How to learn with our Mooc

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An important core of the DCbox project is represented by the online learning modules, which can be accessed through the DCbox website, allowing users to start with the learning experiences. This is structured by the partners in the previous project phases.
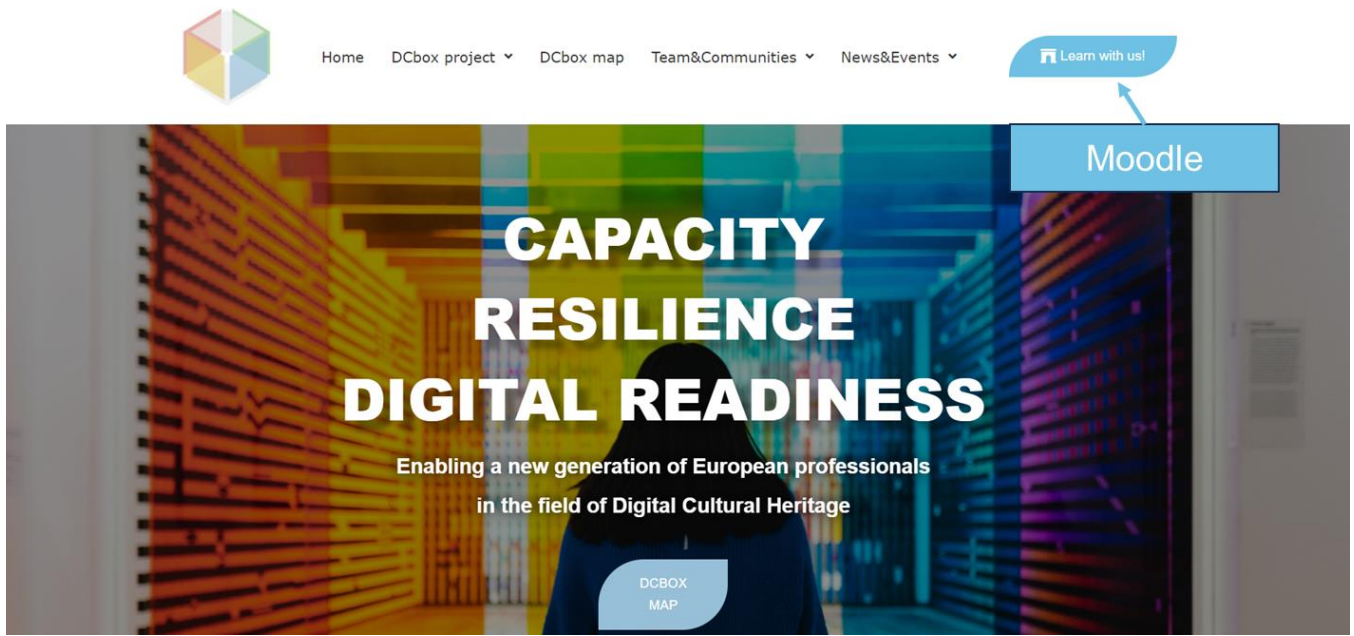

Figure 1_DCbox website homepage

Website

The course can be accessed either via the link directly from the project's webpage www.DCbox .eu or at: https://moodle.DCbox .eu/. The modules are divided into four main areas and a VR Module (which will be discussed in VR Module paragraph of this chapter).

Areas and VR Modules

Available courses

A. DIGITAL TRANSFORMATION OF CULTURAL HERITAGE

B. ADVANCED 3D DIGITIZATION

C. POLICIES AND DIGITAL DATA PRESERVATION

D. DIGITAL ACCESS: UNIVERSAL DESIGN AND VIRTUAL EXPERIENCES
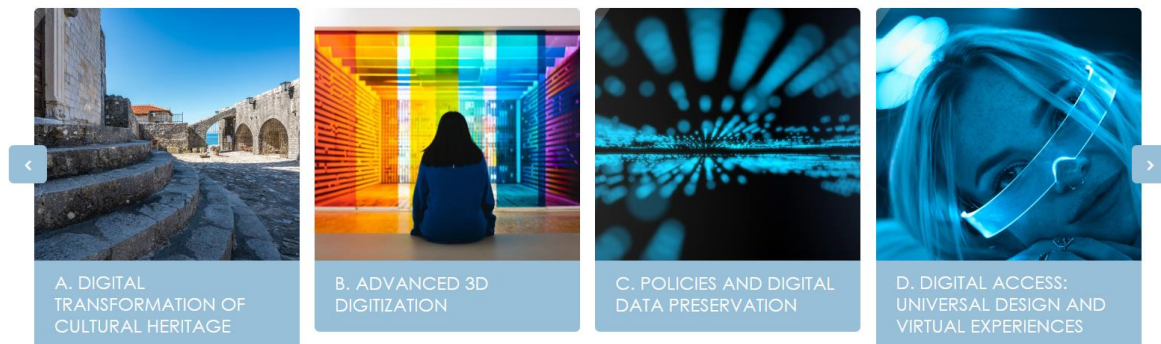
Figure 2_DCbox Moodle homepage

The four areas are designed to be completed sequentially by the learners. Once the first area is completed, an access key is given to the next one, until the entire course is completed.
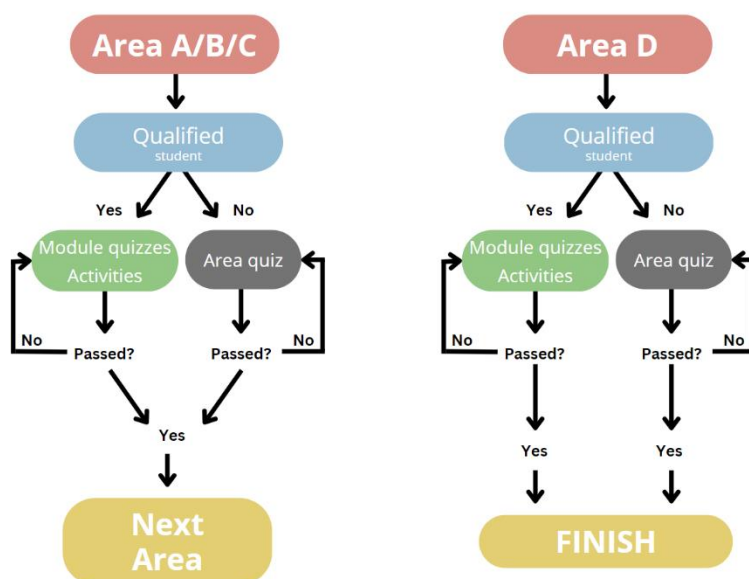

Figure 3_The consequential steps to be followed in the DCbox MOOC

Account Creation

Two learners' profiles enable to access the content, in particular the students who participated in the piloting phase of the project, were defined as "**Qualified**" students, while all other students who participated in the course externally, were defined as "**Self-Enrolled**". Qualified users, have access to the **Activities**, and practical tasks planned to test the concepts explained during the lessons. The activities are only proposed to the learners but are set as not-mandatory activities. However the activities are still present in the Learning Management

System as possible didactic contents and can be reactivated, as possible outlook, if in the future the DCbox partnership can afford to launch another tutored edition of the course.

Course Enrollment

Starting from the previous distinction, the course enrolment is possible in three ways:

- Via back-office through the data provided to the DCbox managers;
- Via Moodle website, for **self-enrolled** students, in the "log in" section;
- Via Moodle website, for **guests**, in the "log in" section. The Guest access allows users to view the contents of a course but not to participate in any learning tasks.
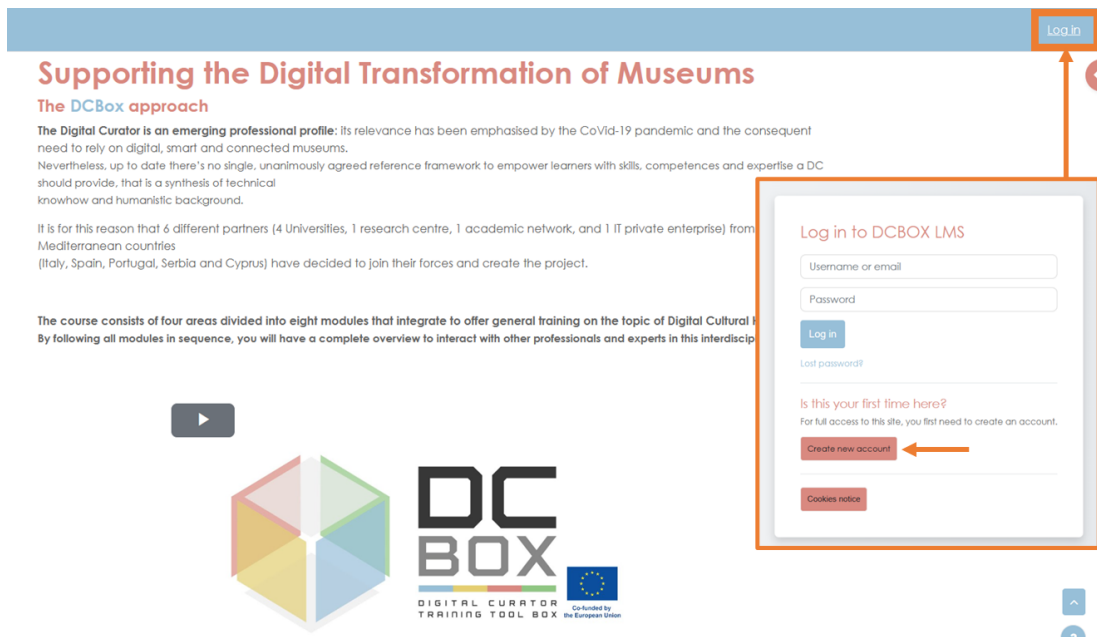

Figure 4_DCbox LMS account creation

Once completed the registration, the users can start with the course. To enroll on the first area, the learner hase to click on"AREA A: Digital Transformation of Cultural Heritage", All Areas enrolled are then displayed in the section "***My courses***" in the up right corner of the page.
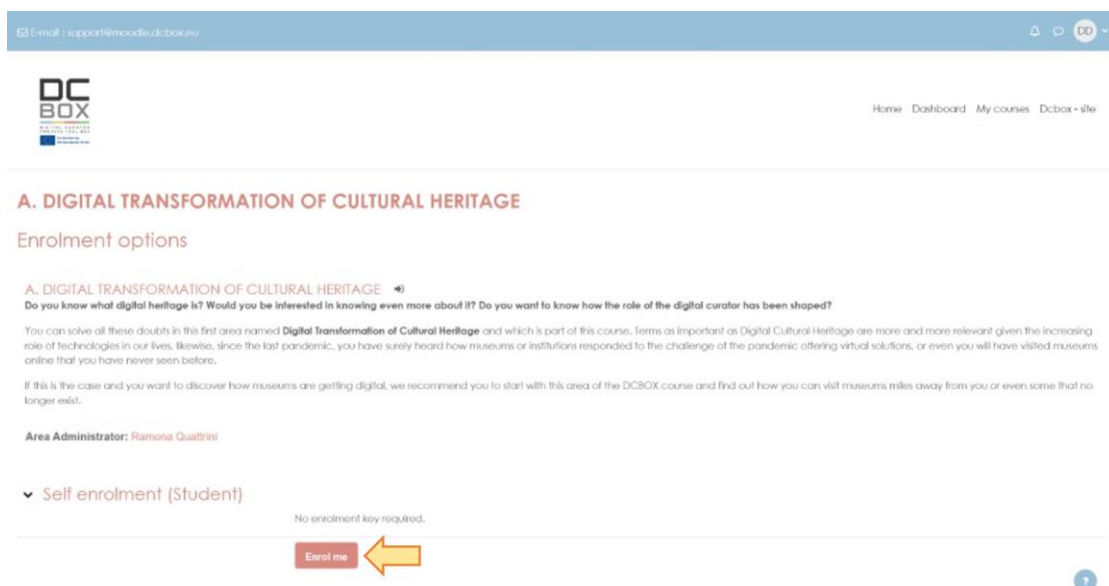
Figure 5_Activation and self-enrolment in a single area

Area Structure

Each area follows the same structure, visible in the figure.

✓ Announcement (teachers -> students) ✓ Forum (teachers <-> students)	**Communicate**
✓ Tutors	**Support**
✓ Video ✓ Presentation	**Educate**
✓ Support material	**Support**
✓ Activity ✓ Quiz	**Evaluate**

Figure 6_Sub-sections of each single area, with their main objective

In the "**General**" section, the user can find an overview of the Area and some useful information. The "**Announcements**" and the "**Forum**" are available per each area to communicate with the students, to share common questions and avoid repetitive need for information.

First area: Pre assessment quiz

Before starting the course, learners have to complete a "*Pre-Assessment Questionnaire*", in order to assess their knowledge and skills before the course. Simple questions are posed about their competencies in the field related to the DCbox learning course. At the end of the course a "*Post-Assessment Questionnaire*" is submitted to track their progress. This contains also additional questions, more specifically regarding the acquired competencies.

Teachers

Each area has assigned different teachers and responsible tutors: their profiles can be found in the related section called "Teachers". Here the learners can consult a brief Bio of each person and contact them directly via personal chat to ask for help if needed.
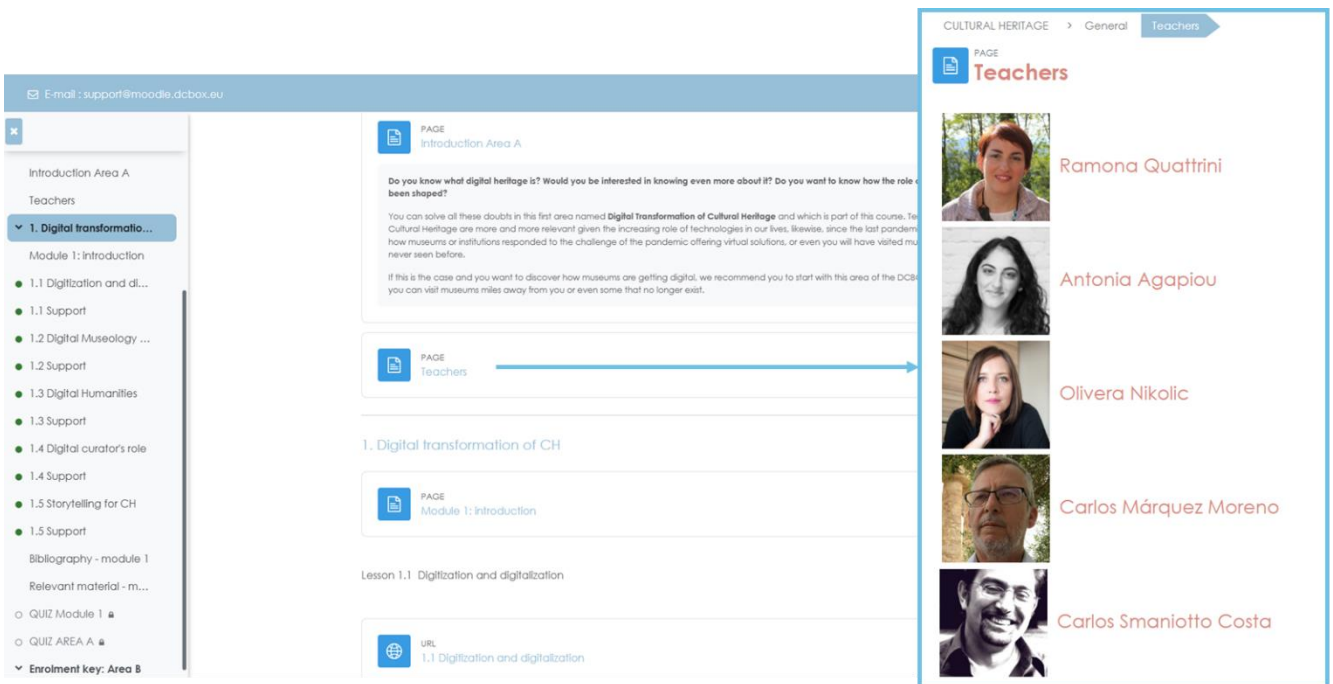
Figure 7_The MOOC section about teachers

Module introduction

Diving into the course, students will find the modules in which the area is divided. The first section of the module is the "introduction" which contains an overview of the topics and a brief syllabus of the contents, competencies and learning objectives of the current one.
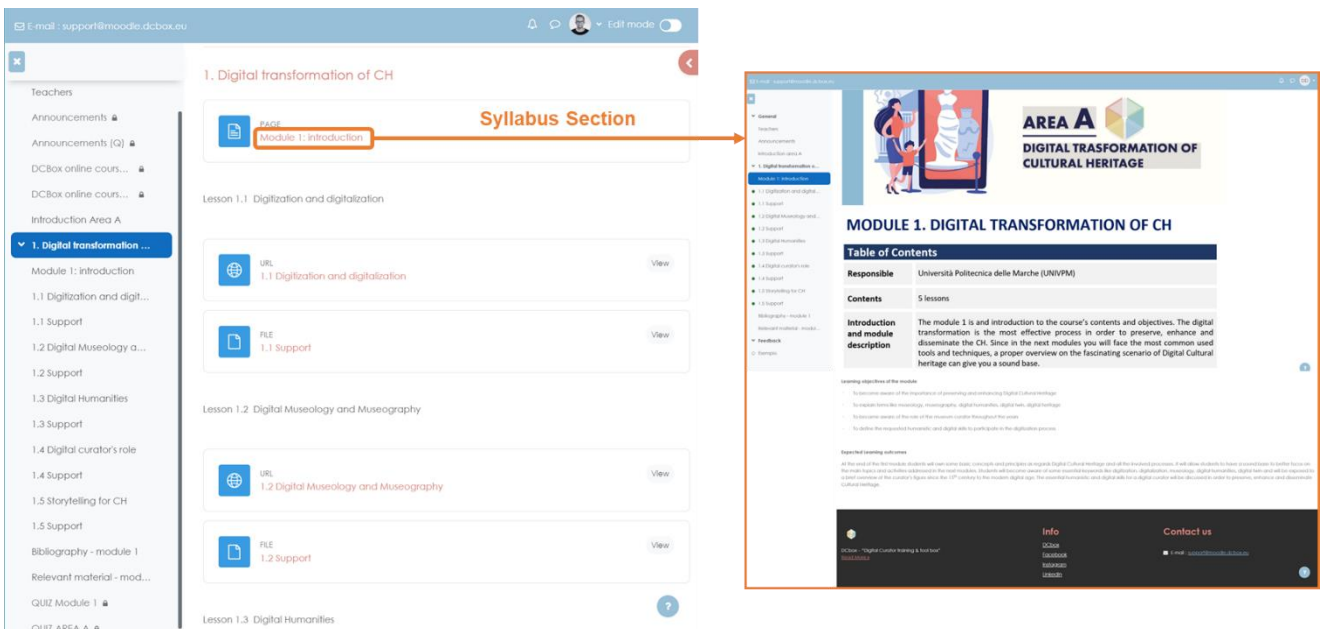

Figure 8_The introductory section of a module

Course Materials

Each module has a variable number of lessons, regarding specific topics, which are structured with a video lesson and a support file containing the slides used by the teachers.
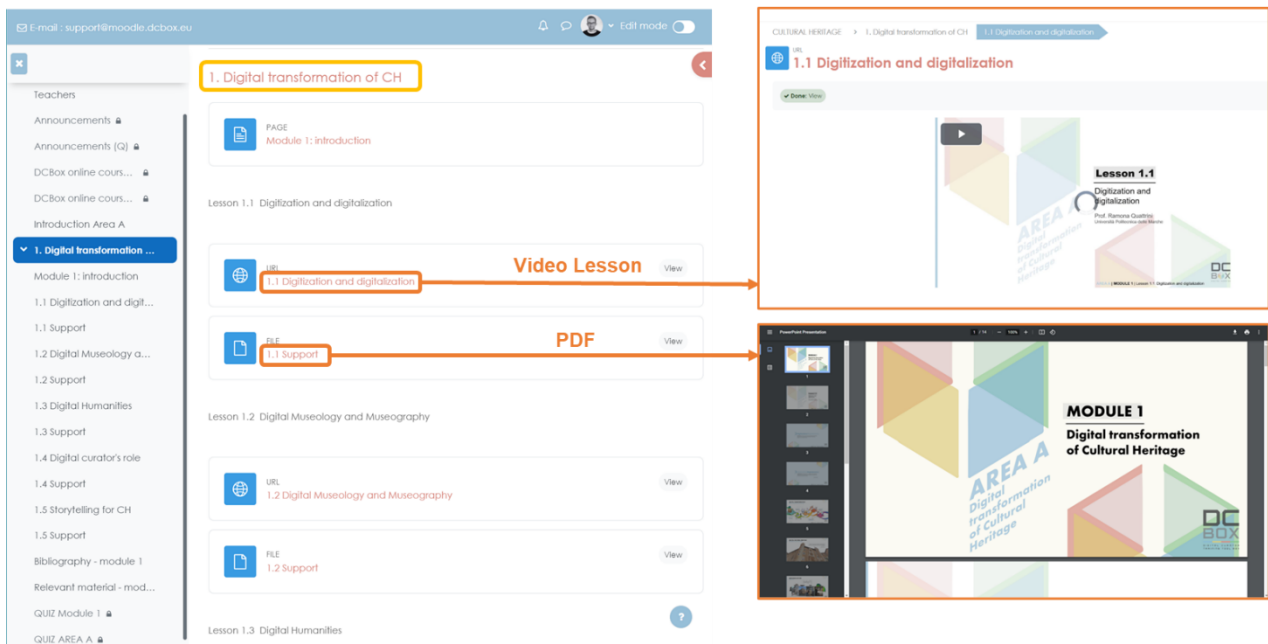
Figure 9_The section of a lesson, with possible material (video, support materials etc.)

Video Lessons

Each video has been uploaded to YouTube and then embedded into the platform. This was made mainly for two main reasons: to not overload the platform server with lots of gigabytes of files and to allow better accessibility via subtitles. Opening the video in the YouTube external player allows learners to activate subtitles and even select a different language. At the moment, the only verified language is English but some lessons have been translated into Spanish by our partners from the University of Cordoba and more languages can be easily set up via YouTube without entering the Moodle Back Office, which requires specific competencies .
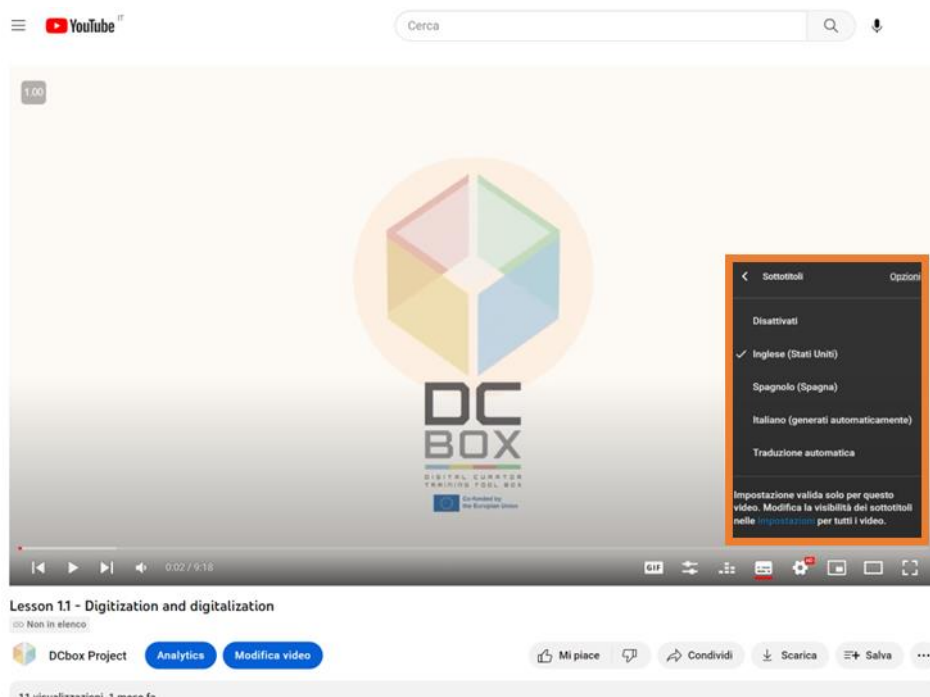

Figure10_Visualization of a DCbox video-lesson in Youtube, with the possibility to activate subtitling.

After the list of lessons, each module concludes with a specific section containing all the bibliographic references and other relevant material, useful to expand the knowledge and give an in-depth study about the module's topics.
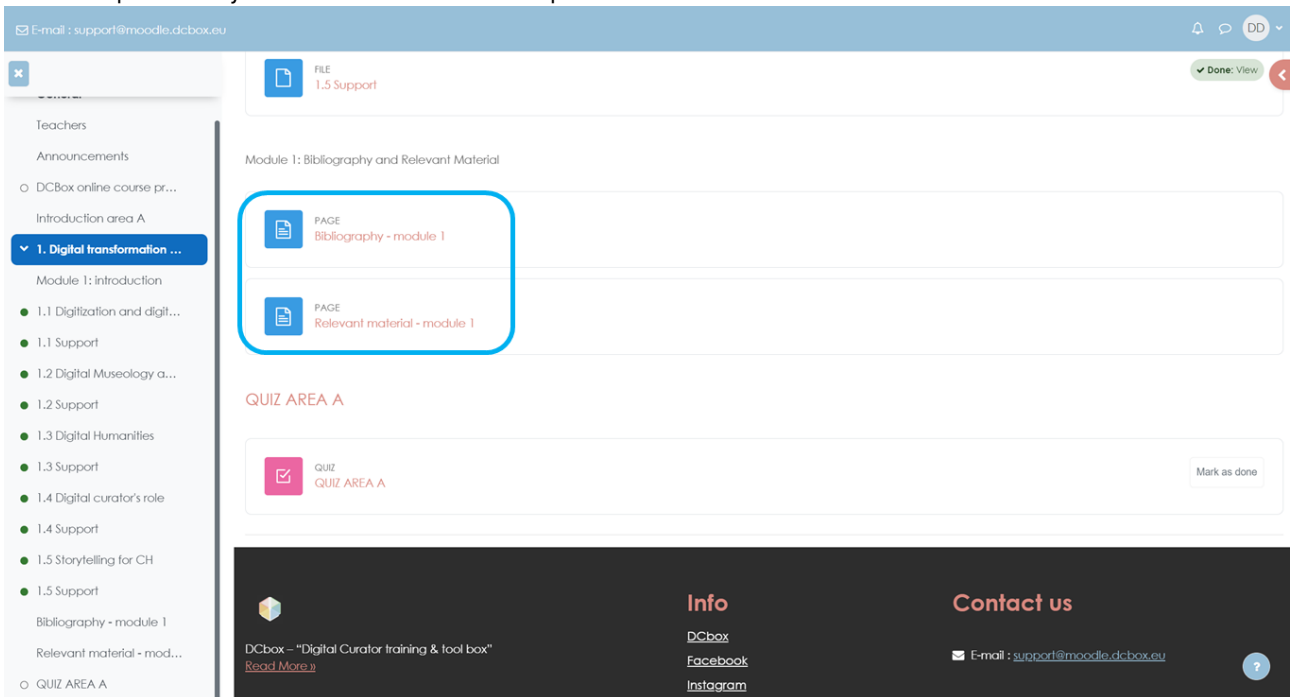

Figure 11_The section bibliography and relevant material, available for each module

Qualified Users: Activities

As mentioned above, in some modules, **qualified users** will find practical activities designed to learn new skills with simple assignments. Those activities are not mandatory, and their submissions were supported and reviewed by "**Tutors**" who are DCbox team members specialized in the topics of the exercise. The activity is generally structured with a main PDF file, containing the tutorial and some extra files to complete the task. Once submitted, the tutor corrects the activity and gives feedback on the outcome, regarding the competence of the student or the matter to improve.
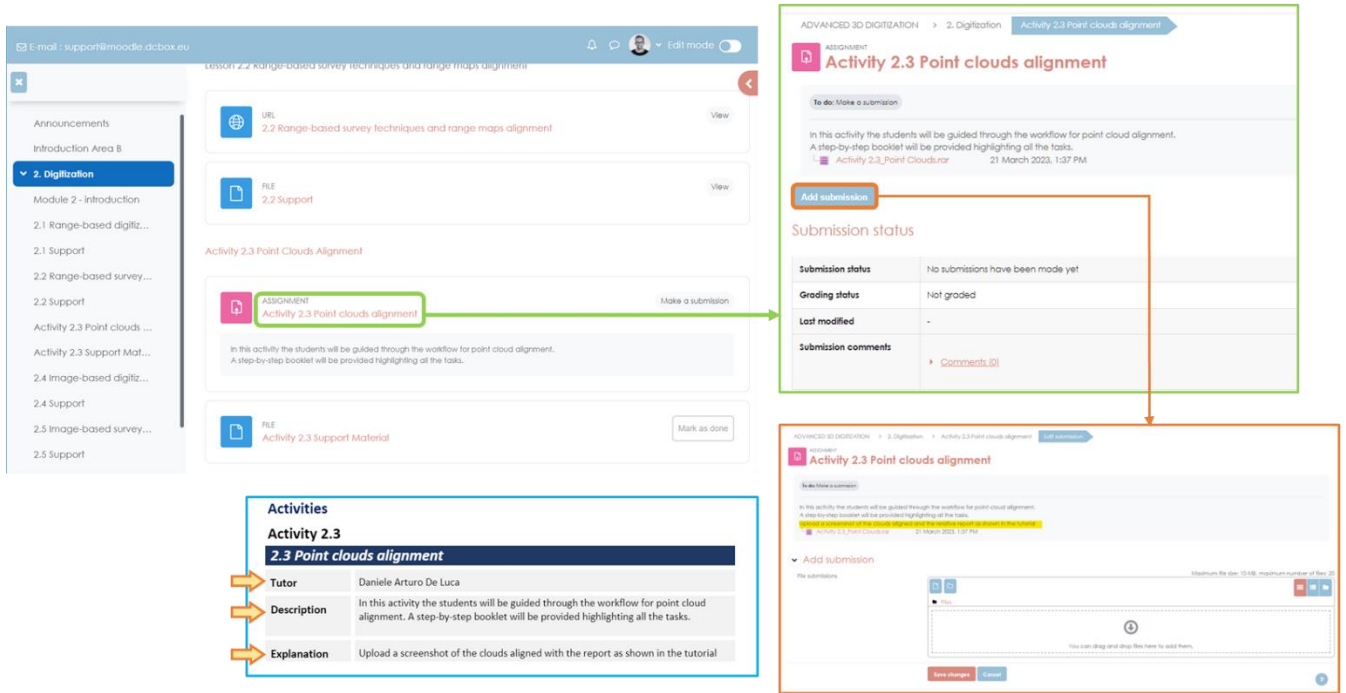
Figure 12_The section activity, available for some module and when the course is tutored.

Quizzes: Module Quizzes and Area Quizzes

To proceed with the following areas, each learner needs to complete a resume quiz. The quizzes are different in the case of qualified students or self-enrolled; in particular, qualified students have to complete one quiz per each module (eight in total), while self-enrolled students will find just one quiz at the end of each area with a selection of questions regarding the covered topics. Quiz completion is mandatory for each student in order to proceed with the course, as the area-key will be unlocked only if all mandatory tasks are completed. This is the only way that users can continue with their learning path.
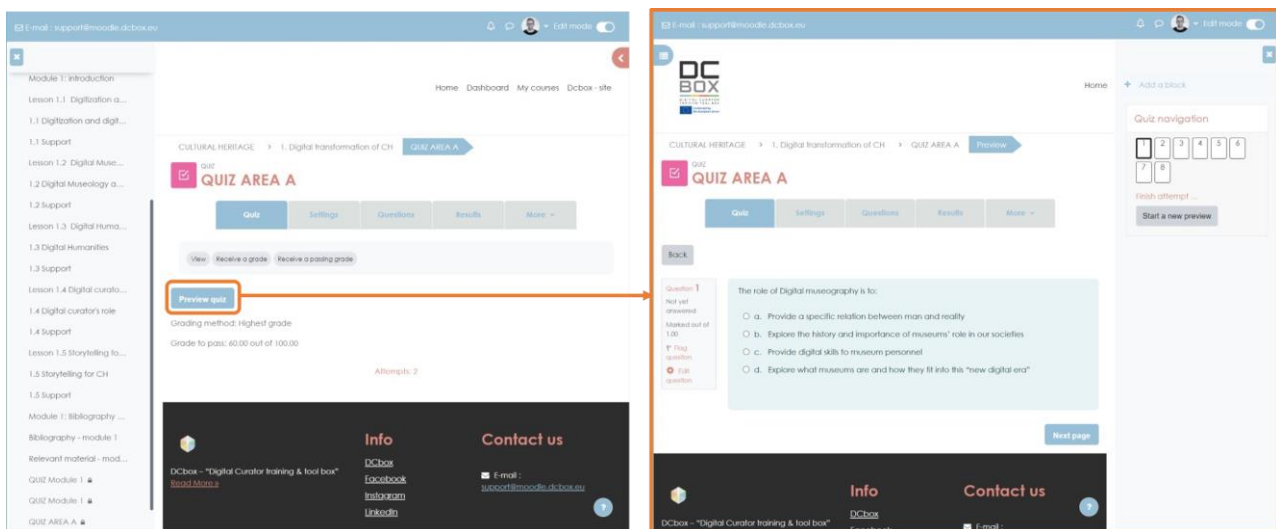

Figure 13_The section of the quizzes and the interface of each question

In Area D, learners unlock also a "Certificate of Accomplishment", one of the documents that states the completion of the course with a 2 ECTS value, a more robust certification can be obtained at the same stage with the Open Badge System *(see chapter 4.4)*.

VR Module

The last section of the DCbox Learning platform is represented by the VR Module. This section can only be modified by specific users who requested access or were enrolled by the managers. Through the VR Module, students can create their own **virtual experiences** within a **collaborative and easy-to-use platform** within the online DCbox platform.

They can work together in the same environment to build their **personal tours** without the need for specific programming skills.

Some of the possible actions are:

✓ Add 360˚ scenes

✓ Navigate between scenes

✓ Connect scenes

✓ Add interactions

✓ Text about the scene,
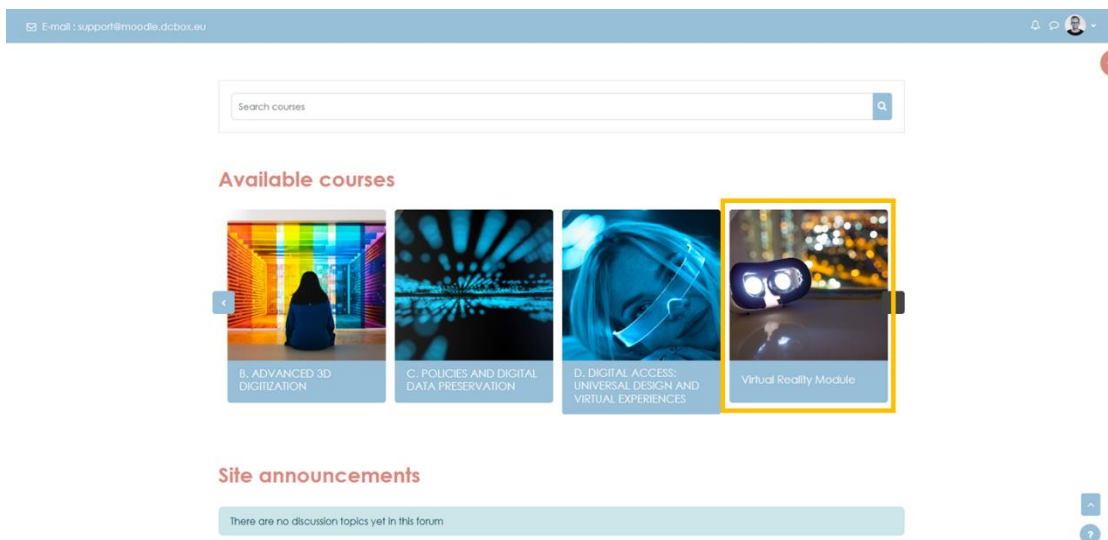
    ✓ Video,

    ✓ Image of the details.

Figure 14_The MOOC home page with the possibility to access to the VR module

The VR Experiences are displayed with the 'H5P' icon and can be accessed by clicking on the name. Modifying permission and visibilities can be set up for each working group and account.
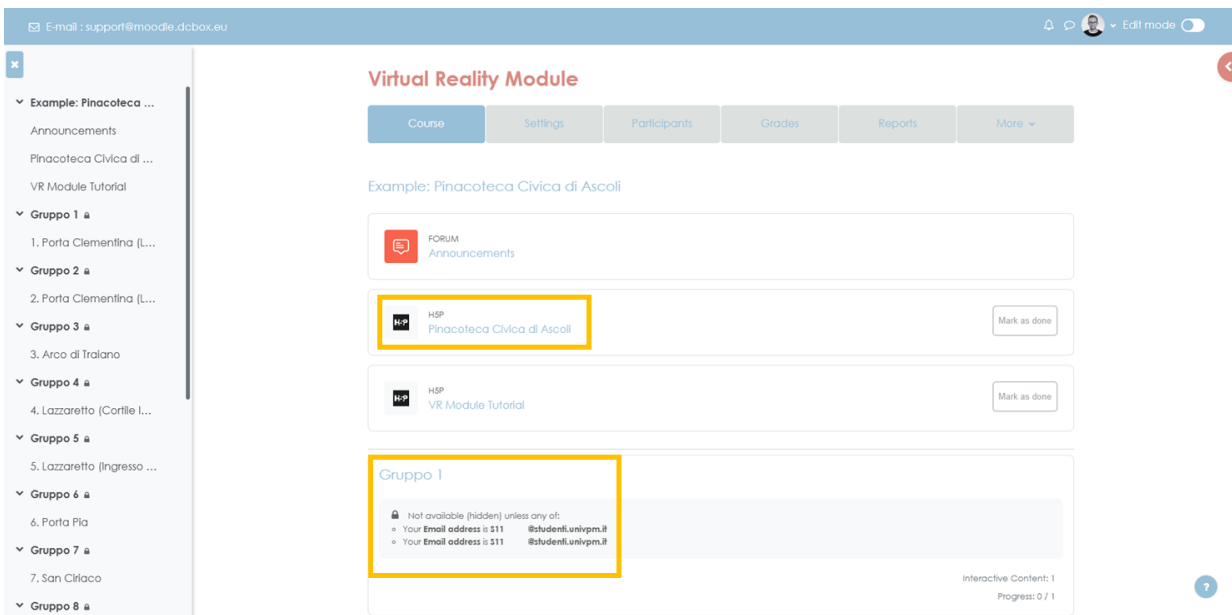
Figure 15_The VR Module section

The Viewer section

In the tab '**Interactive Content**', users can navigate through the experience, moving between scenes and interacting with the content. Here it is possible to explore the tour and view the final version of the experience.
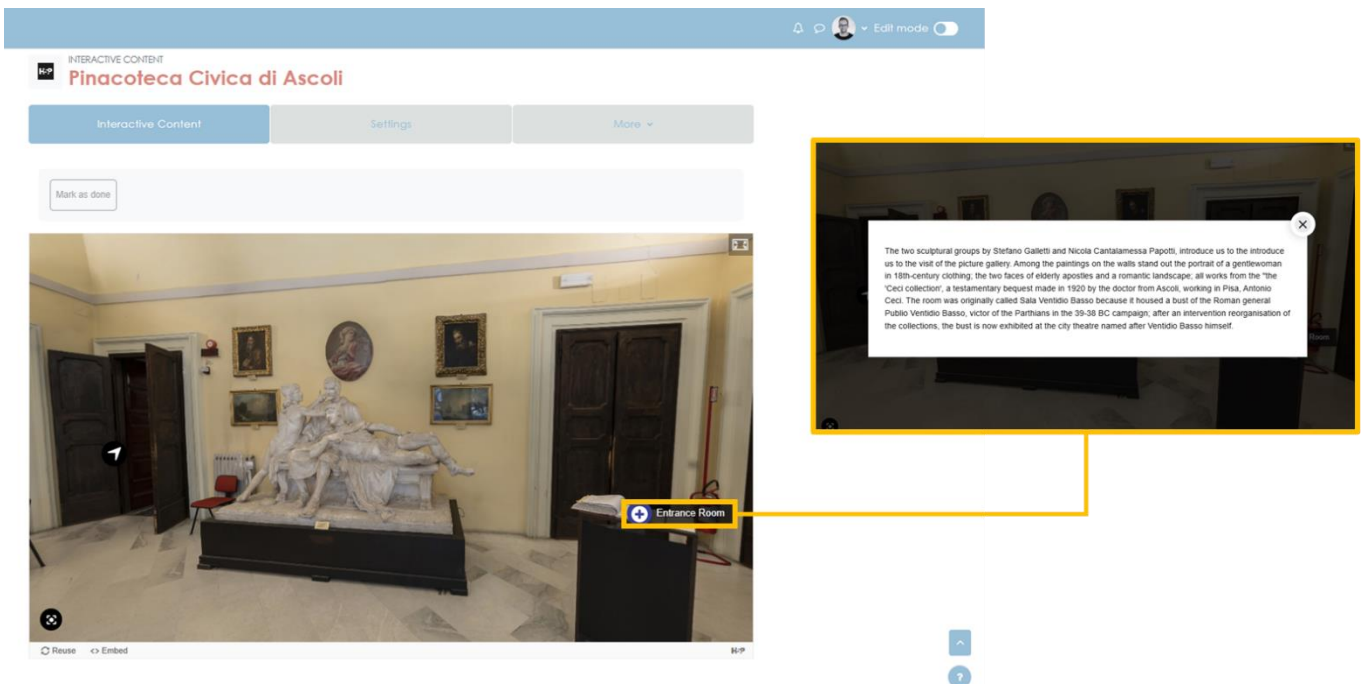

Figure 16_The viewer section of the VR module: the already prepared tour is visible

The Settings Section

In the '**Settings**' tab, users can modify the content of the experience, adding descriptions and other content, and directly managing scenes and media embedded into the final product.
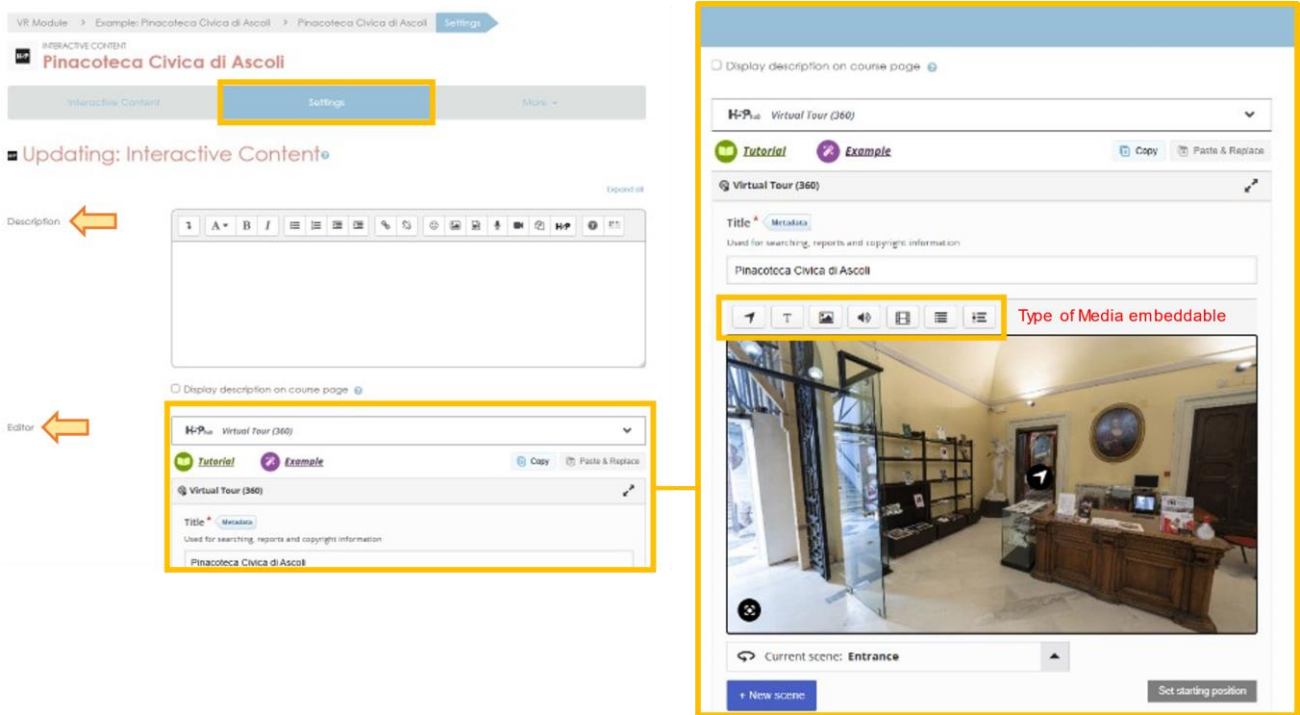
Figure 17_The settings section of the VR module: some tabs for the virtual tour building up are shown.

All those tours can be easily exported in h5p format and embedded into external websites which support this data file format, to see the content without the need to enter the platform.

VR Experiences showcase

Here are some examples of students' work done using the VR Module on the platform: in this case it was exploited in a learning experience in which learners collaborated to join their own drawing with the rest of team members' work.
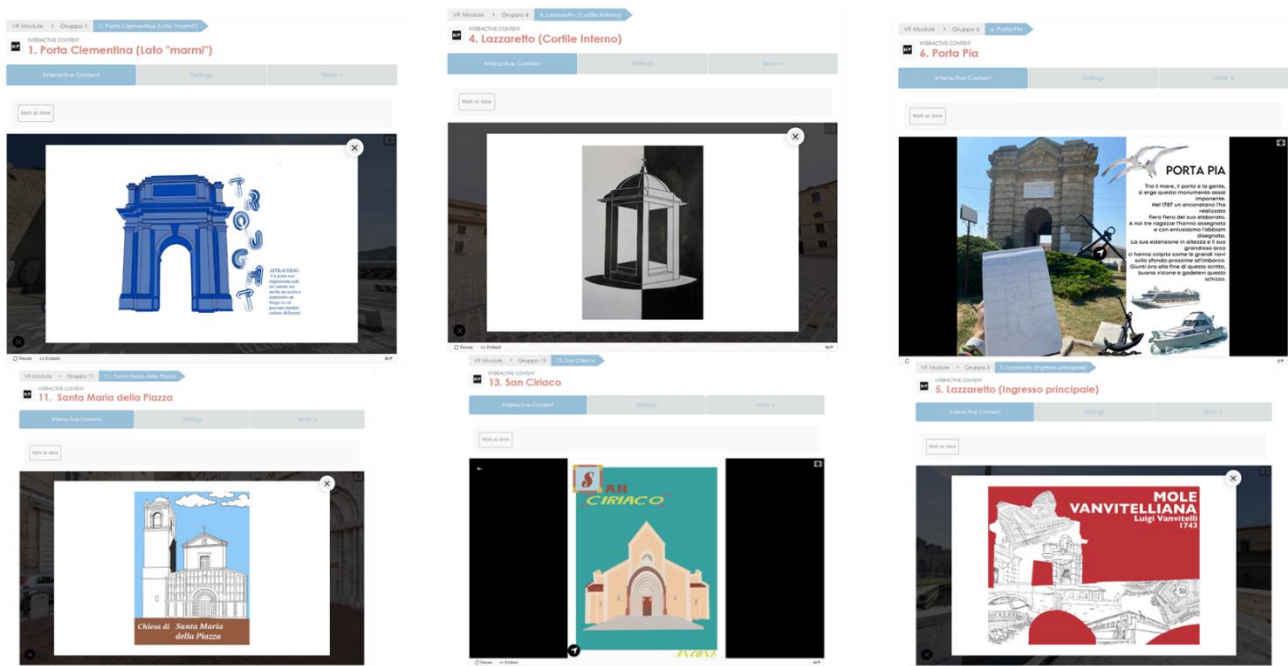
Figure 18_Gallery of learners works

The section students' works is the only section that can be viewed by a guest visitor.

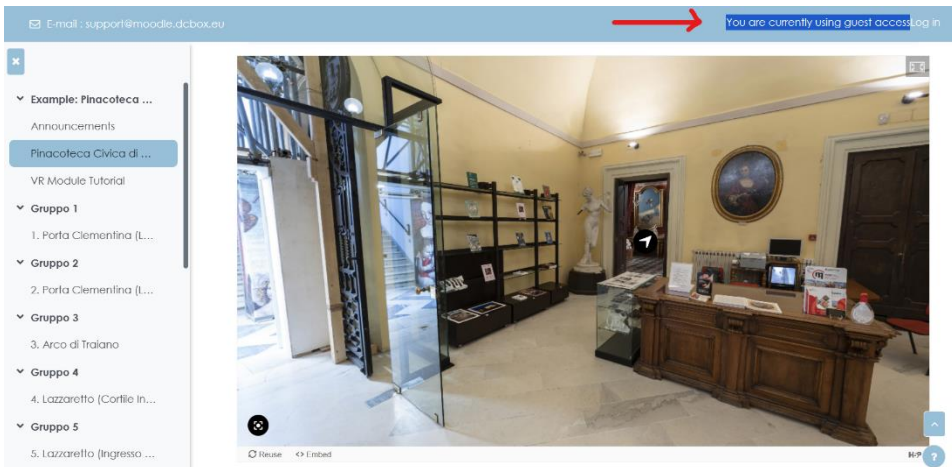Figure 19_The visualization of the VR module by a guest visitor

4.4 Monitoring & awarding - Open Badge System

Olesya Ivanova

One of the issues with the default Moodle certification is that the effective value cannot be validated through an external system and could easily be faked with some image editing software. That's the reason why the DCbox team has opted also for an alternative "Open Badge" attribution system.

Besides the standard certificate, the platform has an **automatic system** able to create **traceable documents** assigned to students after completing certain achievements.

Open Badges are a type of **digital accreditation**, often displayed as badges, containing **metadata** about the achievement or competence that the badge represents, making the achievements easily visible to potential employers and colleagues, and by collecting them in a 'Backpack', a digital storage bag with all the certificates obtained.

There are three actors in the Open Badge environment:

- The **issuer**: This is the entity that defines what you must do to earn that badge (DCbox)
- The **earner**: This is the person that needs to attend the training pass the test, then go through the simulator training and line training, and finally pass the check ride (**students**)
- The **displayer**: This is not a real person, but a computer (cloud-based or workstation) program that will display the page in the desired places such as the Learning Management System (**Moodle**).
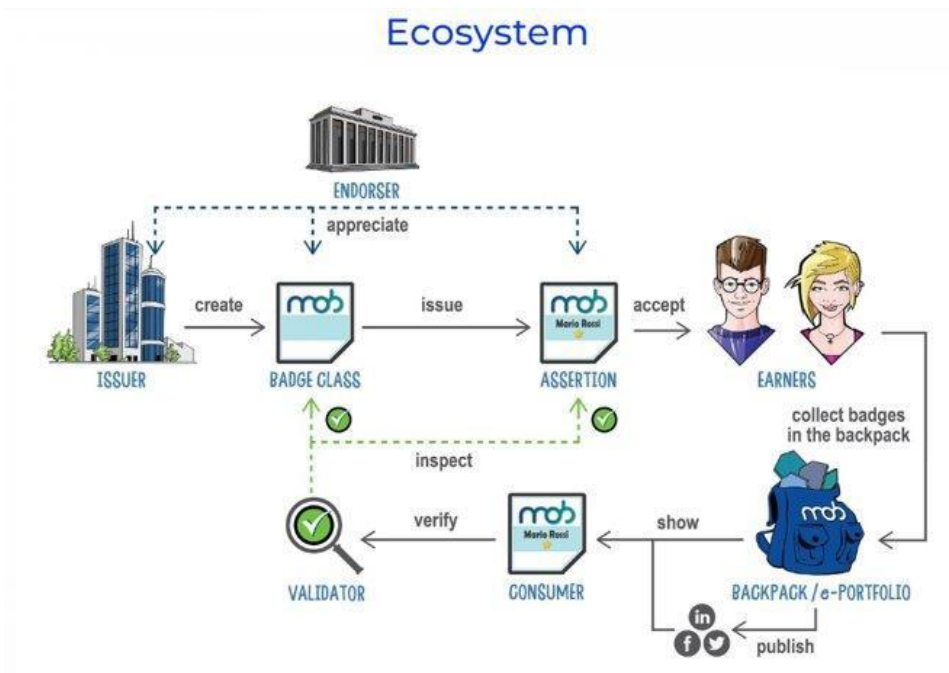
Figure 19_The main actors in the Open Badge environment

The **two main badges** are included in the Platform:

- A Standard Badge (on the left below), assigned to students (qualified and self-enrolled) when completing all the lectures and the quizzes of each area.
- A Full Badge (on the right below), assigned only to qualified students who completed all the previous requirements and also all the activities of the four areas.

Figure 20_The 2 images prepared to be linked to the Open Badge for Standard and Full Badge

Open Badges is not a specific product or platform, but a type of digital badge that is verifiable, portable, and packed with information about skills and achievements. This kind of certification has a higher value and allows students to embed it with other certifications obtained with the same Open Badge system.

As an **earner**, it is possible   As an **issuer**, it is possible

- Demonstrate skills and accomplishments, often by submitting evidence, by earning Open Badges.
- Claim Open Badges when issued to you.
- Collect your Open Badges in a portfolio or backpack to tell your story.
- Share your Open Badges on social media and with your community.

- Break learning down into small chunks.
- Recognise learning based on proficiency.
- Award Open Badges for completion of micro-credentials

OB Structure and achievement

The structure of DCbox's Open Badge system is as follows: for each completed Area, the student earns the Standard Badge; in the event that the student has also completed the activities (exercises more complex than quizzes), they also receive the Full Badge.
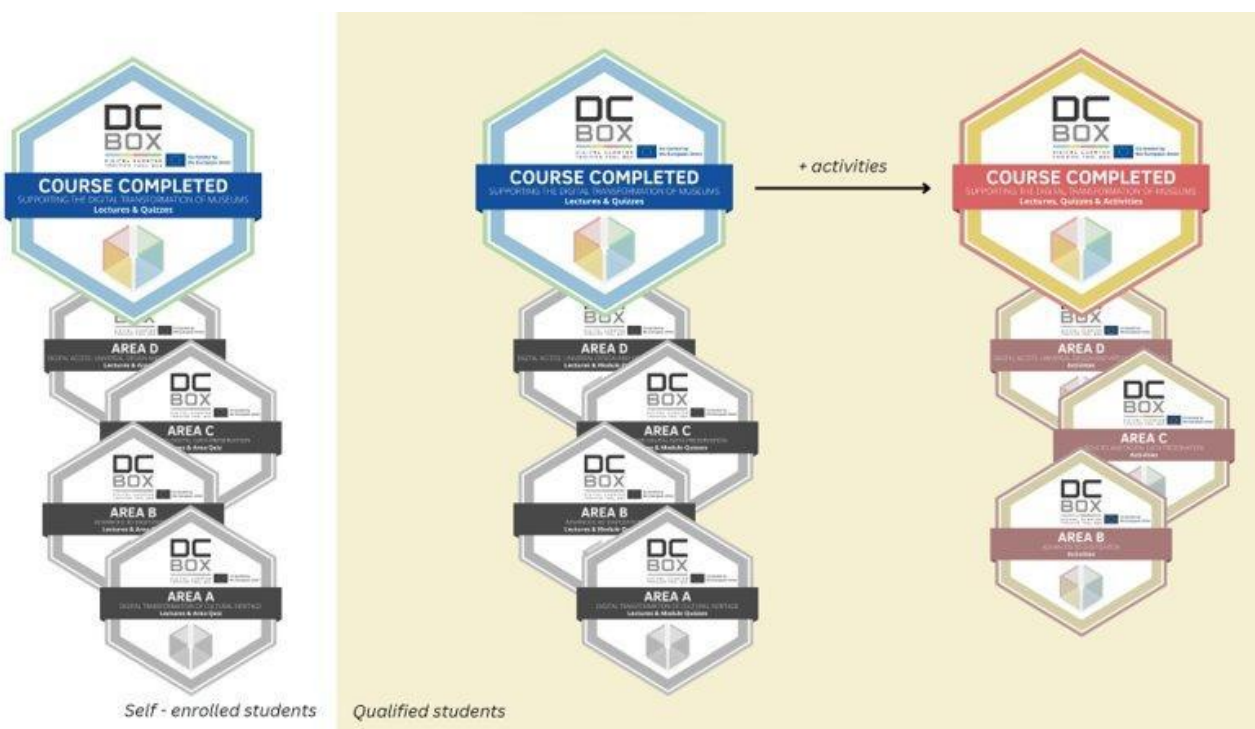

Figure 21_The structure of Open Badges (Standard and Full Badge)

For every badge obtained, the learner receives an email notification. They can also find their earned badges in their personal area.

Email notification

Congratulations! You just earned a badge!

DP DCbox Project (via DCbox) <noreply@moodle.dcbox.eu>
A: marketing

You have been awarded the badge "DCbox Course - Full Completion Badge"!

More information about this badge can be found on the DCbox Course - Full Completion Badge information page.

You can manage and download the badge from your Manage badges page.

Reading this in an email? Download the mobile app and receive notifications on your mobile devi

Students' personal area

Figure 22_The badge is released via email to the learner and available also in the personal area

Students can see the criteria of the badge release when they achieve badges:

Preferences > Manage badges   AREA A: Lessons, Area Quiz, Self Assessment

AREA A: Lessons, Area Quiz, Self Assessment

AREA A: Lessons, Area Quiz, Self Assessment

Awarded to J████████

Issued 13 November 2023, 12:06 AM

Issued by DCbox Project

"The owner achieved the ""AREA A: Lessons, Area Quiz, Self Assessment"" badge by successfully completing Area A, which themes are: Digitization and digitalization Digital Museology and Museography Digital Humanities Digital curator's role Storytelling for CH This badge is a mandatory component of the course's main badge set. Each area badge is a required element, and upon earning all of them, the student achieves the main course badge, signifying successful completion."

Criteria

- The following competencies have to be completed:

  ### 1. Digital transformation of CH Area A
  A. DIGITAL TRANSFORMATION OF CULTURAL HERITAGE - Competency

  Path: A. DIGITAL TRANSFORMATION OF CULTURAL HERITAGE /

More details

Figure 23_The badge allows to certify the obtained compentences
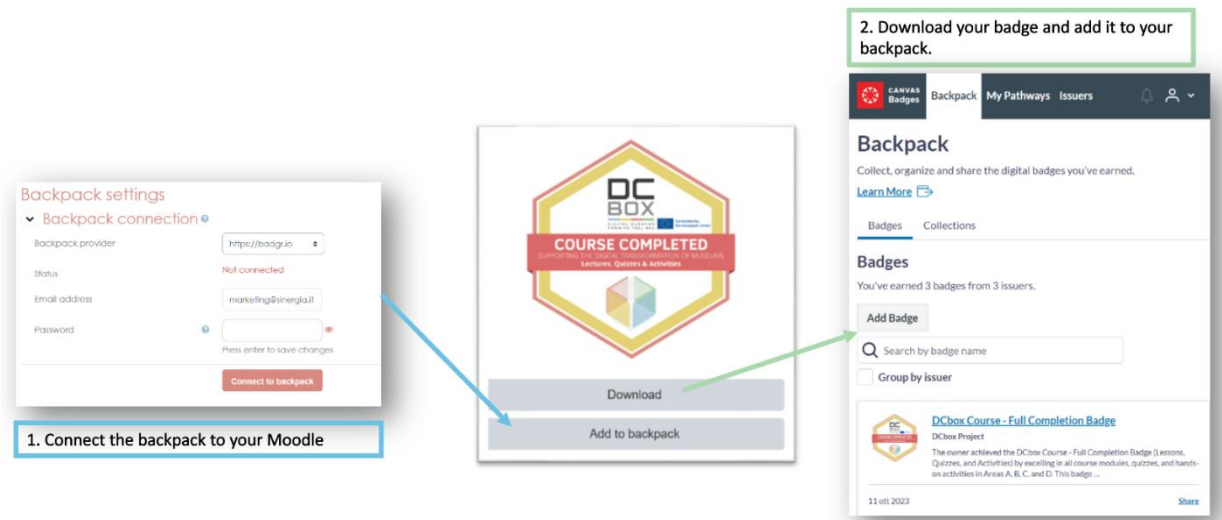
OB redeem on external platforms

The Badges obtained can be **transferred to external platforms** such as Badger (https://badgr.com/), to manage the certificates and to link them to other websites (e.g. Linkedin).

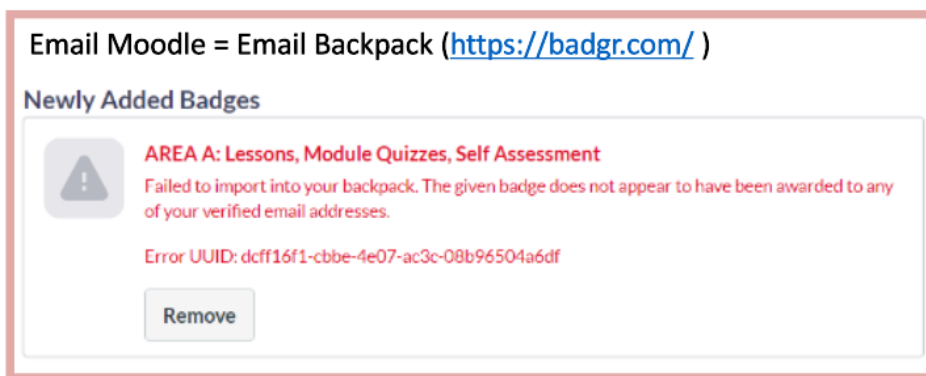When achieved, there are two ways to add a badge to the backpack:

- Connect the backpack to Moodle;

- Download the badge (from Moodle or email notification) and add it to the backpack.

In the BackPack the learners can do multiple actions with their certificates, such as sharing the badge, download the badge, print as a certificate, remove the badge from backpack, view the public page of the badge, and view the badge's JSON file.

For enhanced security, the learner is identified by the backpack through his/her email. To receive the badge in their backpack, it is mandatory to create a backpack account using the same email as the Moodle profile. In case the two emails do not match, the backpack generates an error as shown below.

This does not affect sharing the badges on social media. In fact, it is possible to share the badge, for example, on LinkedIn even if the student registered on LinkedIn with a different email from both Moodle and the backpack.

Add license or certification ✕

* Indicates required

Name*
DCbox Course - Full Completion Badge

Issuing organization*
Canvas Credentials (Badgr)

Issue date
October   2023

Expiration date
Month   Year

Credential ID
6526a9cbf0a06743fd84ddce

Credential URL
https://moodle.dcbox.eu/badges/assertion.php?b=fffd430fea45ff1c89da5012dc19f3a7ea419e11&obversion

Save

AREA A: Lessons, Module Quizzes, Self Assessment
DCbox Project

"The owner achieved the ""AREA A: Lessons, Module Quizzes, Self Assessment"" badge by successfully completing Area A, which themes are: Digitization and digitalization Digital Museology and Museogra...

11 ott 2023   Share

Share Badge

Link   Social   HTML

☑ Show email address:
marketing@sinergia.it

Share to profile

Add to profile

Share to feed

---

in   🔍 Search   Home   My Network   Jobs   Messaging

← Licenses & certifications   +

DCbox Course - Full Completion Badge   ✎
Canvas Credentials (Badgr)
Issued Oct 2023
Credential ID 6526a9cbf0a06743fd84ddce

Show credential ⬀