACHERS AND RESEARCHERS

- Overview of Europeana
- General overview of Europeana
- Tutorial for searching on Europeana (under construction)
- Users scenarios for educational purposes (under construction)
- How to re-use contents? (under construction)

Module 3

LIBRARY AND INFORMATION SCIENCE PROFESSIONALS

- Persistent Identifiers: What if? (Learning Object Included)
- PIDs: What if Assessment
- Evaluate this Learning Object: "PIDs what if"
- Persistent Identifiers: Commercial and heritage views (Learning Object included)
- Persistent Identifiers: commercial and heritage views. Assessment
- Evaluate this Learning Object: Persistent Identifiers: Commercial and Heritage Views
- Digitisation Life Cycle (Learning Object included)
- Digitisation Life Cycle: assessment
- Evaluate this Learning Object: "Digitisation life cycle"
- ? Evaluate this learning object: Terminology
- Linking Cultural Heritage Information (Learning Object included)
- ? Evaluate this Learning Object: Linking Cultural Heritage Information
- MINT Services (Learning Object included)
- ? Evaluate this Learning Object: MINT Services

MARKET PLAYERS

- Overview of Europeana
- Public-Private Partnership with Europeana (Learning Object included)
- ? Evaluate this Learning Object: Public Private Partnership with Europeana
- Persistent Identifiers: Commercial and heritage views (Learning Object included)
- Persistent Identifiers: commercial and heritage views. Assessment
- Evaluate this Learning Object: Persistent Identifiers: Commercial and heritage views

PROJECT



ACTIVITIES

- Feedback
- Forums
- Glossaries
- Quizzes
- Resources

SECTION LINKS

1234

ONLINE USERS

(last 5 minutes)

Cristiana Bettella

PARTNERS









Course: EU project: Linked Heritage







NEWS FROM THE DIGITAL WORLD

Digitalmeetsculture newsletter

Uncommon culture

You are currently using guest access (Login)

EN IT

Webmail Uniweb

Home ▶ My courses ▶ EUproject:LinkedHeritage

di Padova

WELCOME TO THE LINKED HERITAGE TRAINING PROGRAMME!

Linked Heritage: Coordination of Standards and Technologies for the enrichment of Europeana (April 2011–Sept. 2013) is a project funded by the EU as part of its CIP (2007–2013) programme. LH project involved 38 partners from 20 countries, including EU member states, Israel and Russia.

The course "EU project: Linked heritage" is focused on the key aspects of the project: Europeana, metadata standards, linked data, permanent identifiers, multilingual terminologies, public-private partnerships.

The course is in English, but Learning Objects have been translated in several languages.

Further information can be found in the project site and in the University of Padova site.

The training programme includes four **modules** specifically tailored for the following target user groups:

- Cultural institution decision makers
- Teachers and researchers
- Library and Information Science (LIS) professionals
- Market players

Each module contains a list of **topics** that we consider suitable for the users.

Each topic proposes a **learning package** that includes: Case studies, Training materials and Bibliography. Some topics also include a multimedia Learning Object that comes with two questionnaires (assessment and evaluation) and other important information: summary and target audience (About the Learning Object), technical requirements (Using the Learning Objects), aims (To provide skills).

All the Learning objects are available in English. Translations into other languages are done with the help of Linked Heritage partners, and sometimes professional translators.

Learning outcomes on successful completion of the Linked Heritage programme:

- **Cultural institution managers** and decision-makers can appreciate what Europeana is and therefore decide whether they want to apply to it.
- **Teachers**, **educators**, **scholars** can gain knowledge and understanding of the scope of Europeana and of its content, how to search and exploit it for educational purposes.
- Library and Information Science (LIS) students, professionals and technicians can appreciate the importance of professional development and the educational resources available in the Web, selected for this Syllabus by the Linked Heritage experts, to keep up to date with the most advanced issues on digital libraries.
- Market players can appreciate what Europeana is and does and the main results of Linked Heritage, in particular the technical support for commercial partners.

Learning Objects Reuse and Translations

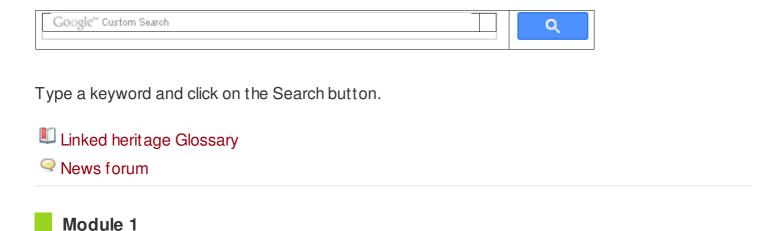
The Linked Heritage Learning Objects are reusable. Read the instructions on how to modify or translate them.

Where to begin

Select the module tailored for you and choose the topic you are interested in. The course is available to all visitors at all times as Guests. Be aware that some tools and activities are reserved only to registered users. This is why we invite you to register here and then login with your personal account here, after email confirmation.

Contact us for more information or comments on the course

SEARCH THE LINKED HERITAGE TRAINING PROGRAMME



CULTURAL INSTITUTION DECISION MAKERS

- Overview of Europeana
- Persistent Identifiers: What if? (Learning Object included)
- Pids: what if" Assessment

- Course: EU project: Linked Heritage
- ? Evaluate this Learning Object: PIDs: What if
- Digitisation Life Cycle (Learning Object included)
- Digitisation Life Cycle: Assessment
- ? Evaluate this Learning Object: Digitisation Lyfe Cycle
- Why and how to contribute to Europeana (Learning Object included)
- Evaluate this Learning Object: "Why and how contribute to Europeana"

Module 2

TEACHERS AND RESEARCHERS

- Overview of Europeana
- General overview of Europeana
- Tutorial for searching on Europeana (under construction)
- Users scenarios for educational purposes (under construction)
- How to re-use contents? (under construction)

Module 3

LIBRARY AND INFORMATION SCIENCE PROFESSIONALS

- Persistent Identifiers: What if? (Learning Object Included)
- PIDs: What if Assessment
- Evaluate this Learning Object: "PIDs what if"
- Persistent Identifiers: Commercial and heritage views (Learning Object included)
- Persistent Identifiers: commercial and heritage views. Assessment
- Evaluate this Learning Object: Persistent Identifiers: Commercial and Heritage Views
- Digitisation Life Cycle (Learning Object included)
- Digitisation Life Cycle: assessment
- Evaluate this Learning Object: "Digitisation life cycle"
- ? Evaluate this learning object: Terminology
- Linking Cultural Heritage Information (Learning Object included)
- ? Evaluate this Learning Object: Linking Cultural Heritage Information
- MINT Services (Learning Object included)
- Evaluate this Learning Object: MINT Services

Course: EU project: Linked Heritage Module 4

MARKET PLAYERS

- Overview of Europeana
- Public-Private Partnership with Europeana (Learning Object included)
- ? Evaluate this Learning Object: Public Private Partnership with Europeana
- Persistent Identifiiers: Commercial and heritage views (Learning Object included)
- Persistent Identifiers: commercial and heritage views. Assessment
- Evaluate this Learning Object: Persistent Identifiers: Commercial and heritage views

PROJECT



SETTINGS

- Course administration
 - Unenrol me from EUproject:LinkedHeritage

- My profile settings
 - Edit profile
 - Change password
 - Messaging

PEOPLE



Participants

ACTIVITIES

- 7 Feedback
- Forums
- Glossaries
- Quizzes
- Resources

SECTION LINKS

1234

ONLINE USERS

(last 5 minutes)

Domenico Castellani

PARTNERS















NEWS FROM THE DIGITAL WORLD

Digitalmeetsculture newsletter

Uncommon culture

You are logged in as Domenico Castellani (Logout)

Home ▶ My courses ▶ EUproject:LinkedHeritage

di Padova

TURN EDITING OFF

WELCOME TO THE LINKED HERITAGE TRAINING PROGRAMME!

Linked Heritage: Coordination of Standards and Technologies for the enrichment of Europeana (April 2011–Sept. 2013) is a project funded by the EU as part of its CIP (2007–2013) programme. LH project involved 38 partners from 20 countries, including EU member states, Israel and Russia.

The course "EU project: Linked heritage" is focused on the key aspects of the project: Europeana, metadata standards, linked data, permanent identifiers, multilingual terminologies, public-private partnerships.

The course is in English, but Learning Objects have been translated in several languages.

Further information can be found in the project site and in the University of Padova site.

The training programme includes four **modules** specifically tailored for the following target user groups:

- Cultural institution decision makers
- Teachers and researchers
- Library and Information Science (LIS) professionals
- Market players

Each module contains a list of **topics** that we consider suitable for the users.

Each topic proposes a **learning package** that includes: Case studies, Training materials and Bibliography. Some topics also include a multimedia Learning Object that comes with two questionnaires (assessment and evaluation) and other important information: summary and target audience (About the Learning Object), technical requirements (Using the Learning Objects), aims (To provide skills).

All the Learning objects are available in English. Translations into other languages are done with the help of Linked Heritage partners, and sometimes professional translators.

Learning outcomes on successful completion of the Linked Heritage programme:

- **Cultural institution managers** and decision-makers can appreciate what Europeana is and therefore decide whether they want to apply to it.
- **Teachers**, **educators**, **scholars** can gain knowledge and understanding of the scope of Europeana and of its content, how to search and exploit it for educational purposes.
- Library and Information Science (LIS) students, professionals and technicians can appreciate the importance of professional development and the educational resources available in the Web, selected for this Syllabus by the Linked Heritage experts, to keep up to date with the most advanced issues on digital libraries.
- Market players can appreciate what Europeana is and does and the main results of Linked Heritage, in particular the technical support for commercial partners.

Learning Objects Reuse and Translations

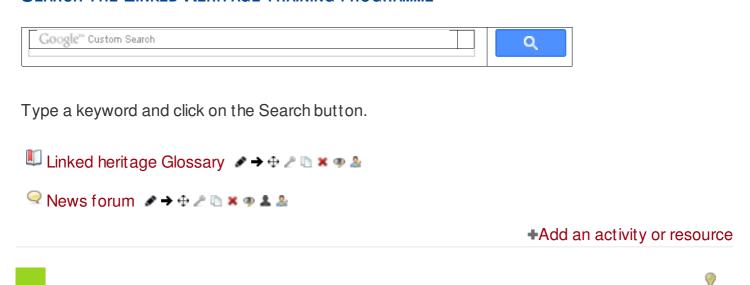
The Linked Heritage Learning Objects are reusable. Read the instructions on how to modify or translate them.

Where to begin

Select the module tailored for you and choose the topic you are interested in. The course is available to all visitors at all times as Guests. Be aware that some tools and activities are reserved only to registered users. This is why we invite you to register here and then login with your personal account here, after email confirmation.

Contact us for more information or comments on the course

SEARCH THE LINKED HERITAGE TRAINING PROGRAMME







Module 1

(B)

- ? Evaluate this Learning Object: PIDs: What if 🎤 🕈 🕆 🗥 💌 🦈 🚨 🚨

- 🔞 Evaluate this Learning Object: Digitisation Lyfe Cycle 📝 🗪 🕂 🗥 🗷 🕦 🗷 👁 🚨
- ? Evaluate this Learning Object: "Why and how contribute to Europeana" 🎤 🗪 🗅 🗶 🗅 🗶 👁 🚨 🚨

+Add an activity or resource



Module 2



TEACHERS AND RESEARCHERS

Add an activity or resource



Module 3



LIBRARY AND INFORMATION SCIENCE PROFESSIONALS

- Persistent Identifiers: What if? (Learning Object Included)

 → ⊕ → ⊕ ∠ □ × → ...
- 🗐 Evaluate this Learning Object: "PIDs what if" 🎤 > 🕀 🗥 🗶 🐚 🗶 🦈 🕭
- Persistent Identifiers: Commercial and heritage views (Learning Object included) 🖋 🗢 🕒

+Add an activity or resource



MARKET PLAYERS

- 🛮 Public-Private Partnership with Europeana (Learning Object included) 🎤 🕈 🗈 🗅 🗶 👁 🚨
- ? Evaluate this Learning Object: Public Private Partnership with Europeana 🥒 🕈 🗈 💌 🗪 🚨 🚨
- Persistent Identifiers: Commercial and heritage views (Learning Object included)

 → → →

 □

 ■
- 🔳 Persistent Identifiers: commercial and heritage views. Assessment 🥒 🗪 🕩 🗷 🐚 🗶 🦈 🕸

+Add an activity or resource

+ -

PROJECT



NAVIGATION



SETTINGS



- Course administration
 - ★Turn editing off
 - Activity chooser off
 - Edit settings
 - Users
 - Unenrol me from EUproject:LinkedHeritage
 - **T** Filters
 - **Grades**
 - Backup
 - **Restore**
 - Import
 - Publish

 - Question bank
 - Legacy course files

Site administration

	SEARCH
--	--------

PEOPLE





ACTIVITIES

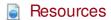












SECTION LINKS



1234

ONLINE USERS



(last 5 minutes)

Gianluca Drago

ADD A BLOCK

Add... \$

PARTNERS













Webmail Uniweb

MOODLE - CENTRO DI ATENEO PER LE EU PROJECT: LINKED HERITAGE

Home ▶ My courses ▶ EUproject:LinkedHeritage ▶ General ▶ Linked heritage Glossary ▶ Browse by alphabet

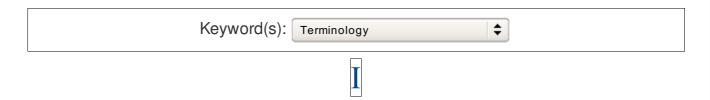
This is the glossary of Ll	l project			=
	SEARCH ⊠ Search full text			
ADD A NEW ENTRY Browse by alphabe	t Browse by category	Browse by date	Browse by Author	
Browse the glossary Special A B C E	using this index	_ M N O P Q	R S T U V W X	Y Z

Page: 1 2 (Next)



Controlled vocabulary

A controlled vocabulary is an established list of standardised terminology for use in indexing and retrieval of information.



Information retrieval

Information retrieval is the activity of obtaining information resources relevant to an information need from a collection of information resources. Searches can be based on metadata or on full-text (or other content-based) indexing.

Interoperability

Interoperability is the ability of the systems, procedures and culture of an organisation to be managed in such a way as to maximise opportunities for exchange and re-use of information, whether internally or externally. Paul Miller further divides interoperability into 6 types:

- 1: Technical interoperability Facilitated by using common technical standards (e.g. file types, metadata, etc.).
- 2: Semantic interoperability Facilitated by using common vocabularies for the terminologies used in data (e.g. thesauri).
- 3: Political/Human interoperability Facilitated by understanding and overcoming the barrierscaused by the different experiences and agendas of users and information providers
- 4: Inter-community interoperability Facilitated by recognising differences between discipline communities and overcoming them by working together (e.g. Museums, archives and libraries)
- 5: Legal interoperability Facilitated by following the legal restraints imposed on information providers (e.g. Freedom of Information and Data Protection legislation)
- 6: International Interoperability Facilitated by recognising and overcoming the barriers caused by cultural and linguistic differences.

(See: Helen Ashby – Gordon McKenna – Matthew Stiff. SPECTRUM Knowledge. London: MDA, 2001, p. 63 in ATHENA WP3 (2011), Digitisation: standards landscape for european museums, archives, libraries, p. 13).

Keyword(s):	Semantic Web	+

Linked heritage Glossary

ISO

ISO stands for International Organization for Standardization. It is the world's largest developer of voluntary international standards composed of representatives from various national standards organisations.

International standards give state of the art specifications for products, services and good practice, helping to make industry more efficient and effective. Developed through global consensus, they help to break down barriers to international trade.

Founded on 23 February 1947, the organisation promotes worldwide proprietary, industrial and commercial standards. It is headquartered in Geneva, Switzerland. Since then ISO has published more than 19 500 international standards covering almost all aspects of technology and business.



Linked data

Linked data is a pattern for hyperlinking machine-readable data sets to each other using Semantic Web techniques, especially via the use of RDF and URIs. Enables distributed SPARQL queries of the data sets and a browsing or discovery approach to finding information (as compared to a search strategy). Linked Data is intended for access by both humans and machines. Linked Data uses the RDF family of standards for data interchange (e.g., RDF/XML, RDFa, Turtle) and query (SPARQL). If Linked Data is published on the public Web, it is generally called Linked Open Data (See: W3C Government Linked Data Working Group: Linked data Glossary).

Explore further the Linked Heritage learning object: Linking Cultural Heritage Information

See also: Linked open data





Metadata

Metadata is structured information about any king of resource, which is used to idenity, describe, manage or give access to that resource



OWL

OWL stands for Web Ontology Language [...]



RDF

RDF stands for Resource Description Framework [...]



Semantic web

[...]

See also: Linked data, Linked open data, RDF, SKOS, XML

SKOS

SKOS stands for Simple Knowledge Organization System [...]

Page: 1 2 (Next)

ALL

PROJECT



NAVIGATION

Home

- My home
- Site pages
- My profile
- My courses
 - EUproject:LinkedHeritage
 - Participants
 - ▼ General
 - Linked heritage Glossary
 - Browse by alphabet
 - Browse by category
 - Browse by date
 - Browse by Author

News forum

- Module 1
- Module 2
- Module 3
- Module 4

SETTINGS

- ▼ Glossary administration
 - Add a new entry





Webmail Uniweb

MOODLE – CENTRO DI ATENEO PER LE EU PROJECT: LINKED HERITAGE

Home ▶ Courses ▶ Generale ▶ EUproject:LinkedHeritage ▶ Module 1 ▶ Digitisation Life Cycle (Learning Object included)





About the Learning Object

Summary

This LO presents the digitisation workflow both in theory and in practice. It consists of two parts: the first one gives an overview of the digitisation entire workflow, the second one focuses on a case study of the University of Padua: the "Botanists portrait collection".

The case study is illustrated also by means of two videos showing the following activities: preservation of items and digitisation.

Development Notes

Last revision 11 September 2012.

Languages

English

German

Greek

Italian

Spanish

Hosted and maintained by CAB, Padua University





TABLE OF CONTENTS

Using the Learning Object

Aim: to provide skill

Learning Object

Reading and training materials

- Case studies
- Training materials
- Bibliography

PROJECT



You are currently using guest access (Login)

You are currently using guest access (Login)



Webmail Uniweb

MOODLE - CENTRO DI ATENEO PER LE EU PROJECT: LINKED HERITAGE

Home ▶ Courses ▶ Generale ▶ EUproject:LinkedHeritage ▶ Module 1 ▶ Digitisation Life Cycle (Learning Object included)





Using the Learning Object

This learning object should be usable with any modern Web browser, but JavaScript must be enabled for many features to work.

The video can be downloaded in High Definition.

The text can be downloaded as a .txt file.





TABLE OF CONTENTS

About the Learning Object

Using the Learning Object

Aim: to provide skill

Learning Object

Reading and training materials

- Case studies
- Training materials
- Bibliography

PROJECT



You are currently using guest access (Login)

Webmail Uniweb

MOODLE - CENTRO DI ATENEO PER LE EU PROJECT: LINKED HERITAGE

Home ▶ Courses ▶ Generale ▶ EUproject:LinkedHeritage ▶ Module 1 ▶ Digitisation Life Cycle (Learning Object included)





Aim: to provide skill

This LO is both for managers of cultural institutions and technicians involved in digitisation projects.

Managers can have an overview of the entire workflow while librarians, archivists, technicians are given practical examples of activities/situations they might face in the digitisation process which nowadays affects many institutions.

Its content supplemented by training materials and further readings, raises awareness and, at the same time, provides technical information on digitisation workflow of collections of cultural institutions.





TABLE OF CONTENTS

About the Learning Object

Using the Learning Object

Aim: to provide skill

Learning Object

Reading and training materials

- Case studies
- Training materials
- Bibliography

PROIECT



)

EN IT

Webmail Uniweb

MOODLE - CENTRO DI ATENEO PER LE EU PROJECT: LINKED HERITAGE

Home ► Courses ► Generale ► EUproject:LinkedHeritage ► Module 1 ► Digitisation Life Cycle (Learning Object included)





Learning Object

English language version

German language version

Greek language version

Italian language version

Spanish language version





TABLE OF CONTENTS

About the Learning Object

Using the Learning Object

Aim: to provide skill

Learning Object

Reading and training materials

- Case studies
- Training materials
- Bibliography

PROJECT





EN IT

Webmail Uniweb

MOODLE - CENTRO DI ATENEO PER LE EU PROJECT: LINKED HERITAGE

Home ► Courses ► Generale ► EUproject:LinkedHeritage ► Module 1 ► Digitisation Life Cycle (Learning Object included)





Reading and training materials

Cases studies

Training materials

Bibliography





TABLE OF CONTENTS

About the Learning Object

Using the Learning Object

Aim: to provide skill

Learning Object

Reading and training materials

- Case studies
- Training materials
- Bibliography

PROJECT



You are currently using guest access (Login)

Webmail Uniweb

MOODLE - CENTRO DI ATENEO PER LE EU PROJECT: LINKED HERITAGE

Home ► Courses ► Generale ► EUproject:LinkedHeritage ► Module 1 ► Digitisation Life Cycle (Learning Object included)





Reading and training materials

Case studies

Il Progetto di digitalizzazione Iconoteca dei Botanici (it)

Technical report on the project "Botanists' portraits" of the University of Padua by Lorisa Andreoli, University of Padua, 2011, 71 p.

http://phaidra.cab.unipd.it/o:4855

Restauro, conservazione e digitalizzazione della collezione "Manifesti di propaganda della R.S.I." (it)

Technical report on the project "Restoration, preservation and digitisation of the collection "Propaganda posters of the Italian Social Republic" by Lorisa Andreoli, University of Padua, 2005, 62 p.

http://manifestirsi.cab.unipd.it/docs/Rapporto_tecnico_Manifesti_RSI.pdf





TABLE OF CONTENTS

About the Learning Object

Using the Learning Object

Aim: to provide skill

Learning Object

Reading and training materials

- Case studies
- Training materials
- Bibliography

PROJECT



You are currently using guest access (Login)

Webmail Uniweb

MOODLE - CENTRO DI ATENEO PER LE EU PROJECT: LINKED HERITAGE

Home ▶ Courses ▶ Generale ▶ EUproject:LinkedHeritage ▶ Module 1 ▶ Digitisation Life Cycle (Learning Object included)





Reading and training materials

Training materials

This section gathers Linked Heritage Project's deliverables and booklets, sister project booklets (Athena, Minerva), slides, guidelines and manuals edited by Linked Heritage partner Institutions (both in English and in their native language) relevant to the topic.

Digitisation: standards landscape for european museums, archives, libraries (en)

An overview of the different standards which are in use with the partners in the ATHENA project. Its content results from the information provided from the more than 20 partners from ATHENA coming from museums, libraries and archives, as well as ministries. Edited by ATHENA WP3 Working Group "Identifying standards and developing recommendations", 2011, 44 p. http://phaidra.cab.unipd.it/o:6785

Linee guida sulla digitalizzazione (ita)

Reference booklet about digitalization's procedures of bidimensional documents, accordin to international standards and good practices. Edited by the Phaidra group for the digital asset management system with long-term archiving functions of Padua University. (2011) 23 p. https://phaidra.cab.unipd.it/detail_object/o:11913

MINERVA Technical Guidelines for Digital Cultural Content Creation Programmes: Version 2.0. (multi-language)

"This document is intended as a resource for policy-makers, for those implementing funding programmes for the creation of digital cultural content and for those managing digitisation

projects. Based on a life-cycle approach to the digitisation process, it seeks to provide guidelines for the use of technical standards and identifies areas where there is already a commonality of approach". Editors: Kate Fernie, Giuliana De Francesco and David Dawson, 2008, 92 p. https://phaidra.cab.unipd.it/detail_object/o:13226

Good Practice Handbook. Version 1.2 Identification of good practices and competence centres (eng)

A list of good practices in digitisation, according to the ten categories selected by the MINERVA Working group 6. (2003) 105 p. https://phaidra.cab.unipd.it/detail_object/o:13227





TABLE OF CONTENTS

About the Learning Object

Using the Learning Object

Aim: to provide skill

Learning Object

Reading and training materials

- Case studies
- Training materials
- Bibliography

PROJECT



You are currently using guest access (Login)

Webmail Uniweb

MOODLE - CENTRO DI ATENEO PER LE EU PROJECT: LINKED HERITAGE

Home ▶ Courses ▶ Generale ▶ EUproject:LinkedHeritage ▶ Module 1 ▶ Digitisation Life Cycle (Learning Object included)





Reading and training materials

Bibliography

PLANNING

Cohen, Daniel J., Rosenzweig, R. 2005, *Digital history: a guide to gathering, preserving, and presenting the past on the web.* Available at:

http://chnm.gmu.edu/digitalhistory/index.php [accessed 11/9/2012]

Europeana's professional knowledge-sharing platform. Available at: http://pro.europeana.eu/web/guest/home [accessed 11/9/2012]

International Federation of Library Associations and Institutions (IFLA), *Guidelines for digitisation projects*. Available at: http://archive.ifla.org/VII/s19/pubs/digit-guide.pdf [accessed 11/9/2012]

JISC Digital Media. Available at: http://www.jiscdigitalmedia.ac.uk/ [accessed 11/9/2012]

National Archives and Records Administration (NARA), *Technical guidelines for digitizing archival materials for electronic access: creation of production master files – raster images*. Available at: http://www.archives.gov/preservation/technical/guidelines.html [accessed 11/9/2012]

National Information Standards Organization (NISO), *A framework guidance for building good digital collections*. Available at: http://framework.niso.org/ [accessed11/9/2012]

The NINCH Guide to Good Practice in the Digital Representation and Management of Cultural Heritage Materials. Available at: http://www.nyu.edu/its/humanities/ninchguide/ [accessed 11/9/2012]

Northeast Document Conservation Center (NDCC), *Handbook for digital projects*. Available at: http://www.nedcc.org/resources/digitalhandbook/dighome.htm [accessed 11/9/2012]

DIGITISATION

California Digital Library (CDL), *Guidelines for Digital Images*. Available at: http://www.cdlib.org/inside/diglib/guidelines/bpgimages/ [accessed 11/9/2012]

Comité des Sages of the European Commission, *The cost of Digitising Europe's Cultural Heritage*. Available at:

http://ec.europa.eu/information_society/activities/digital_libraries/doc/refgroup/annexes/digiti_repo 11/9/2012]

Cornell University Library, *Digital preservation management resource*. Available at: http://www.icpsr.umich.edu/dpm/ [accessed 11/9/2012]

Cornell University Library, *Moving theory into practice: digital imaging tutorial*. Available at: http://www.library.cornell.edu/preservation/tutorial/contents.html [accessed 11/9/2012]

Digital Library Federation (DFL), *Draft benchmark for digital reproductions of printed books and serial publications*. Available at: http://old.diglib.org/standards/draftbmark.htm [accessed 11/9/2012]

Digital Library Federation (DLF), *Guides to quality in visual resource imaging*. Available at: http://www.diglib.org/pubs/dlf091/dlf091.htm [accessed 11/9/2012]

Federal Agencies Digitization Initiative (FADGI) – Still Image Working Group, *Technical Guidelines for Digitizing Cultural Heritage Materials: Creation of Raster Image Master Files*.

Available at: http://www.digitizationguidelines.gov/guidelines/FADGI_Still_Image-Tech Guidelines 2010-08-24.pdf [accessed 11/9/2012]

Hubbard, S., Lenert, D. (eds.), *Introduction to Imaging*. Available at: http://www.getty.edu/research/publications/electronic_publications/introimages/index.html [access-11/9/2012]

Lavoie, B.F. 2004, *The Open Archival Information System Reference Model: Introductory Guide*. Available at: http://www.dpconline.org/docs/lavoie_OAIS.pdf [accessed 11/9/2012]

National Library of the Netherlands, *Alternative File Formats for Storing Master Images of Digitisation Projects*. Available at:

http://www.kb.nl/hrd/dd/dd_links_en_publicaties/links_en_publicaties_intro-en.html [accessed 11/9/2012]

Northeast Document Conservation Center (NDCC), *Outsourcing and Vendor Relations*. Available at:

http://www.nedcc.org/resources/leaflets/6Reformatting/07OutsourcingAndVendorRelations.php [a 11/9/2012]

RLG Guidelines for creating a request for proposal for digital images services. Available at: http://www.oclc.org/programs/ourwork/past/digimgtools/RFPGuidelines.pdf [accessed 11/9/2012]

DIGITISATION 3D

3D-COFORM: Available at: http://www.3d-coform.eu/ [accessed 22/7/2013]

3D-COFORM publications: Available at http://www.3d-coform.eu/index.php/dissemination/publications [accessed 22/7/2013]

Gallant, R. 2013, "3D printing in libraries around the world", in http://www3ders.org. Available at: http://www.3ders.org/articles/20130422-3d-printing-in-libraries-around-the-world.html [accessed 21/8/2013]

Stevenson, J., Jimenez, C., Kelleher, P. & Knox, U. 2012, "3D modelling of cultural objects in the V&A Museum: Tools and workflow developments", Archiving 2012 - Preservation Strategies and Imaging Technologies for Cultural Heritage Institutions and Memory Organizations, Final Program and Proceedings, pp. 168 Available

at: http://www.imaging.org/ist/publications/reporter/articles/REP27_3_ARCH2012_Stevenson.pdf [accessed 22/7/2013]

METADATA

Baca, M. (ed.) 2008, *Introduction to metadata*. Available at: http://www.getty.edu/research/publications/electronic_publications/intrometadata/index.html [acce 11/9/2012]

Dublin Core Metadata Initiative Wiki, *User guide*. Available at: http://wiki.dublincore.org/index.php/User_Guide [accessed 11/9/2012]

National Information Standards Organization (NISO), *Data dictionary – Technical metadata for digital still images*. Available at: http://www.niso.org/kst/reports/standards? step=2&gid=None&project_key=b897b0cf3e2ee526252d9f830207b3cc9f3b6c2c [accessed 11/9/2012]

National Information Standards Organization (NISO), *Understanding metadata*. Available at: http://www.niso.org/publications/press/UnderstandingMetadata.pdf [accessed 11/9/2012]





TABLE OF CONTENTS

About the Learning Object

Using the Learning Object

Aim: to provide skill

Learning Object

Reading and training materials

- Case studies
- Training materials
- Bibliography

PROJECT



You are currently using guest access (Login)

Webmail Uniweb

MOODLE - CENTRO DI ATENEO PER LE EU PROJECT: LINKED HERITAGE

Home ▶ My courses ▶ EUproject:LinkedHeritage ▶ Module 3 ▶ Persistent Identifiers: commercial and heritage views.

Assessment

Question 1 Not yet answered Marked out of 1.00 Flag question	In the media industries, most large companies only have supply partnerships with one other company Select one: True False
Question 2 Not yet answered Marked out of 1.00 Flag question	Commercial sector identifiers (and other universally unique identifiers) can have a "use-by date". Select one: True False
Question 3 Not yet answered Marked out of 1.00 Flag question	Which of these are benefits of using standard identifiers? Select one or more: a. They guarantee you can get a refund b. They can allow direct selection of one product, rather than a category of similar items you need to search through. c. They can create a machine-readable "Web of data" d. They offer a fixed point to attach detailed information e. They enable a "chain" of messages along the supply chain. f. They automatically provide legal protection in any jurisdiction
Question 4	A personal name, or the title of <i>e.g.</i> a book, can be used as a unique,

Not yet answered

persistent identifier.

ersistent Identifiers: commercial and he	eritage views. Assessment
	Select one:
1.00	○ True
→ Flag question	○ False
Question 5	Benefits of using a "dumb number" instead of a structured identifier are:
Not yet answered	
Marked out of	Select one or more:
1.00	☐ a. It is more likely to unique
→Flag question	□ b. It will avoid confusion among users of the ID
3 4	□ c. True
Question 6	Why is a controlled management organisation needed for Persistent Unique
Not yet answered	Identifiers?
Marked out of	Select one or more:
1.00	□ a. To make a financial profit.
→ Flag question	
	 b. To create and maintain correct and up to date central information on the things identified
	c. To enable appropriate access to information.
	d. To ensure unique numbering by coordinating local agencies and
	correcting any mistakes they make.
Question 7	Commercial media industries normally identify specific copies of books, films
Not yet answered	and music recordings.
Marked out of	
1.00	Select one:
→Flag question	○ True
y lag quosion	○ False
0	The IODNI was a daignally placed and the Physics of a 11 days in the Physics of a 11 d
Question 8	The ISBN was originally developed by libraries for their own internal use.
Not yet answered	Select one:
Marked out of	○ True
1.00	
→Flag guestion	○ False

Marked out of 1.00

→ Flag question

Select one:

- True
- False

Question 14

Not yet answered

Which of these "historic" Web standard specifications have been fully implemented for all actual and potential Web users?

Persistent Identifiers: commercial and he Marked out of 1.00 Flag question	Select one: a. URN b. URC c. URL
Question 15 Not yet answered Marked out of 1.00 Flag question	A DOI should not be used for commercial products because it resolves directly to the content of the product. Select one: True False
Question 16 Not yet answered Marked out of 1.00 Flag question	The ISBN-A system means all ISBNs can become Web links taking you to a "home page" for the book they identify. Select one: True False
Question 17 Not yet answered Marked out of 1.00 Flag question	The DOI system can archive, preserve and retrieve your academic research data. Select one: True False
Question 18 Not yet answered Marked out of 1.00 Flag question	Which of these research activities does DataCite directly (or in a secondary way) support? Select one or more: a. Data citation b. Data publication c. Data retrieval d. Data interpretation e. Data recording



Webmail Uniweb

MOODLE - CENTRO DI ATENEO PER LE EU PROJECT: LINKED HERITAGE

Home ▶ My courses ▶ EUproject:LinkedHeritage ▶ Module 3 ▶ Evaluate this Learning Object: Persistent Identifi... ▶ Complete a feedback

Evaluate this Learning Object: Persistent Identifiers:

Commercial and Heritage Views
Mode: Anonymous
(*)Answers are required to starred questions.
How would you rate this tutorial overall? (on a scale 1-5, with 1 being not helpful and 5 being extremely helpful)* (1 - 5)
Are the L.O. objectives clear? (on a scale 1-5, with one being not at all and 5 being very clear)* (1 - 5)
Is the content clear? (on a scale 1-5, with one being not at all and 5 being very clear)* (1 - 5)
Is the audio helpful to understand the contents ?*
Not selected
○ yes
○ no
Is there any additional information you would include? *
Not selected
○ yes
○ no
If yes, please give us a short description of the information you would add
Is the L.O. supported by appropriate documentation and bibliography? *
Not selected
○ yes
○ no
Is the level of the L.O. suited to your needs? *
Not selected
○ yes
○ no

Evaluate this Learning Object: Persistent Identifiers: Commercial and Heritage Views Rank the overall look and feel of the L.O (on a scale of 1-5, with 1 being poor, 5 being excellent)* (1 - 5)
Do fonts and colours make reading easy?*
Not selected
○ yes
○ no
Is it easy to activate the video subtitles?*
Not selected
○ yes
○ no
onot applicable
Video editing: are transitions, timing and animation appropriate? *
Not selected
○ yes
○ no
Are the navigation tools through the L.O. flexible and intuitive?*
Not selected
○ yes
○ no
Are the L.O. links clear and useful for the interaction?*
Not selected
○ yes
○ no
If you have further comments on the L.O. please write them here (max 250 characters)
SUBMIT YOUR ANSWERS
Cancel

PROJECT



Home

- My home
- Site pages
- My profile
- My courses
 - EUproject:LinkedHeritage
 - Participants
 - General
 - Module 1
 - Module 2
 - ▼ Module 3
 - Persistent Identifiers: What if? (Learning Object ...
 - PIDs: What if Assessment
 - Evaluate this Learning Object: "PIDs what if"
 - Persistent Identifiers: Commercial and heritage vi...
 - Persistent Identifiers: commercial and heritage vi...
 - Evaluate this Learning Object: Persistent Identifi...
 - Digitisation Life Cycle (Learning Object included)
 - Digitisation Life Cycle: assessment
 - Evaluate this Learning Object: "Digitisation life ...

 - ? Evaluate this learning object: Terminology

 - ? Evaluate this Learning Object: Linking Cultural He...

 - ? Evaluate this Learning Object: MINT Services
 - Module 4

SETTINGS

Course administration



EU PROJECT: LINKED HERITAGE

Home ▶ My courses ▶ EUproject:LinkedHeritage ▶ Reports ▶ Activity report

PROJECT

EU project: Linked Heritage

LINKED HERITAGE

Computed from logs since Wednesday, 15 May 2013, 2:14 PM.

	Activity	Views	Related blog entries	Last access
	Linked heritage Glossary	890	-	Friday, 13 September 2013, 2:32 PM (7 mins 39 secs)
	○ News forum	-	-	
	Modu	ıle 1		
Ιį	Overview of Europeana	208	-	Thursday, 12 September 2013, 1:41 PM (1 day)
	Persistent Identifiers: What if? (Learning Object included)	666	-	Friday, 13 September 2013, 12:40 PM (2 hours)
	Pids: what if" Assessment	36	-	Friday, 13 September 2013, 2:21 PM (18 mins 50 secs)
	? Evaluate this Learning Object: PIDs: What if	-	-	
p?i	Digitisation Life Cycle (Learning Object included)	397	-	Thursday, 12 September

NAVIGATION

Home

- My home
- Site pages
- My profile
- My courses
 - EUproject:LinkedHerita
 - Participants
 - Reports
 - Logs
 - Live logs
 - Activity report
 - Course participation
 - Statistics
 - General
 - Module 1
 - Module 2
 - Module 3
 - Module 4

SETTINGS				2013, 10:06 PM (16 hours 34 mins)
Course administration Turn editing on Edit settings Users Unenrol me from	Digitisation Life Cycle: Assessment	22	-	Tuesday, 10 September 2013, 10:48 PM (2 days 15 hours)
	e? Evaluate this Learning Object: Digitisation Lyfe Cycle	-	-	
	Why and how to contribute to Europeana (Learning Object included)	427	-	Friday, 13 September 2013, 2:40 PM (6 secs)
	? Evaluate this Learning Object: "Why and how contribute to Europeana"	-	-	
Legacy course files	Modu	ıle 2		

EUproject:LinkedHeritage: Activity report Site administration



			12:41 PM (37 days 1 hour)
	11	-	Wednesday, 12 June 2013, 4:12 PM (92 days 22 hours)
Tutorial for searching on Europeana (under construction)	26	-	Wednesday, 7 August 2013, 11:35 AM (37 days 3 hours)
Users scenarios for educational purposes (under construction)	19	_	Wednesday, 7 August 2013, 11:36 AM (37 days 3 hours)
How to re-use contents? (under construction)	54	-	Thursday, 12 September 2013, 9:36 PM (17 hours 3 mins)
Modu	ule 3		
Persistent Identifiers: What if? (Learning Object Included)	12	-	Friday, 13 September 2013, 8:47 AM (5 hours 52 mins)
PIDs: What if Assessment	7	-	Monday, 9 September 2013, 12:32 PM (4 days 2 hours)
Evaluate this Learning Object: "PIDs what if"	12	-	Saturday, 31 August 2013, 6:35 AM (13 days 8 hours)
Persistent Identifiers: Commercial and heritage views (Learning Object included)	244	_	Friday, 13 September 2013, 1:30 PM (1 hour 10

			mins)
Persistent Identifiers: commercial and heritage views. Assessment	25	-	Friday, 13 September 2013, 2:22 PM (17 mins 54 secs)
? Evaluate this Learning Object: Persistent Identifiers: Commercial and Heritage Views	-	-	
Digitisation Life Cycle (Learning Object included)	9	-	Thursday, 25 July 2013, 3:17 PM (49 days 23 hours)
Digitisation Life Cycle: assessment	10	-	Tuesday, 10 September 2013, 6:10 AM (3 days 8 hours)
Evaluate this Learning Object: "Digitisation life cycle"	12	-	Wednesday, 7 August 2013, 11:38 AM (37 days 3 hours)
Terminology (Learning Object included)	300	-	Friday, 13 September 2013, 12:40 PM (1 hour 59 mins)
? Evaluate this learning object: Terminology	-	-	
Linking Cultural Heritage Information (Learning Object included)	338	-	Friday, 13 September 2013, 12:41 PM (1 hour 58 mins)
? Evaluate this Learning Object: Linking Cultural Heritage Information	-	-	
MINT Services (Learning Object included)	368	-	Friday, 13 September

			2013, 11:14 AM (3 hours 25 mins)
? Evaluate this Learning Object: MINT Services	-	-	
Modu	ule 4		
Overview of Europeana	15	-	Thursday, 12 September 2013, 1:41 PM (1 day)
Public-Private Partnership with Europeana (Learning Object included)	254	-	Friday, 13 September 2013, 8:36 AM (6 hours 4 mins)
? Evaluate this Learning Object: Public Private Partnership with Europeana	-	-	
Interoperability and standards	8	_	Tuesday, 30 July 2013, 1:05 PM (45 days 1 hour)
Persistent Identifiers: Commercial and heritage views (Learning Object included)	13	-	Monday, 2 September 2013, 1:01 PM (11 days 1 hour)
Persistent Identifiers: commercial and heritage views. Assessment	6	-	Friday, 13 September 2013, 2:22 PM (17 mins 55 secs)
Evaluate this Learning Object: Persistent Identifiers: Commercial and heritage views	10	-	Thursday, 5 September 2013, 4:53 PM (7 days 21 hours)

MOODLE - CENTRO DI ATENEO PER LE

Home ▶ Pagine del sito ▶ Report ▶ Log ▶ Report ▶ Log

ATTIVA MODIFICA BLOCCHI

Moodle – Centro di Ateneo per le Biblioteche: Tutti i partecipanti, venerdì, 13 settembre 2013 (Ora locale del server)

Oggi, 13 settembre 2013	‡ Tutte	e le attività 🗦 🗍	Tutte le azioni	‡ v	isualizza nella pagina 🗦	
OTTIENI I LOG Visualizzazione di 256 record						
agina: 1 2 3 (Successivo						
Corso	Ora	Indirizzo IP	Nome completo dell'utente	Azione	Informazioni	
cab	ven 13 settembre 2013, 14:32	147.162.213.101	Gianluca Drago	course report log	Moodle – Centro di Ateneo per le Biblioteche	
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:31	147.162.213.101	Cristiana Bettella	glossary view	Linked heritage Glossary	
cab	ven 13 settembre 2013, 14:31	147.162.213.101	Gianluca Drago	course report log	Moodle – Centro di Ateneo per le Biblioteche	
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:31	147.162.213.101	Cristiana Bettella	glossary view	Linked heritage Glossary	
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:31	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary	
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:31	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary	
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:31	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary	
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:30	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary	
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:30	147.162.213.101	Cristiana Bettella	glossary update entry		

cab: Amministrazione: Report: Log EUproject:LinkedHeritage	ven 13 settembre 2013, 14:30	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:30	147.162.213.101	Cristiana Bettella	glossary update entry	
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:29	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:29	147.162.213.101	Cristiana Bettella	glossary update entry	
cab	ven 13 settembre 2013, 14:27	147.162.213.101	Gianluca Drago	course report log	Moodle – Centro di Ateneo per le Biblioteche
cab	ven 13 settembre 2013, 14:27	147.162.213.101	Gianluca Drago	course report log	Moodle – Centro di Ateneo per le Biblioteche
cab	ven 13 settembre 2013, 14:27	147.162.213.101	Gianluca Drago	course report stats	Moodle – Centro di Ateneo per le Biblioteche
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:26	147.162.213.101	Gianluca Drago	course view	EU project: Linked Heritage
cab	ven 13 settembre 2013, 14:26	147.162.213.101	Gianluca Drago	course view	Moodle – Centro di Ateneo per le Biblioteche
cab	ven 13 settembre 2013, 14:26	147.162.213.101	Gianluca Drago	user login	10
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:26	147.162.213.101	Cristiana Bettella	glossary view	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:26	147.162.213.101	Cristiana Bettella	glossary add entry	
cab	ven 13 settembre 2013, 14:26	147.162.213.101	Domenico Castellani	user logout	69
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:25	147.162.213.101	Domenico Castellani	course	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:24	147.162.213.101	Domenico Castellani	glossary	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13	147.162.213.101	Domenico Castellani	glossary view	Linked heritage Glossary

cab: Amministrazione: Report: Log	2013, 14:24				
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:24	147.162.213.101	Domenico Castellani	glossary view	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:23	147.162.213.101	Domenico Castellani	glossary	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:23	147.162.213.101	Domenico Castellani	glossary view	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:23	147.162.213.101	Domenico Castellani	glossary view all	
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:23	147.162.213.101	Domenico Castellani	course view	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:23	147.162.213.101	Domenico Castellani	feedback view all	EUproject:LinkedHeritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:22	147.162.213.101	Domenico Castellani	course	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:22	147.162.213.101	Domenico Castellani	quiz continue attempt	Persistent Identifiers: commercial and heritage views. Assessment
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:22	147.162.213.101	Domenico Castellani	quiz attempt	Persistent Identifiers: commercial and heritage views. Assessment
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:22	147.162.213.101	Domenico Castellani	quiz view	Persistent Identifiers: commercial and heritage views. Assessment
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:22	147.162.213.101	Domenico Castellani	url view	Persistent Identifiers: commercial and heritage views. Assessment
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:21	147.162.213.101	Domenico Castellani	course	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:21	147.162.213.101	Domenico Castellani	quiz continue attempt	"Pids: what if" Assessment
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:21	147.162.213.101	Domenico Castellani	quiz attempt	"Pids: what if" Assessment
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:21	147.162.213.101	Domenico Castellani	quiz view	"Pids: what if" Assessment

o: Amministrazione: Report: Log	40	147400040404	١٥ .	1 .	ı
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:21	147.162.213.101	Domenico Castellani	quiz view all	
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:18	147.162.213.101	Domenico Castellani	course view	EU project: Linked Heritage
cab	ven 13 settembre 2013, 14:18	147.162.213.101	Domenico Castellani	course view	Moodle – Centro di Ateneo per le Biblioteche
cab	ven 13 settembre 2013, 14:18	147.162.213.101	Domenico Castellani	user login	69
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:14	147.162.213.101	Utente ospite	course view	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:10	147.162.213.101	Cristiana Bettella	glossary view	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:02	147.162.213.101	Gianluca Drago	course view	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:02	147.162.213.101	Gianluca Drago	course view	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:02	147.162.213.101	Gianluca Drago	course view	EU project: Linked Heritage
cab	ven 13 settembre 2013, 14:02	147.162.213.101	Gianluca Drago	course view	Moodle – Centro di Ateneo per le Biblioteche
cab	ven 13 settembre 2013, 14:02	147.162.213.101	Gianluca Drago	user login	10
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:02	147.162.213.101	Utente ospite	course view	EU project: Linked Heritage
cab	ven 13 settembre 2013, 14:02	147.162.213.101	Gianluca Drago	user logout	10
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:02	147.162.213.101	Gianluca Drago	course view	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre	147.162.213.101	Gianluca Drago	course	EU project: Linked Heritage

Gianluca

course

EU project: Linked Heritage

147.162.213.101

2013, 14:01

ven 13

EUproject:LinkedHeritage

Amministrazione: Report: Log	2013, 14:01				
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:01	147.162.213.101	Gianluca Drago	course delete mod	forum 3
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:01	147.162.213.101	Gianluca Drago	course delete mod	page 1
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:01	147.162.213.101	Gianluca Drago	course delete mod	url 11
EUproject:LinkedHeritage	ven 13 settembre 2013, 14:00	147.162.213.101	Gianluca Drago	course	EU project: Linked Heritage
cab	ven 13 settembre 2013, 14:00	147.162.213.101	Gianluca Drago	course	Moodle – Centro di Ateneo per la Biblioteche
cab	ven 13 settembre 2013, 14:00	147.162.213.101	Gianluca Drago	course	Moodle – Centro di Ateneo per le Biblioteche
cab	ven 13 settembre 2013, 14:00	147.162.213.101	Gianluca Drago	course	Moodle – Centro di Ateneo per la Biblioteche
cab	ven 13 settembre 2013, 14:00	147.162.213.101	Gianluca Drago	user login	10
cab	ven 13 settembre 2013, 14:00	147.162.213.101	Utente ospite	course view	Moodle – Centro di Ateneo per la Biblioteche
EUproject:LinkedHeritage	ven 13 settembre 2013, 13:35	147.162.213.101	Utente ospite	course	EU project: Linked Heritage
cab	ven 13 settembre 2013, 13:35	147.162.213.101	Utente ospite	course	Moodle – Centro di Ateneo per la Biblioteche
EUproject:LinkedHeritage	ven 13 settembre 2013, 13:30	66.249.78.52	Utente ospite	book view	Persistent Identifiers: Commercial and heritage views (Learning Object included)
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:41	147.162.213.101	Cristiana Bettella	course	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:41	147.162.213.101	Cristiana Bettella	book view	Linking Cultural Heritage Information (Learning Object included)
EUproject:LinkedHeritage	ven 13	147.162.213.101	Cristiana	glossary	Linked data

ab: Amministrazione: Report: L	٦	one:	t: L	_og	
--------------------------------	---	------	------	-----	--

: Amministrazione: Report: Log EUproject:LinkedHeritage	ven 13 settembre 2013, 12:40	147.162.213.101	Cristiana Bettella	glossary view entry	Metadata
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:40	147.162.213.101	Cristiana Bettella	course	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:40	147.162.213.101	Cristiana Bettella	book view	Terminology (Learning Object included)
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:40	147.162.213.101	Cristiana Bettella	course	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:40	147.162.213.101	Cristiana Bettella	glossary view entry	Interoperability
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:40	147.162.213.101	Cristiana Bettella	book view	Persistent Identifiers: What if? (Learning Object included)
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:39	147.162.213.101	Cristiana Bettella	glossary view entry	Linked data
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:39	147.162.213.101	Cristiana Bettella	glossary view entry	Metadata
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:39	147.162.213.101	Cristiana Bettella	course	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:39	147.162.213.101	Cristiana Bettella	book view	Terminology (Learning Object included)
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:39	147.162.213.101	Cristiana Bettella	book view	Terminology (Learning Object included)
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:39	147.162.213.101	Cristiana Bettella	book view	Terminology (Learning Object included)
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:38	147.162.213.101	Cristiana Bettella	book view	Terminology (Learning Object included)
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:38	147.162.213.101	Cristiana Bettella	course	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:38	147.162.213.101	Cristiana Bettella	glossary view entry	Intero perability
EUproject:LinkedHeritage	ven 13	147.162.213.101	Cristiana Bettella	book	Terminology (Learning Object included)

	2013, 12:38				
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:16	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:15	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:15	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:14	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:14	147.162.213.101	Cristiana Bettella	glossary add entry	
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:10	147.162.213.101	Utente ospite	course view	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:10	1.2.163.86	Utente ospite	book view	Persistent Identifiers: Commercial and heritage views (Learning Object included)
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:04	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:04	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:03	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:03	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary
EUproject:LinkedHeritage	ven 13 settembre 2013, 12:03	147.162.213.101	Cristiana Bettella	course view	EU project: Linked Heritage
EUproject:LinkedHeritage	ven 13	147.162.213.101	Cristiana Bettella	glossary	Linked heritage Glossary

Pagina: 1 2 3 (Successivo)

settembre

2013, 11:28

NAVIGAZIONE

Home

My home

Bettella

view

: Amn	ninistrazione: Report: Log Pagine del sito
	Partecipanti
	Annotazioni
	Tag Tag
	Calendario
7	Report
	Log
	Live log
	Attività del corso
	Partecipazione al corso
	Statistiche
▶ µ	mio profilo
▶ 1	miei corsi
LM	DOSTAZIONII

▼ Impostazioni Pagina home X Attiva modifica

Impostazioni

▶ Utenti

T Filtri

Backup

Ripristino

Deposito delle domande

	ninistrazione: Report: Log Amministrazione del sito
	Notifiche
	Registrazione
	Funzionalità avanzate
	Utenti
	Corsi
•	
•	
	Lingua
•	
,	
	Aspetto
)	
,	
-	
	Commenti
	Backup
	Modifiche configurazione
	Panoramica corsi
	& Log
	Eive log
	Domande
	Sicurezza Statisticho
	Statistiche Profile inspector
•	Profile inspector Sviluppo
	3 Assistente per l'aggiornamento dei compiti
G C	m / Natiatorio por raddivirialifotio doi ovitipia

CERCA

assistente per l'aggiornamento del motore delle domande

(i) Documentazione di Moodle per questa pagina

Sei collegato come Gianluca Drago. (Esci)