



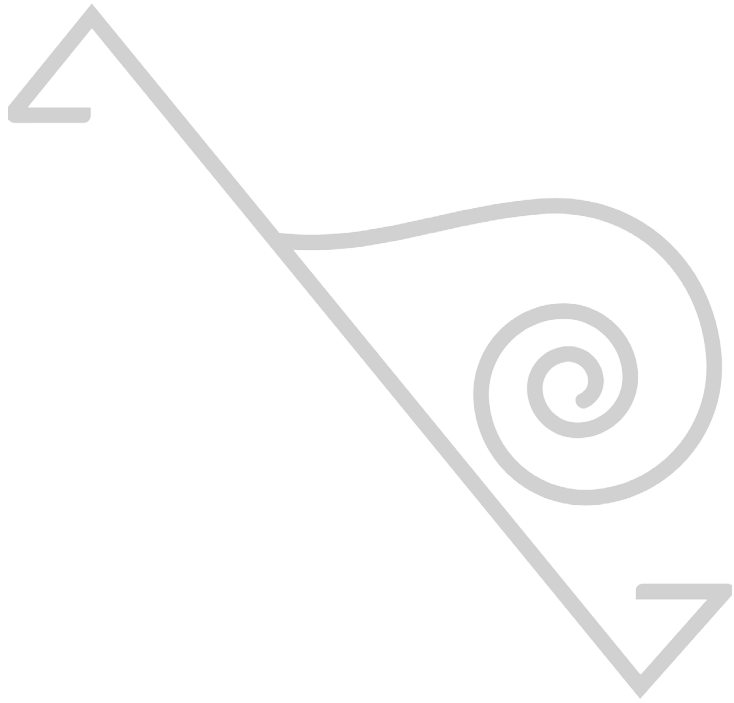
Digital education tools in the field of cultural heritage

# IRSCHEIN

## Good Practices Handbook

Co-funded by the  
Erasmus+ Programme  
of the European Union





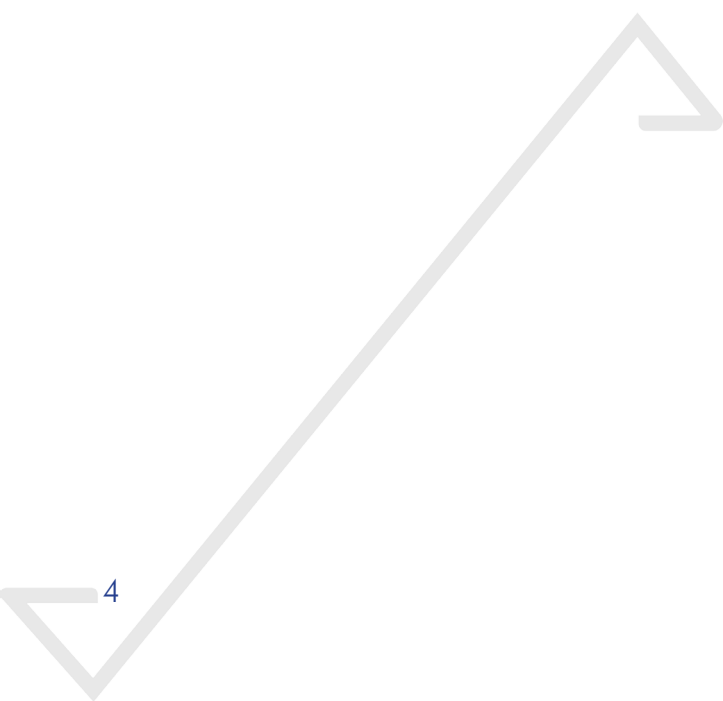
*Motto*

“New ideas often need old buildings”

Jane Jacobs

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# About the project

## *Description of the project:*

The importance of digitization, creativity and cultural awareness is always present, but it is particularly emphasized in the current situation, at the time of the COVID-19 pandemic. We need to acquire new skills and competences that strengthen creative potential and thus contribute to the resilience of the educational, cultural & creative sector. Our 24 months strategic project is a cooperation between public educational/academic institutions & private businesses that can see a big opportunity to thrive and improve their skills and offers in terms of new tools and digital competences in ICT and visualization techniques. This will open up new ways of collaboration boosting open and distant Cultural Heritage Education through a strategic alliance of 7 partners from 4 countries (AT, EL, IT, SI).

The Interdisciplinary Resilience through Science & Cultural Heritage Education Network (IRSCHEN) is not only a Strategic partnership project but also the place where this project idea was born and where a very special site of archeological importance called "Burgbichl" has been discovered recently by the Coordinators of the project, University of Innsbruck. Through this interdisciplinary network, all partners can improve and promote technical skills, media literacy and awareness on our common cultural heritage while fostering our solidarity to overcome the negative effects of the pandemic. The digital transformation of European Cultural Heritage (ECH) sites in the field of archeology and its adaptation to the needs of students will enable further social and educational added-value for our 2 main HE-target groups, but also grant access to education to a wider audience beyond the academic elite. It will be possible to get to know & learn about different remote places with high importance for our common values, transfer knowledge about ECH easily, and learn about similarities that unite us without physical mobility.

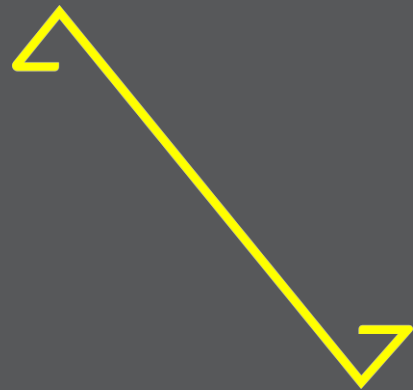
## *Project IRSCHEN's main target groups are:*

- 1.) ACADEMIC & PROFESSIONAL STAFF in CULTURAL HERITAGE EDUCATION: Educational & scientific staff from Higher Education partners in need of improving their digital competences who want to tackle skills gaps and learn about transdisciplinary approaches & innovative pedagogies for open and distant learning (28 directly involved in trainings, further 350 reached through multiplier events & dissemination activities)
- 2.) STUDENTS: Students (18-35 years) from curricula like archeology, ancient studies, history, regional development interested in archeological ECH in Alps Adriatic Region (28 directly involved in the scientific camps, further 850 reached through e-learning modules & educational game).

## *IRSCHEN pursues the following objectives:*

- To tackle skills gaps and mismatches, especially related to digital competences, through transdisciplinary approaches and innovative pedagogies such as research-based learning;
- To develop, test and implement OERs relevant for HE-target groups (with co-creation elements) & potential impact for a broader audience (science to public approach) on a long term with flexible and modular course design (online or blended) to support the setting up of open and distant learning while also being relevant for the labour market and for the wider society;
- To increase attractiveness and reforming educational offers for STEM with a STREAM (add "reading" and "arts") approach including real-world applications, inquiry-based and ICT enriched learning, collaborative practices, including university-business cooperation;
- To foster civic engagement & life-long learning opportunities related to our archaeological heritage as an integral part of our European identity whilst delivering European Cultural Heritage Education as part of different curricula (archeology, ancient studies etc.) & thus to promote a cross-border and scientifically based know-how transfer and understanding of European Cultural Heritage through the use of ICT
- To foster transnational cooperation & interdisciplinary resilience through building a solidarity network between Academia & Business from "the Alps Adriatic Region" & "the Mediterranean".

○ Innsbruck Good practices





# Tool 1

## Name of the tool Digital Culture

*Promoter (partner/country) + Collaborations and partners*  
Centre for Information Modelling, University of Graz, Austria

*Partners:*

- Politehnica University of Timisoara, Romania
- Roma Tre University, Italy
- Aalborg University, Denmark
- Dublin City University, Ireland
- Timisoara European Capital of Culture Association, Romania
- JME Associates Ltd, UK
- National Association of Distance Education, Lithuania

*Main objective and aim of the tool*

- To enhance awareness of the need for training in digital skills for the creative industries and to design a set of Guidelines for Digital Competences for Creative Industries
- To create an online and mobile Virtual Learning Hub for a blended learning and online course (MOOC) on Digital Skills and Social Inclusion for Creative Industries and Culture
- To improve the achievement and recognition of digital skills through formal and informal learning by introducing Digital Skills e-assessment and Open Badges for adult education in Creative Industries

*Main target group:* Cultural institutions

*Detailed description:* Improving the Digital Competences and Social Inclusion of Adults in Creative Industries” aims to provide opportunities for developing digital skills necessary for working in the cultural and creative industries in Europe.

The project aims to create a sustainable and efficient education program dedicated to adult learners with low digital skills and low-qualified adults involved in the creative industries sector

from Romania, Italy, Austria, Denmark, Lithuania, UK and Ireland. The main outcomes include the Digital Skills and Social Inclusion for Creative Industries MOOC Courses available online and through blended learning, the Integrated Virtual Learning Hub including an innovative mobile app aimed at low-skilled and at-risk adults, the Digital Skills e-assessment tool and Open Badges for Digital Skills. Together they will provide important new opportunities for low-skilled adults to access knowledge, gain new digital skills and inter-cultural competences and improve their chances of finding employment or performing better in their current employment.

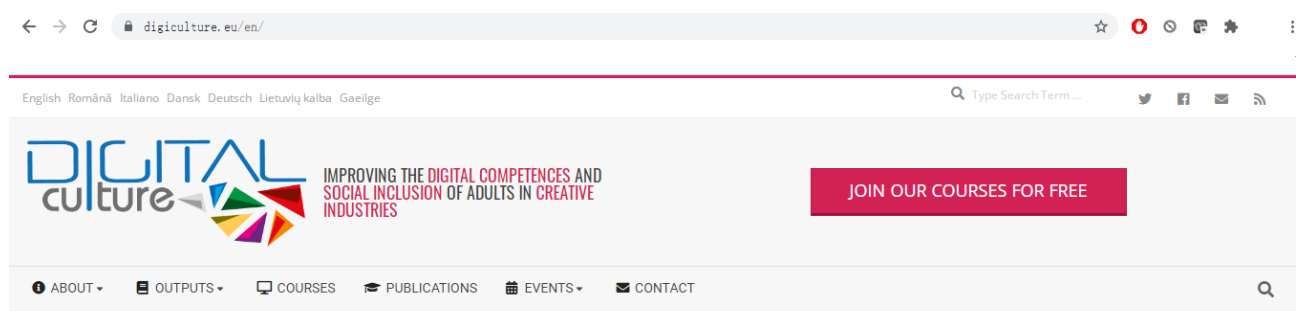
The DigiCulture – Improving the Digital Competences and Social Inclusion of Adults in Creative Industries – project aims to create a sustainable and efficient education program dedicated to adult learners with low skills in the creative industries from Romania, Italy, Austria, Denmark, Lithuania, UK and Ireland. The project focus on openness and inclusive in education. It involves the use and development of an open online and mobile course Digital Skills and Social Inclusion for Creative Industries, built as a Massive Open Online Course (MOOC), an innovative adult educational program of 13 modules available in English, Romanian, German, Italian, Lithuanian, Danish and Gaelic, integrating new Open Education Resources (OER) and accessible to people with limited digital skills.

*Relevant links, social media, video or publication related to the tool /best practice*

<https://informationsmodellierung.uni-graz.at/de/forschen/digital-culture/>

<https://digiCulture.eu/de/>

Twitter Feed @CultureDigi



*Resources available*

Topics covered in learning materials Integrated Virtual Learning Hub – online and mobile MOOC platform

*Digital Skills for Culture Course* – a MOOC based structure to include course materials developed during the project as well as User Generated Content, Open Educational Resources and other forms of Open Content as cultural and heritage examples and study cases;

Open Learning Activities, peer-to-peer activities, virtual/blended learning interdisciplinary approach from web technologies, mobile technologies, Web 2.0, interactive media and audio-video technologies, open access and tools from semantic technology

## Tool 2

**Name of the tool** DigiCULT. Technological Challenges for digital Culture

*Promoter (partner/country) + Collaborations and partners*  
Salzburg Research mbH



## Partners:

- Consorzio Civita, Rom (I)
- Haus der Kulturen der Welt, Berlin (D)
- Kungliga Biblioteket, Sveriges Nationalbibliotek, Stockholm (S)
- Österreichische Nationalbibliothek, Wien (A)
- Scottish Cultural Resources Access Network – SCRAN, Edinburgh (UK)
- Stichting Netherlands Filmmuseum, Amsterdam (NL)

*Main objective and aim of the tool:* Strengthen cultural institutions

## *Main target group*

Cultural institutions like archives, libraries and museums

## *Detailed description*

The DigiCULT study analysed the development of cultural institutions such as museums, libraries and archives in the digital cultural economy, in particular, with regards to the uptake, use and impact of information and communication technologies (ICT). State-of-the-art technologies and content as well as user demands in cultural services were investigated. Another important part of the study was to analyse the current policy and institutional frameworks, impacts of ICT on organisational processes, and new opportunities for valorising cultural content. A comprehensive set of recommendations for different stakeholders including the European Commission, national and regional governments, and cultural institutions was provided. Based on the study results, in March 2002 the project DigiCULT Forum was started as an accompanying measure of the EU FP5 Information Society Technologies programme

## *Relevant links, social media, video or publication related to the tool/best practice*

<https://www.digicult.info/pages/index.php>

[https://www.salzburgresearch.at/en/projekt/digicult\\_e/](https://www.salzburgresearch.at/en/projekt/digicult_e/)

## *Resources available report:*

[https://www.salzburgresearch.at/wp-content/uploads/2010/10/digicult\\_es\\_german.pdf](https://www.salzburgresearch.at/wp-content/uploads/2010/10/digicult_es_german.pdf)

salzburgresearch

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MOTION DATA INTELLIGENCE

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**DigiCULT – Technological Landscapes for Tomorrow's Cultural Economy**

A strategic study on the digital cultural economy for the European Commission, DG Information Society

The DigiCULT study analysed the development of cultural institutions such as museums, libraries and archives in the digital cultural economy, in particular, with regards to the uptake, use and impact of information and communication technologies (ICT). State-of-the-art technologies and content as well as user demands in cultural services were investigated. Another important part of the study was to analyse the current policy and institutional frameworks, impacts of ICT on organisational processes, and new opportunities for valorising cultural content. A comprehensive set of recommendations for different stakeholders including the European Commission, national and regional governments, and cultural institutions was provided. Based on the study results, in March 2002 the project DigiCULT Forum was started as an accompanying measure of the EU FP5 Information Society Technologies programme

Core Competence: [Innovation & Value Creation](#)

Project partner: [Austrian National Library \(AT\)](#), [Consorzio Civita \(IT\)](#), [Haus der Kulturen der Welt \(DE\)](#), [International Music Center \(AT\)](#), [Netherlands Filmmuseum \(NL\)](#), [SCRAN - Scottish Cultural Resources Access Network \(UK\)](#), [The Digital Guild \(UK\)](#), [The Pulman Consortium \(UK\)](#), [The Royal Library - National Library of Sweden \(SE\)](#)

Funding: [FP5 - Fifth Framework Programme \(EU\)](#)

Reach: [International](#)

Project Status: [completed \(since 2002/04\)](#)

Project website: [www.digicult.info](#)

## *Topics covered in learning materials*

- Cultural agents and avatars, electronic programming guides
- Digital Asset Management Systems for Cultural Heritage Institutions
- Location based systems, GIS, GPS, and land management systems
- Virtual Reality and Display Technologies
- Visualisation of data and dynamic objects

# Tool 3

**Name of the tool** Ancient Cities Creating a Digital Learning Environment on Cultural Heritage

*Promoter (partner/country) + Collaborations and partners*  
Christian-Albrechts-Universität zu Kiel

*Partners:*

- ETHNIKO KAI KAPODISTRIAKO PANEPISTIMIO ATHINON
- Open Universiteit Nederland
- Aarhus universitet
- Universitetet Bergen
- Universite Paris I Pantheon-Sorbonne

*Main objective and aim of the tool:* testing, promoting and implementing high quality digital learning material in their respective fields both for teaching at university and school level as well as for reaching out to a broader audience

*Main target group:* Students of archaeology, history and art history.

*Detailed description*

The humanities in general and Classics or Classical Archaeology in particular are in need for testing, promoting and implementing high quality digital learning material in their respective fields both for teaching at university and school level as well as for reaching out to a broader audience. The SP “Ancient Cities” aimed at creating digital learning materials for different audiences. The project focused on the ancient city, as this topic is a central subject in the education of students of archaeology, history and art history.

The learning material comprises 34 educational videos (on the topics of “Basics”, “Life in the Ancient City”, “Religion and the Ancient City”, “Politics and the Ancient City”, “Death and the Ancient City”, “Infrastructure and the Ancient City”, “Economy and the Ancient City” and “The Heritage of the Ancient City”) of up to 10 minutes in length as well as extensive digital learning material in the form of texts, maps, assignments, quizzes and bibliographies.

The production of the textual learning material was based on the scholarship of dialogue-based learning, a theory with strong historical roots in scholarship on learning and dissemination. Dialogue-based learning is increasingly being used in Scandinavian educational institutions, but also in museums of art and archaeology. It is based on the theory that meaning and learning is developed through dialogue between both students and teachers.

The videos were either shot on-site or in modern cities depending on the video’s topic, learning goals as well as general financial and administrative possibilities and restrictions. On the one side we wanted to give viewers first-hand information on archaeological sites and interview specialists. On the other side we aimed at connecting ancient and modern cities by recording the videos in a contemporary environment.

The MOOC “Discovering Greek & Roman Cities” was aimed at a broad audience: people interested in archaeology, art and cultural history, architecture and history. The participation did not require any previous knowledge. The course was accessible online free of charge and had two runs: in fall 2019 and in spring 2020 during the COVID lockdown. Course materials were multi-

lingual and available in German, English and French.

Relevant links, social media, video or publication related to the tool /best practice

<http://www.ancientcities.eu>

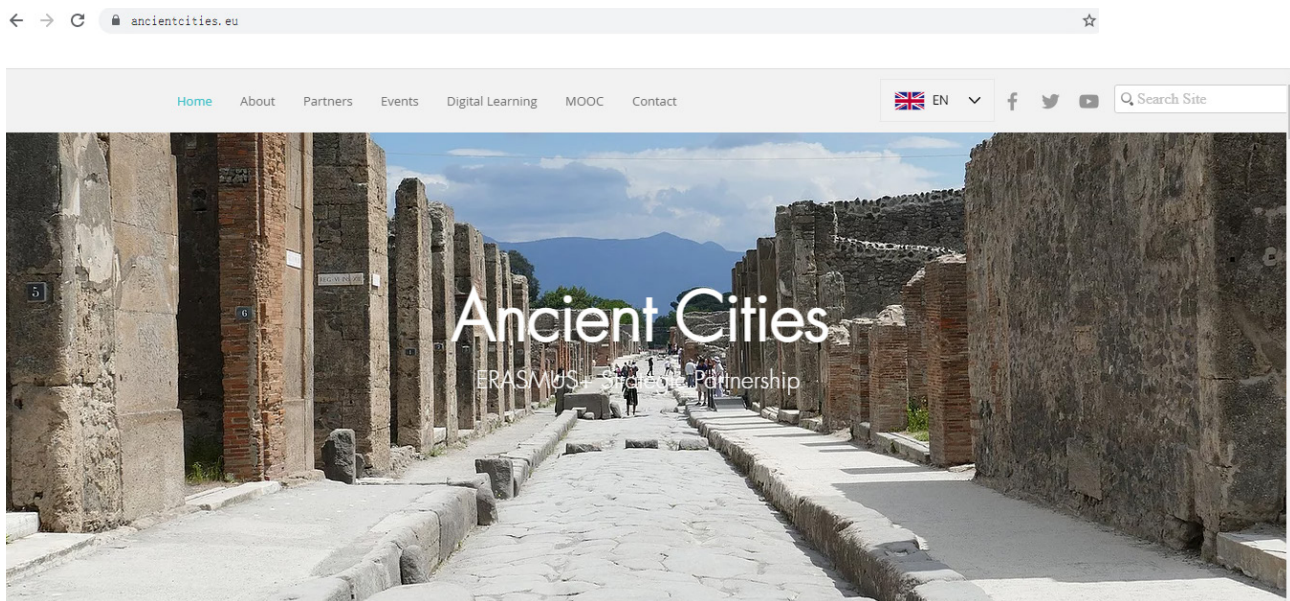
### *Resources available*

Learning materials in German, English and French

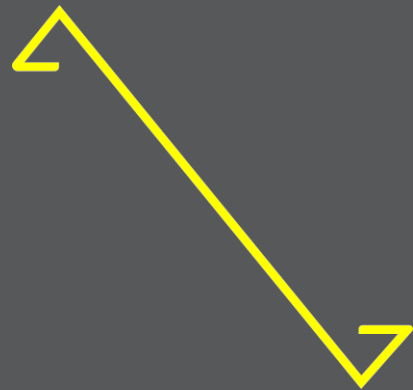
Scientific articles

Video reports

Topics covered in learning materials Greek and Roman Cities



○ Gemeinde IRSCHEN Good practices



# Tool 1

**Name of the tool** The Golden Cathedral - Treasure Hunt  
(Cultural Heritage Education)

*Link to access to the tool*

<https://play.google.com/store/apps/details?id=com.codefluegel.pilgrimgame>

*Promoter (partner/country) + Collaborations and partners*  
Diocese Graz-Seckau/ Austria

*Main objective and aim of the tool*

- Promote cultural heritage within medieval churches for youth
- Create interest for old heritage
- Give information about the place to visitors
- Gamified approach using Augmented Reality

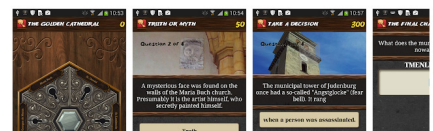
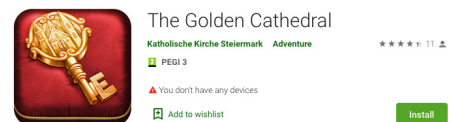
*Main target group*

- Youth 14+

*Detailed description*

In this mobile quiz adventure, you will have to follow mysterious tracks in search of a golden cathedral. Your adventure will begin wherever you are at this very moment – at home on a comfy couch, on the school bus or even in your classroom.

You are tasked with finding 6 secret keys that are hidden at 6 different locations in the Mur valley (Styria). You will collect one clue after another, decode secret inscriptions and, in doing so, explore exciting places such as remote ruins or an abbey of the famous Benedictine Monks. You will only be rewarded with the golden cathedral if you manage to find all six keys.





The different games at a glance:

- Truth or Myth – Find out which statements are true or false.
- Make your choice! – Answer questions and go for one out of four possible answers.
- Trust yourself – Follow the tracks and solve the tasks unaided.
- The secret entrance – Discover hidden QR-Codes in digital scavenger hunts.
- The final exam – Solve the final clue and find the secret keys.

\*\*\* IMPORTANT NOTE \*\*\*

You can play „The Golden Cathedral“ from anywhere and at anytime. However, in order to really find the golden cathedral, you have to travel to real churches and ruins as well as cities in the Mur valley. The six communities in which you have to look for clues, are as follows:

- Maria Buch
- St. Georgen ob Judenburg
- St. Oswald
- Seckau
- St. Georgen ob Murau
- St. Lambrecht

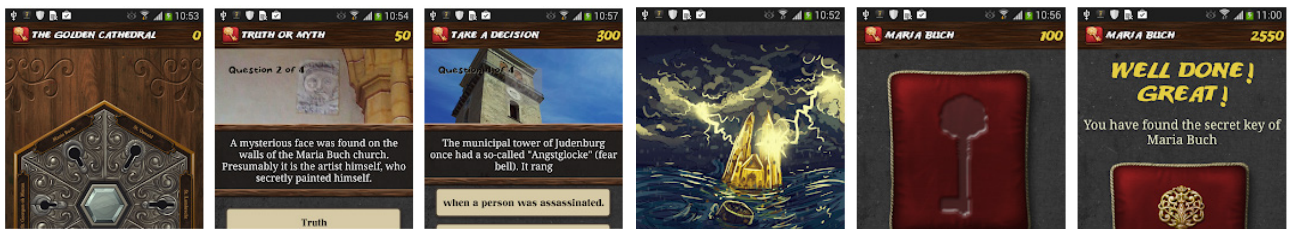
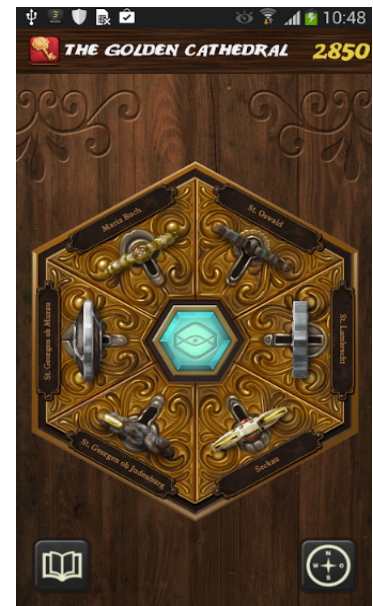
These locations are all shown on a virtual map within the app. In this way you can easily navigate from place to place, without getting lost or straying off your path.

*Resources available*

App for Android and Iphone

*Topics covered in learning materials*

Cultural heritage education as treasure hunt game- archeology, history, architecture etc



## Tool 2

Name of the tool **My Pompeii**

*Link to access to the tool*

<https://play.google.com/store/apps/details?id=org.pompeisites.pompeiiapp>

*Promoter (partner/country) + Collaborations and partners*

Parco Archeologico di Pompei/ Italy

### Main objective and aim of the tool

- Guide participants through the tours
- Guarantee safety measures and social distancing
- Give overview to facilities

### Main target group

Visitors 18+



## MyPompeii

Parco Archeologico di Pompei Travel & Local

3 PEGI 3

⚠ You don't have any devices

➕ Add to wishlist

### Detailed description

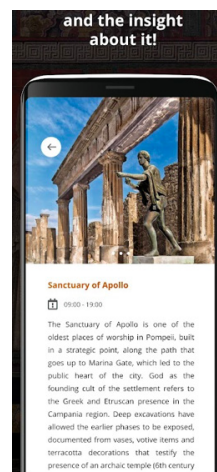
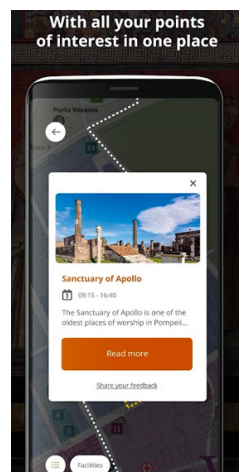
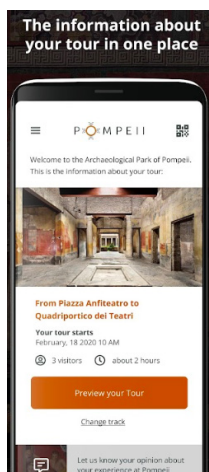
Pompeii is the official app for entry to the Archaeological Park of Pompeii. It is designed for a new and safer way to experience Pompeii Archaeological Park, where the prioritization of social distancing is the main focus.

### How to access the application.

To access the main functionalities of the application, you should have an entrance ticket to the Archaeological Park of Pompeii.

### You can log in

- By scanning the QR Code or barcode on the ticket
- By manually entering the order number displayed on your ticket



### Main functionalities.

Once you have logged in, all information regarding your visit will be available.

You will be asked to enable the geo-location of your device in order to view your position in real time, with respect to the route you need to follow.

This way you will be able to see in advance if, during your tour, there will be a consistent number of visitors along your route. The staff of Pompeii Archaeological Park will be able to guarantee the right number of visitors to allow for correct social distancing measures.

### On the map you will find:

- Points of interest with related insights to archeological cultural heritage
- Facilities such as emergency services, restrooms, baby change points, bars and restaurants

### Resources available

App for Android and IOS

### Topics covered in learning materials

Cultural heritage of the archeological park of Pompeii described in English and Italian

# Tool 3

## Name of the tool Archaeologist- Ancient Egypt

Link to access to the tool

<https://play.google.com/store/apps/details?id=com.magisterapp.ancientegypt>



### Archaeologist - Ancient Egypt

MagisterApp - Educational Games for kids Educational ★★★★★

3 PEGI 3

Offers in-app purchases

⚠ You don't have any devices

➕ Add to wishlist

Promoter (partner/country) + Collaborations and partners  
MagisterApp/ Italy

Main objective and aim of the tool  
- Teach children and youth about ancient archeology

Main target group  
Children and youth

#### Detailed description

Do you know the story of the goddess Isis? No ...? No problem, with this app you will learn tons of fascinating things about ancient Egypt

Children will have fun looking for the entrance to the secret rooms and then doing excavations, like a real archaeologist, to discover all of the finds and treasures hidden in the pyramids. Once all of the pieces have been found, everyone heads to the laboratory for the cleaning and reconstruction phase.

The graphics of the game are filled with detail, colour and fun animations designed specially for little ones, with tons of educational information about the Egyptian world.

Children who try out the game will never stop excavating and reconstructing the various things they find.

All designed to ensure lots of fun for you and your children.

\* Excavate to find the entrance to the secret rooms

\* Eight different excavation settings



- \* Find all of the hidden treasures
- \* Clean and reconstruct all of the objects that you find
- \* Read and learn about the mysteries of ancient Egypt

Try it now. You will be glad that you did and your children will have a ton of fun.

## SECURITY FOR YOUR CHILDREN

MagisterApp creates high quality apps for children.No third party advertising. This means no nasty surprises or deceiving advertisements.

*Relevant links, social media, video or publication related*

<https://www.magisterapp.com/wp/about/>

*Resources available*

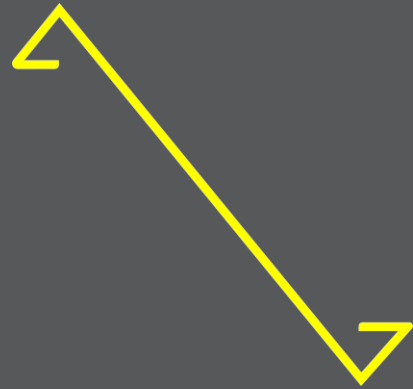
App for Android and IOS

*Topics covered in learning materials*

Ancient archeology trough gamified approach to discover Egyptian treasures



○ Mobile 3D Good practices





# Tool 1

**Name of the tool** **Audio Guide: Text-to-speech, Beacons & CMS**

*Promoter (partner/country) + Collaborations and partners*  
Mobile 3D

*Main objective and aim of the tool*

A mobile application for museums, which uses Beacons for indoor localization and a Content Management System for the creation and management of its contents

*Main target group*

Audio Guide: museum visitors (tourists, citizens, students), including people with visual and hearing impairments

CMS: museum curators and cultural heritage specialists

*Detailed description*

The Audio Guide application, created by Mobile3D as part of the COME-IN! Project, is inspired by the simplicity of using an audio guide, a familiar and user friendly tool to visit a museum. Starting from the accessibility needs of people with visual impairments, who have experienced the phases of realization of the instrument, Audio Guide is proposed as a universal aid to the museum visit.

Its essential graphics make it easy to use and facilitate the use of the smartphone's system accessibility features, such as reading the screen (Voice Over for Apple, TalkBack for Android): by touching the different areas of a screen, the system provides the vocal information of the command you are about to give and then, with a quick double-touch, confirms the action producing the desired effect. It is a standard interaction mode, familiar to people with visual impairments, which allows easy access to the description of a museum room or a single object.

The textual content is transmitted by reading with a synthetic voice (text-to-speech), which people with visual disabilities prefer to the audio tracks recorded by an actor because it allows to control

the reading mode, in particular the speed, and to scan individual lines of text, words and even characters.

The inclusiveness of this tool is determined by the fact that these properties remain hidden from the user who has not activated the accessibility features on the smartphone and can therefore use Audio Guide almost like a conventional audio guide. “Almost” because Audio Guide is equipped with automatic localization features: thanks to the infrastructure of the museum with Beacon technology, the app automatically provides content based on the visitor’s location.

For people with visual impairments, localization is an aid to orientation in exhibition spaces and facilitates the identification of tactile and multisensory workstations, offering a richer and more inclusive experience.

Inclusiveness is implemented by the presence of translations (audio and text) in Italian, English and French, offering an opportunity for assisted visits to foreign users and people with hearing disabilities. Finally, the museum tour and numerous Audio Guide contents are enriched by videos interpreted in the Italian language of signs.

The Content Management System (CMS), developed by Mobile 3D, is the natural complement of the Audio Guide and it can be seen as its back-office. In fact, it allows museum curators to prepare and manage the contents of the Audio Guide app autonomously, so that the contents of the app can be always up to date and aligned to the current setup of the exhibitions.

In particular, the CMS provides a simple and user friendly user interface to manage all the cultural contents, by creating new contents and editing or deleting the existing ones and by preparing visit itineraries, which aggregate together the contents in a thematic path.

Moreover, the CMS also allows to manage the users which are allowed to access the CMS and their roles according to their specific responsibilities and needs in the contents creation flow. For instance, the Editor user is allowed to add and edit contents, the Reviewer is the only one allowed to publish the contents to the app, and the Technician cannot update contents but he has access to administration functionalities.



## Audio Guide

Mobile3D SRL Travel & Local

3 PEGI 3

This app is available for all of your devices

Add to Wishlist

Install



The CMS allows to manage 3 different kinds of entities:

- The Category allows to define the type of the content, for instance an object, a room, a building, a monument or whichever categorization is needed by the museum
- The “Point Of Interest” (or POI) is a content of any category and it contains the actual content in terms of textual description and audiovisual materials
- The Path allows to arrange a certain set of POIs into a thematic visit itinerary

The user of the CMS can see the list of all the POIs and paths and search or filter them.

For each content, the user can provide a title, an associated image and a textual description in multiple languages, including the text to be used respectively on Android or iOS for text to speech.

Moreover, for each POI, it is possible to define several properties: the visibility to decide if it is

visible in the app, the type to define its category (e.g. object, building, room, etc.), tags for supplemental categorization, links to other related POIs or to external references, beacon association to define its location within the museum.

*Relevant links, social media, video or publication related to the tool /best practice*

Audio Guide project description: <https://mobile3d.it/portfolio/audio-guide/?lang=en>

CMS: no public link available, please refer to the presentation provided by Mobile 3D during the project kick-off meeting.

*Resources available*

Audio Guide app available for free on Apple and Google stores:

<https://play.google.com/store/apps/details?id=it.mobile3d.audioguide>

<https://apps.apple.com/it/app/audio-guida/id1328992026>

Demo video (Italian only):

<https://mobile3d.it/portfolio/audio-guide/?lang=en>

*Topics covered in learning materials*

Cultural contents related to the collections hosted by the Archaeological Museum of Udine (Italy)

See: <http://www.civimuseiudine.it/en/civic-museums/castle-museums/archaeological-museum>

## Tool 2

### Name of the tool Indoor AR with rich content & Outdoor tours (MuCa app and Last Supper app)

*Promoter (partner/country) + Collaborations and partners*  
Mobile 3D

*Main objective and aim of the tool*

Mobile apps for the visualization of contents in Augmented Reality within museums, and which also allow to take outdoor tours in its surroundings

*Main target group*

Museum visitors (tourists, citizens, students)

*Detailed description*

MuCa is the app of the Museo della Cantieristica di Monfalcone (i.e. Monfalcone Shipbuilding Museum). The application for smartphones and tablets (iOS and Android) is a useful tool to learn about the Museum and effective support for the visit. From the Museum section the user can consult the map of the exhibition itinerary. Each theme room is briefly described with text and images, providing an overview of what the Museum offers its guests.

The experience of visiting the Museum is also enriched by multimedia content in Augmented Reality. By accessing the IN Visit section of the menu and framing the images of the exhibition with your mobile device, the application will automatically provide video content (in Italian and English) that will accompany the visitor to discover rich insights.

By accessing the OUT Visit section, you can start one of the external guided tours in the Panzano district. A narrative voice will accompany you step-by-step through the streets of the workers' village, introduce the main places and topics of historical interest, provide windows into the past thanks to historical photos in Augmented Reality.

The News section allows to stay up to date on MuCa activities, making the Museum a place of continuous discovery.

Last Supper app is an even richer and articulated application of Augmented Reality to cultural heritage.

When visiting museums, where audio guides are still the main accompanying tool, the automatic recognition functions of the works, in particular the paintings, represent not only a simplification, but a new way of interacting with the work itself.

Last Supper app realizes this concept for the ancient art gallery of the museums of Udine, where thanks to an augmented reality app the visitor can dialogue directly with the characters of the scene of the Last Supper painting (by Pomponio Amalteo).

Relevant links, social media, video or publication related to the tool /best practice M u C a app project description:

<https://mobile3d.it/portfolio/muca-mobile-app/?lang=en>

Last Supper app project description:

<https://mobile3d.it/portfolio/pomponio-amalteos-last-supper/?lang=en>

#### Resources available

MuCa app available for free on Apple and Google stores:

<https://play.google.com/store/apps/details?id=it.comune.monfalcone.muca>

<https://apps.apple.com/it/app/muca/id1228691261?mt=8>

MuCa app Demo video:

<https://mobile3d.it/portfolio/muca-mobile-app/?lang=en>

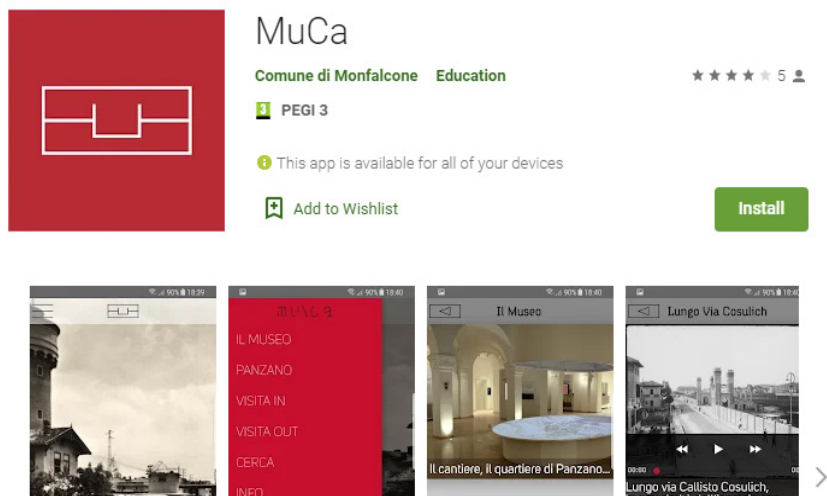
Last Supper app available for free on Apple and Google stores:

<https://play.google.com/store/apps/details?id=it.mobile3d.ultimacena>

<https://apps.apple.com/it/app/ultima-cena/id1083980240?l=it>

Last Supper app Demo video (Italian only):

<https://mobile3d.it/portfolio/pomponio-amalteos-last-supper/?lang=en>



#### Topics covered in learning materials MuCa app

Industrial archaeology contents related to the collection hosted by the Monfalcone Shipbuilding Museum (Italy).

See: <http://www.mucamonfalcone.it/asp/Home.aspx?idAmb=107&idMenu=-1&liv=0>

Cultural contents related to the Last Supper painting by Pomponio Amalteo. See:

<http://www.civimuseiudine.it/en/2-non-categorizzato/623-the-last-supper-by-pomponio-amalteo-the-new-augmented-reality-app>

## Tool 3

Name of the tool **Virtual Reality: 3D reconstruction of ancient buildings and sites**

## Mobile 3D

### *Main objective and aim of the tool*

3D reconstructions to perform immersive and engaging visits of ancient buildings and sites

### *Main target group*

Museum visitors (tourists, citizens, students)

### *Detailed description*

In many cases, 3D graphics are the only tool capable of reviving places, buildings, sensations, as in the case of one of our most recent creations for the Museum of Shipbuilding in Monfalcone

The tour of the Museum offers the history of the shipyard which between the 1920s and 1930s invested heavily in corporate welfare thanks to numerous cultural initiatives.

Place of meeting and representation was the Euripides Theatre, an elegant building which, destroyed after the bombings of the Second World War, thanks to our virtual reconstruction, comes back to life and tells its story to the visitor of the museum, merging the 3D reconstruction with historical photos and a narrative with a strong emotional impact.

Another impressive realization present in the path of the Museum is the crane simulator, a multi-monitor station that literally immerses the visitor in the cabin of a crane of the construction site of the 20s.

From this privileged point of view it is possible to admire a virtual reconstruction of the entire basin and of the construction site, with its workshops of which it is possible to obtain in-depth information in an interactive way by selecting them from a historical map.

Last, but not least, the playful component that 3D allows and which finds an element of motivation in the youngest (but not only). The crane simulator expresses this aspect thanks to a simple loading game that the visitor-crane operator is invited to perform, including the possible wrong manoeuvres that lead to produce significant damage to the ship and to the load, naturally the funniest part of the experience.

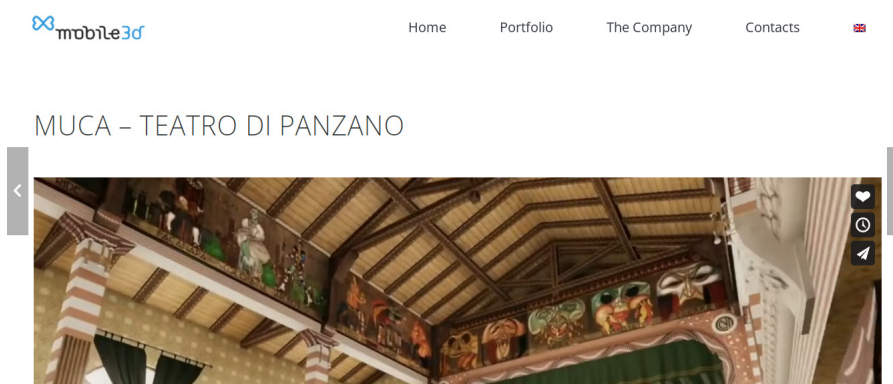
The effectiveness of these contents is maximum in the case of the use of Virtual Reality, thanks to which the user is completely immersed in the scene and lives an extremely engaging experience (e.g. when using immersive technology like a "Vive" helmet).

### *Relevant links, social media, video or publication related to the tool /best practice*

Euripides Theatre 3D reconstruction, project description: <https://mobile3d.it/portfolio/muca-panzanos-theatre/?lang=en>

Crane 3D reconstruction, project description: <https://mobile3d.it/portfolio/muca-gru-vr/?lang=en>

### *Resources available*

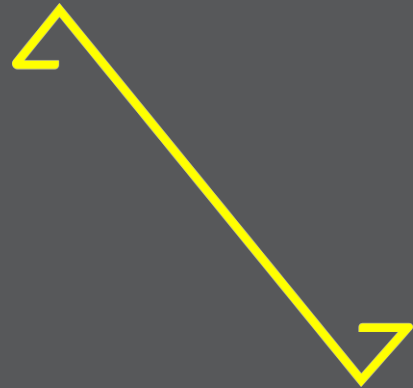


Demo videos of the 3D reconstructions are available at the above links

Topics covered in learning materials Industrial archaeology contents related to the ancient buildings and sites referenced in the Archaeological Museum of Udine (Italy)

See: <http://www.mucamonfalcone.it/asp/Home.aspx?idAmb=107&idMenu=-1&liv=0>

○ Ionian University Good practices







# Tool 1

## Name of the tool Education and Museum: Cultural Heritage and Learning

*Promoter (partner/country) + Collaborations and partners*  
Università degli studi di Roma La Sapienza

### *Partners*

- Agrupamento de Escolas Coimbra Centro (PT)
- Istituto Comprensivo Via Val Maggia (IT)
- Istituto e Museo di Storia della Scienza (IT)
- Nuclio Nucleo Interactivo de Astronomia Associacao (PT)
- Universidade de Coimbra (PT)
- Directorate of Primary Education of Achaia (EL)
- Panepistimio Patron (EL)
- 46 dimotiko sxoleio patron (EL)

### *Main objective and aim of the tool*

The Project aim is to promote new ways of learning and teaching through innovative method, using technologies and open digital resources that can be non-formal content for design curricula. It also proposed a new way for schools and museums cooperation;

### *Main target group*

Teachers and students of Primary School, Museums

### *Detailed description*

- State of the art analysis in the use of innovative practices in science education in country partners;
- Define methodology of using technologies and digital resources for making learning units;

- Design and development platform to access and re-use digital resources of cultural heritage in education field;
- Design and development tool for making interactive and open educational resources.
- Oriented educational, research-technology and museum Partners will analyze the practices adopted by different countries connected to Science teaching, European Commission document and recommendations in educational field. They also will discuss on some experiences of “best practices” to identify access modality, use and reuse of cultural heritage and the arrangements for making learner-centered teaching unit. The partner will be able to define such skills needed by teachers for working in an innovative way and therefore which practices for permanent professional development and experience sharing among teachers of different countries of the Union should be adopted.
- The partners expect positive results related to:
  - Teach in the classroom through multimedia tools with new approaches to the scientific disciplines for learning enhancing;
  - Propose a trail for reality perception by students as an open system in which you can draw and exchange information with the help of technology;
  - Constructivist theory application, creating a synergistic relationship between different learning environment;
  - Develop relationships between schools, cultural institutions and in general between school, research and culture environment;
  - Increase and stimulate students for Science learning.

The Project goal will be to share and exchange best practices and applications among school models of different countries, to enable the teachers training on how to design cross-disciplinary learning activities for improving a collaborative work to include scientific issues in different areas of the school curricula. Important aims will be innovative relationships between teachers and museum staff, the accessibility to resources as tools to enable teachers to create teaching units to be shared as OER (Open Educational Resources), providing students formal and no formal educational content adopting a language close to the one they use on every day. Dissemination and communication plan provides information and content of Project activities for involving and stimulating stakeholders, national and international educational agencies to replicate experimental methodology and instruments for increasing motivation of the students to choice of higher studies in science field.

*Relevant links, social media, video or publication related to the tool /best practice*

[www.edmuse.eu](http://www.edmuse.eu)

<https://www.researchgate.net/publication/320470910>

*Resources available*

Learning materials in English, Greek, and Italian.



[The Project](#) [Meetings & Events](#) [Partners](#) [Activities](#) [Resources](#) [Contact](#)

GR | IT | PT

### **Education and Museum: Cultural Heritage for Science Learning**

The project is connect to the promotion of initiatives, starting in primary school, for using ICT, the open educational resources and digital resources of cultural heritage for the improvement science learning.

The Project aim is to promote a new ways of learning and teaching through innovative method, using technologies and open digital resources that can be non-formal content for design curriculum. It also proposed a new way for schools and museums cooperation.

#### **The Project Activities**

- State of the art analysis in the use of innovative practices in science education in country partners;
- Define methodology of using technologies and digital resources for making learning units;
- Design and development platform for to access and to re-use digital resources of cultural heritage in education field;
- Design and development tool for making interactive and open educational resources.

Scientific articles

Videos

*Topics covered in learning materials*

Prehistory, archaeological museums, school museums

Classics, cultural heritage, academic heritage

# Tool 2

## Name of the tool The Europeana “Digital Education with Cultural Heritage”

*Promoter (partner/country) + Collaborations and partners*

Time Machine Organisation

ViMMPlus

Europeana China

*Partners*

- The RightsStatements.org Consortium
- The RightsStatements.org Consortium
- EuroClio

*Main objective and aim of the tool*

With the aim of increasing digital cultural data as a trusted primary source – essential in this era of disinformation – in order to implement innovative pedagogies, the Europeana “Digital Education with Cultural Heritage” MOOC empowers teachers and educators to use digital technologies, essential to develop learners’ 21st century skills. This online course will explore the educational potential of digital cultural heritage, improving teachers’ and educators’ understanding so that they can efficiently integrate it into their lessons and practices, regardless of the subject they teach. The final goal is to design engaging and in-depth content for students, museumgoers, or lifelong learners to prepare them to be active and responsible citizens with key competencies to thrive in life.

*Main target group*

Teachers coming from all subjects and levels (primary and secondary)

non-formal educators, particularly museum educators, librarians, archivists or curators. Other educational professionals and stakeholders, such as heads of schools, school support staff, and policy makers in education and culture with an interest in the topic are also welcome to join.

*Detailed description*

This MOOC makes use of Europeana’s digitised collection of cultural heritage and content from the Teaching with Europeana blog, where participants will find resources in multiple formats (such as pictures, videos, texts, 3D) and multiple languages, various tools like Transcribathon and Historiana and other ready-made materials that they can easily integrate into their educational activities. Moreover, the course will introduce the learning scenario template and guide participants to use it and build their own. To help participants, the course offers a selection of videos with tested learning scenarios designed by educators from different countries.

Additionally, this course will foster the employment of innovative pedagogical approaches and facilitate open schooling and hybrid spaces for education by connecting museums, libraries, and other cultural institutions with schools through educational activities based on cultural heritage assets.

The MOOC’s objectives are the following:

- Introduce participants to Europeana cultural content and help them to understand how this can be integrated in their educational activities online and offline.
- Introduce the Learning Scenario template and guide participants to its use.

- Foster the employment of innovative pedagogical approaches, using arts and science digital heritage.
- Facilitate open schooling experience by connecting museums and schools through educational activities based on Europeana resources.

The course is organised around the principle of peer learning, with course content designed to stimulate reflection and discussion so that participants can learn from each other's experiences and ideas. In order to complete the course, participants are required to submit a final course product and review their peers' work.

*Relevant links, social media, video or publication related to the tool /best practice*

<https://epale.ec.europa.eu/en/content/europeana-digital-education-cultural-heritage-mooc-about-start>

*Resources available Pictures, videos, texts in various languages*

Transcribathon and Historiana

*Topics covered in learning materials*

Nazi and Soviet regimes, World War I and II, Greek inventions, woman in history, Cultural heritage, Censorship, Cold War, Greek history, European History, Industrial Inventions, etc

**The Europeana "Digital Education with Cultural Heritage" MOOC is about to start!**

 Altheo VALENTINI



## Tool 3

Name of the tool **Open and Free Academic Courses** in Conservation of Cultural Heritage in Greece

*Promoter (partner/country) + Collaborations and partners*

Technological Educational Institute (TEI) of Athens together with the Greek Universities Network (GUNET)

*Main objective and aim of the tool*

The 4-year Bachelor Degree in Conservation-Restoration at the Technological Educational Institute (TEI) of Athens has the difficult task of preparing its students to become professional Conservator-Restorers with knowledge and skills in six specializations of either archaeological (objects) conservation or in conservation works of art. The goal is to prepare their course material in Greek as freely accessible digital educational content in the form of thirteen PowerPoint lectures with or without video lectures per course offered via the open source eLearning platform 'Open eClass' hosted by the TEI of Athens. The paper describes how the courses were prepared, the challenges involved in its preparation, as well as the benefits to the students.

*Main target group*

Teachers and students from the department of Conservation (former TEI of Athens now University of West Attica)

*Detailed description*

Each course should have an organized template which includes the description of the course, the learning outcomes, key words and bibliography. The courses should comprise of thirteen distinct

units (based on the duration of the academic semester in Greek Universities) and each unit should also follow the same template. The learning material should be comprehensible and easily accessible to impaired people.

Copyright Clearance is another key issue, where course material is published under the Creative Common License (CCL). Thus, the learning material may consist of Professors' work, open educational resources, and works that a license is granted for their use.

The learning material should meet the following specifications regarding design and development:

- Easy content navigation (Use of Contents, Titles, Headings)
- Comprehensive and logical design (organization of chapters and units, no surprises during navigation/reading)
- Attractiveness (good quality of graphics)
- Easy to learn when using it (consistency and uniformity of the learning units)
- Clear and small meanings in every slide (for power point presentations)

The project would benefit the educators in the following ways:

- Enhance the significance to the educational material created by the instructors;
- Deal with copyright issues when using third-party materials;
- Train instructors in new technologies and the application of digital learning educational material;
- Promote the reputation and visibility of instructor's textbooks. International practice has shown that the availability of Open Courses by Faculty helps to promote their publications and the University

Additionally, it would allow the educators to spend more time in the lecture room in dealing with specific case studies to strengthen or reinforce the concepts taught in the online course. It would also allow for a larger audience so the educator can promote the state-of-the-art or standard practices in Conservation-Restoration. However, the courses would not offer any certificate or feedback to the online end-users from the educators.

Another very important issue was that various private educational institutions in Greece (IEK) offer two year conservation programs for conservation technicians. The paid instructors of these institutions could now be able to use the material prepared by the Department's staff as their teaching material. However, this may also occur for the academic staff's printed teaching material. Also, CCL states that the material cannot be used for commercial purposes, which secures that the Department and its academic staff are protected in such cases. Moreover, it would be better for the Department to be aware and "control" the type of information and knowledge that IEKs' students obtain during their studies, which se

The Professor filled in the Educational Material Form which all the information about the course (semester, theory or lab course, instructional hours, material used and complementary information). Then each Professor prepared the course material according to the specification and forwarded it to the Open Courses team. The team checked whether the course material has been properly prepared according to the project's specifications. The team also suggested how the course material can be further altered in order to be more comprehensible, and at the same time the team also "cleared" the content from copyright issues. The main tool for the copyright clearance process is to search and find OER to replace third party copyrighted material. However, the open courses team encountered barriers in closed access contents, and permissions were not given, even though the material would be used for educational purposes. In the case of A or A+ courses the lectures are audio and /or video recorded and are edited by the team.

Each Professor and a member of the Open Course team performed together a final check of the material and the team certifies through a technical checklist that the course complied with the project's specifications. Each Professor signed that he/she allows the publication of the courses with CCL. Finally, the team uploaded and published the course at the Open Courses TEI of Athens platform and GUNET published the course at the central repository automatically.

*Relevant links, social media, video or publication related to the tool /best practice*

<https://journals.openedition.org/ceroart/4231#tocfrom1n2>

<https://www.gunet.gr/el/>

*Resources available*

Video Lectures

Podcasts

Ppt presentations, pdf and word files

*Topics covered in learning materials*

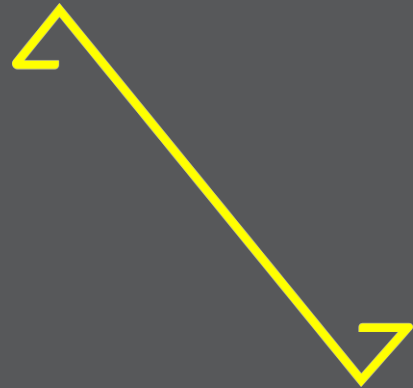
Ancient history and byzantine history



The Academic Internet and its goals

Distance Learning Platforms

○ Solidarity Tracks Good practices





# Tool 1

## Name of the tool E-youth Patrimony

*Promoter (partner/country) + Collaborations and partners*  
MONOPATIA ALLILEGGIIS/SOLIDARITY TRACKS, Greece

### *Partners*

- Gain&sustain: Europe, Austria
- The Starry Start of Talents Foundation, Bulgaria
- Lužánky Czech republic
- CREFAD LOIRE, France
- Hungarian Volunteer sending foundation, Hungary
- Asociatia de tineri din Ardeal, Romania
- Mittetulundusuhing VitaTiim, Estonia
- Semper Avanti, Poland
- DIAGONAL ESPAÑA
- Spain Asociacion Mundus – Un Mundo a tus Pies, Spain
- Kalkinma ve inovasyon Ofisi Dernegi - Cyprus
- Associazione Costiera Amalfitana Riserva Biosfera, Italy
- ASSOCIAÇÃO NOVO MUNDO AZUL, Portugal
- ACTOR, Romania
- Developement and innovation office organization, Turkey

### *Main objective and aim of the tool*

- Establishment and follow-up a strategic cooperation plan to support young crafters and to integrate them into professional life.
- Exchanging good practices in youth work between partners.
- Cooperate in common projects of common interest that meet the needs of our young people & our communities through : Volunteering / exchanges / training / youth initiatives / professional internships...

Main target group  
Young crafters, artists and NGO

### Detailed description

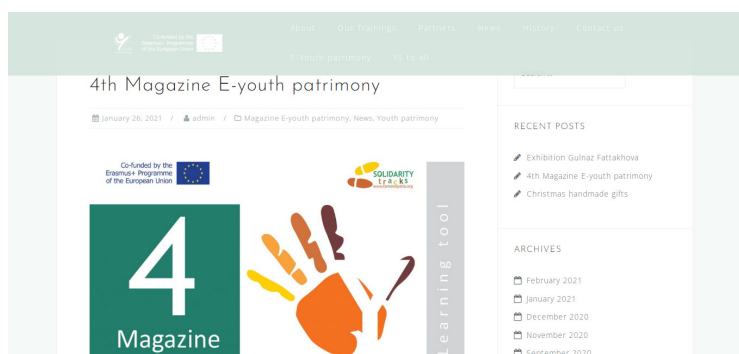
Craftsmanship is an art and practice that is essential to strengthen a country's cultural identity. It symbolizes the culture of the region and allows the preservation and dissemination of local patrimony. It is also a real tourist and economic asset. It reflects the experience and memory that tourists and even locals have of the region. Crafts have a major economic role because they contribute to the country's reputation and can generate, if they are promoted and supported, many jobs and sources of income. Crafts also make it possible to perpetuate techniques and produce works that would have disappeared over time, they protect the heritage of their region and country. Setting up international initiatives to support crafts and exchange good practices helps to enhance the value of European and international heritage.

Relevant links, social media, video or publication related to the tool /best practice

<https://youthclub.eu/index.php/category/e-patimony/>

<https://youthclub.eu/index.php/category/magazine-e-youth-patrimony/>

<https://e-learning.youthclub.eu/enrol/index.php?id=10>



Resources available

Topics covered in learning materials Best Practices in crafting, art exhibitions, tools

## Tool 2

Name of the tool YES club

Promoter (partner/country) + Collaborations and partners  
MONOPATIA ALLILEGGIIS/SOLIDARITY TRACKS, Greece

Partners

- ASOCIACION CIVIL RED DE ACCION CLIMATICA-Red Argentina de Municipios ante el Cambio Climático (RAMCC)
- Cong Ty Co Phan Phat Trien Viec Lamthanh Thieu Nien Va Xa Hoi
- Asociación MUNDUS
- Disha International Foundation Trust
- ATA – Youth Association From Transylvania
- D'Antilles & D'Ailleurs
- The Organization For Indigent Toits



### *Main objective and aim of the tool*

Promote social entrepreneurship

To enable a group of youth workers and staff of 8 youth organizations coming from 8 countries from 4 continents to exchange and acquire knowledge, skills and competences about innovative methods for non formal education of young people to social entrepreneurship, networking, On line training, support and coaching, and building their capacity for the use of modern learning methods related to non-formal education of young people and social entrepreneurship based on virtual technology; in order to modernize their working methods and optimize their supporting role in favor of young people of different backgrounds and abilities who wish to learn and invest in social entrepreneurship.

### *Main target group*

Youth unemployed, educators, mentors

### *Detailed description*

In order to enhance the social entrepreneurship in our countries, it would be absolutely necessary to supply the young people who dream of becoming social entrepreneurs with appropriate competences, contacts and the will to launch social entrepreneurs commensurate to their own profile & the needs of their milieu.

In this context, we wish to organize a long-term project to favour the experiences' exchange and develop the competences of 24 youth workers and instructor designers who stem from 8 countries and 4 continents, so that they can come up with innovative educational methods about the social entrepreneurship and act as multipliers who will help this type of entrepreneurship to spread among the young people in their countries and elsewhere.

### *Relevant links, social media, video or publication related to the tool /best practice*

<https://e-learning.youthclub.eu/>

<https://youthclub.eu/>

### *Topics covered in learning materials*

Social problems in my community  
Solve social problems: From idea to action  
Entrepreneurship and social entrepreneurship  
The profile of a social entrepreneur  
Science of project management  
YES, better society is possible!  
Follow-up activities



# Tool 3

**Name of the tool** The culture and cultural codes

*Promoter (partner/country) + Collaborations and partners*  
AMSED network & Solidarity Tracks (Monopatia Allieggiiis)

### *Main objective and aim of the tool*

The course/tool aims to enable youth and not just to better understand diverse cultures, to better fit in a new environment, community and to allow the target group to learn from different perspectives about various cultures.

### Main target group

Youth, youth who wish to volunteer abroad

### Detailed description

Moodle TC

The culture and history of the host country: cultural codes, customs, cuisine, religion, tradition...

In order to learn more about the country, develop an open mind and avoid misunderstandings.

Skills to be improved: intercultural communication, cultural awareness, open mind, logical thinking,

This course will enable the participant to better understand diverse cultures, to better fit in the hosting community and will allow them to learn from different perspectives about other cultures.

Culture is all about Learned Behaviors

Culture is not something that we are born knowing. No baby is born being able to understand art, or speaking the language of its parents. Yet what it does possess is a desire to communicate and be understood – a desire it generally seeks to fill by screaming, which works out just fine, to begin with. But then, it learns that different noises mean different things, and so language begins to be learned.

Because of this, culture is also something that accumulates. It is built on overtime.

It's not as though a group of people in 1000BC sat down and discussed whether they were going to use forks or chopsticks, or whether they were going to teach math in school. These things developed slowly – and now, millennia later, schoolchildren are learning mathematical concepts developed by ancient Greeks.

### Relevant links, social media, video or publication related to the tool /best practice

<https://e-esc.eu/course/view.php?id=47>

<https://e-esc.eu/>

### Resources available

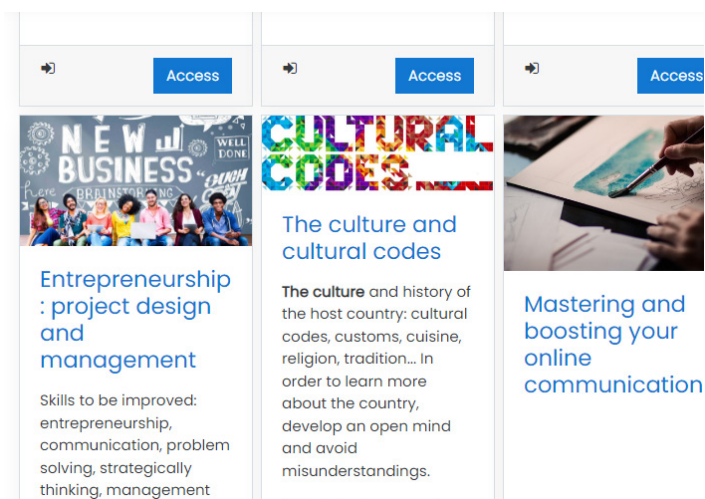
Learning materials in English



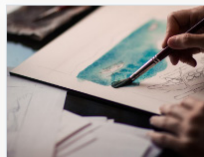
Video

Quiz

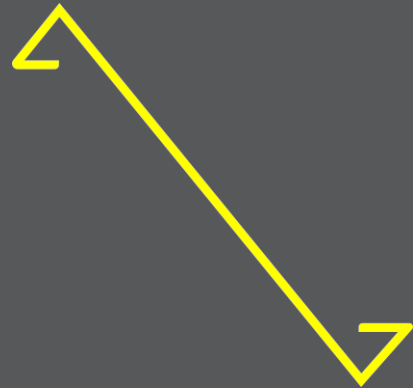
Topics covered in learning materials What is culture

Cultural shock



 <b>Entrepreneurship : project design and management</b> Skills to be improved: entrepreneurship, communication, problem solving, strategically thinking, management	 <b>The culture and cultural codes</b> The culture and history of the host country: cultural codes, customs, cuisine, religion, tradition... In order to learn more about the country, develop an open mind and avoid misunderstandings.	 <b>Mastering and boosting your online communication</b>
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○ ZRC SAZU Good practices



# Tool 1

**Name of the tool** The use of the LIDAR-data for the understanding and protection of cultural heritage

*Promoter (partner/country) + Collaborations and partners*  
Skupina Stik

*Main objective and aim of the tool*

To understand the archaeological heritage, which is often (mostly due to the strong forest cover) invisible

*Main target group*

Stakeholders in the field of cultural heritage  
Local communities

*Detailed description*

LIDAR-data are extremely important for the understanding of archaeological heritage especially in the areas which are mostly covered with forest. They can be used in the field of protection of the archaeological heritage as well as the education tool.

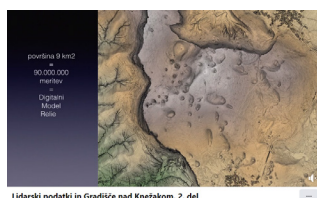
*Relevant links, social media, video or publication related to the tool /best practice*

<https://www.facebook.com/skupina.stik/videos/979901318822737/H>

<https://www.facebook.com/skupina.stik/videos/978500475629488/>

*Resources available*

Topics covered in learning materials



Lidarski podatki in Gradišče nad Knežakom, 2. del



Lidarski podatki in Gradišče nad Knežakom, 2. del

# Tool 2

Name of the tool **3D reconstructions** of the archaeological sites

## Detailed description

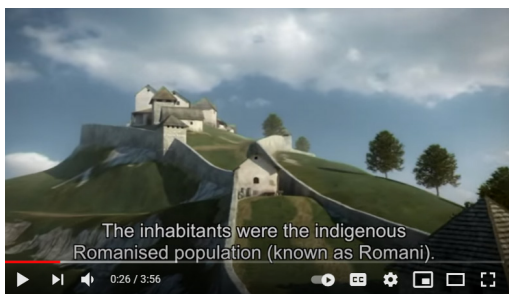
3D reconstructions of archaeological sites are especially important for those sites that are difficult to access as they are set on hills.

## Relevant links, social media, video or publication related to the tool /best practice

[https://www.youtube.com/watch?v=I2ZN8U\\_NGBc](https://www.youtube.com/watch?v=I2ZN8U_NGBc)

## Resources available

Topics covered in learning materials



javovski gradec



javovski gradec

# Tool 3

Name of the tool **Virtual excursions**

## Promoter (partner/country) + Collaborations and partners

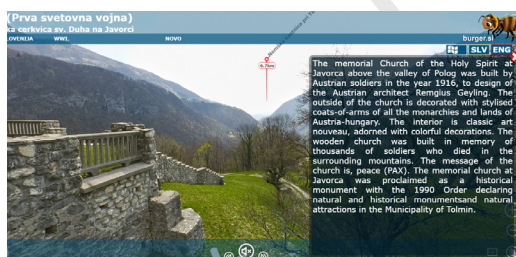
Tolminski muzej

## Detailed description

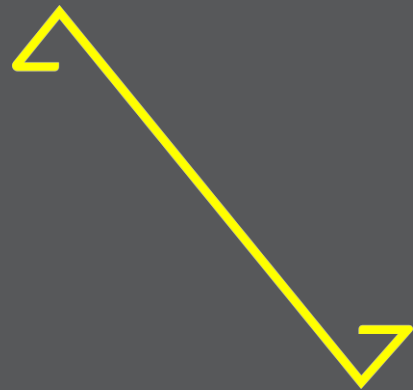
The popularity of virtual excursions and virtual museum tours has grown greatly during the Covid-19 epidemic, but they are also suitable for locations to which access is more difficult.

## Relevant links, social media, video or publication related to the tool /best practice

<https://www.burger.si/WWI/360/index.html#Javorca>



○ Other Digital tools





## Further Digital Tools

Websites that allows you to generate random images, or random number for dices editor at various local sites, for example: Buqelemun.com, Kafkazh.com, Xeberburo.az

Design:

<https://vectr.com/rekavektorfree/aAY6d6qHD>

<https://pixlr.com/x/>

Zoom - Zoom Cloud Meetings is a proprietary video teleconferencing software program developed by Zoom Video Communications. The free plan allows up to 100 concurrent participants, with a 40-minute time restriction. Users have the option to upgrade by subscribing to a paid plan.

Mentimeter - Interact with your audience using real-time voting. No installations or downloads required - and it's free! Mentimeter is a Swedish company based in Stockholm that develops and maintains an eponymous app used to create presentations with real-time feedback

<https://www.mentimeter.com/>

Mentimeter: <https://vimeo.com/401017176>

Kahoot - Kahoot! is a game-based learning platform, used as educational technology in schools and other educational institutions. Its learning games, "kahoots", are user-generated multiple-choice quizzes that can be accessed via a web browser or the Kahoot app.

<https://kahoot.com/>

Kahoot: <https://youtu.be/pANtMqNWBek>

Jamboard - Collaborative digital whiteboard - Jamboard is a digital interactive whiteboard developed by Google to work with Google Workspace, formerly known as G Suite. It was officially announced on 25 October 2016. It has a 55" 4K touchscreen display and can be used for online collaboration using Google Workspace.

<https://jamboard.google.com/>

Google Meet - Google Meet is a video-communication service developed by Google. It is one



of two apps that constitute the replacement for Google Hangouts, the other being Google Chat. Real-time meetings by Google. Using your browser, share your video, desktop, and presentations with teammates and customers.

<https://meet.google.com/>

Padlet - Padlet is an educational technology startup company based in San Francisco, California and Singapore. Padlet provides a cloud-based software-as-a-service, hosting a real-time collaborative web platform in which users can upload, organize, and share content to virtual bulletin boards called "padlets."

From your hobby to your career, your class notes to your final exam, your mood board to your runway show, padlets help you organize your life.

<https://padlet.com/>

Padlet for teachers: <https://youtu.be/dC69Sr-OQik>

Padlet how to get started: <https://youtu.be/OPkq5q8nRbM>

Padlet for students: [https://youtu.be/delW1Jtoq\\_w](https://youtu.be/delW1Jtoq_w)

Miro - is an Online Whiteboard & Visual Collaboration Platform that enables distributed teams to work effectively together, from brainstorming with digital sticky notes to planning and managing agile workflows.

Miro's infinitely zoomable canvas and web whiteboard enables you to work the way you want to. Unleash your creativity, plan projects from all angles, and create centralized hubs of information to keep everyone in the loop. See the big picture and the details.

<https://miro.com>

Miro: <https://youtu.be/0olcwCD9-GM>

<https://youtu.be/Zc2c6HquANE>

<https://youtu.be/cSZsTTSMrSE>

Teams - Microsoft Teams is a proprietary business communication platform developed by Microsoft, as part of the Microsoft 365 family of products. Teams primarily competes with the similar service Slack, offering workspace chat and videoconferencing, file storage, and application integration.

Microsoft Teams is free to use. With the free flavor of Microsoft Teams, you get unlimited chats, audio and video calls, and 10GB of file storage for your entire team, plus 2GB of personal storage for each individual.

Microsoft Teams is the hub for team collaboration in Microsoft 365 that integrates the people, content, and tools your team needs to be more engaged

<https://www.microsoft.com/en-us/microsoft-teams/group-chat-software>

Jitsi-Ji - Jitsi is a collection of free and open-source multiplatform voice (VoIP), video conferencing and instant messaging applications for the web platform, Windows, Linux, macOS, iOS and Android. The Jitsi project began with the Jitsi Desktop (previously known as SIP Communicator). With the growth of WebRTC, the project team focus shifted to the Jitsi Videobridge for allowing web-based multi-party video calling. Later the team added Jitsi Meet, a full video conferencing application that includes web, Android, and iOS clients. Jitsi also operates [meet.jit.si](https://meet.jit.si), a version of Jitsi Meet hosted by Jitsi for free community use. Other projects include: Jigasi, lib-jitsi-meet, Jidesha, and Jitsi.

<https://jitsi.org/jitsi-meet/>

Canva - Canva is a graphic design platform, used to create social media graphics, presentations, posters, documents and other visual content. The app includes templates for users to use. The platform is free to use and offers paid subscriptions like Canva Pro and Canva for Enterprise for additional functionality.

<https://www.canva.com/>



Moodle - is a Learning Platform or course management system (CMS) - a free Open Source software package designed to help educators create effective online trainings.

Moodle™ stands for Modular Object-Oriented Dynamic Learning Environment. Founded and developed by Martin Dougiamas in 2002, Moodle™ was designed to provide educators, administrators, and learners with an open, robust, secure and free platform to create and deliver personalized learning environments.

<https://moodle.org/>

H5P - H5P is a free and open-source content collaboration framework based on JavaScript. H5P is an abbreviation for HTML5 Package, and aims to make it easy for everyone to create, share and reuse interactive HTML5 content.

<https://h5p.org/>

Bluejeans - BlueJeans provides interoperable cloud-based video conferencing services. Easily and securely hold live online meetings, webinars, and video calls.

BlueJeans is a cloud video-conferencing and screen-sharing service. While BlueJeans offers a free trial, there are three levels of subscription offered starting at \$9.99 per month. BlueJeans has the ability to connect users across a variety of platforms.

<https://www.bluejeans.com>

Gather.town - Gather. Town is a web-conferencing software like Zoom, but with the added component of seeing the virtual “room” you and others are occupying, and with the ability to move around and interact with other participants based on your locations in the room, just like real life. How much does it cost? From the moment you create your Space, it is always available and free for up to 25 concurrent users. If you are looking to just hang out with your friends and chat, you are probably good on our Free account

<https://www.gather.town/>

MOOC - massive open online course

MOOC stands for ‘massive open online course’. The term originated in the US in 2008 to describe free, easily accessible, completely online courses.

MOOCs integrate social networking, accessible online resources, and are facilitated by leading practitioners in the field of study. Most significantly, MOOCs build on the engagement of learners who self-organize their participation according to learning goals, prior knowledge and skills, and common interests.

<https://www.mooc-list.com/>

Doodle - Doodle is the simplest way to schedule meetings with team members, colleagues, clients, partners and friends. Take back control of your calendar (and time)

Doodle makes your life easier by allowing you to create online surveys and polls in just a few short steps. Doodle polls are primarily used to find the best time to meet amongst a large group of people. During the second step of poll creation you can choose free text to create a survey for anything like. Whatever your intent, gathering opinions for your work or simply deciding on a restaurant for your next birthday party, you can create a Doodle survey to find out what people want to do. In fact, you could use Doodle to poll opinions about anything you like!

<https://doodle.com/en/>

Workplace - Workplace – marketed as Workplace from Facebook and formerly Workplace by Facebook – is an online collaborative software tool developed by Facebook, Inc. It facilitates online groupwork, instant messaging, video conferencing, and news sharing.

Workplace is a communication tool that connects everyone in your company, even if they’re working remotely. Use familiar features like Groups, Chat, Rooms and Live video broadcasting to get people talking and working together.

<https://www.workplace.com/>

Youtube - YouTube is a video sharing service where users can watch, like, share, comment and upload their own videos. The video service can be accessed on PCs, laptops, tablets and via mobile phones.

<https://www.youtube.com/>

ActionBound - Actionbound is an app for playing digitally interactive scavenger hunts to lead the learner on a path of discovery. We call these multimedia based hunts 'Bounds'. The program quite literally augments our reality by enhancing peoples' real-life interaction whilst using their smartphones and tablets.

Actionbound is ad-free. And free of charge for personal use.

<https://en.actionbound.com/>

Discord - Discord is a VoIP, instant messaging and digital distribution platform designed for creating communities. Users communicate with voice calls, video calls, text messaging, media and files in private chats or as part of communities called "servers".[note 1] Servers are a collection of persistent chat rooms and voice chat channels. Discord runs on Windows, macOS, Android, iOS, iPadOS, Linux, and in web browsers. As of December 2020, the service has over 250 million registered users and over 140 million monthly active users.

<https://discord.com/>

Slack - Slack is a new way to communicate with your team. It's faster, better organized, and more secure than email.

Slack is a messaging app for business that connects people to the information they need. By bringing people together to work as one unified team, Slack transforms the way organizations communicate.

<https://slack.com/intl/en-gr/>

Trello - Trello is a collaboration tool that organizes your projects into boards. In one glance, Trello tells you what's being worked on, who's working on what, and where something is in a process. Imagine a white board, filled with lists of sticky notes, with each note as a task for you and your team.

<https://trello.com/en>

Spatial Chat - Spatial chat is a virtual space where people can form groups for conversations with different topics. It is similar to the breakout room in Zoom, but it is better for online social-events as participants can move freely between groups, or form new groups, by simply dragging their avatar.

Free Plan: Up to 3 rooms, for up to 50 people in space, Share images & videos, Screensharing & collaboration

<https://spatial.chat/>

Online puzzle maker – Millions of free jigsaw puzzles created by a large community. Create, play, share jigsaw puzzles and compete with other users.

<https://www.jigsawplanet.com/>

<https://im-a-puzzle.com/>

Artsteps - Artsteps

The Artsteps virtual gallery is more accessible to artists and viewers as it is free and can be accessed from the comfort of homes all over the world. It allows viewers and artists to compare works that would be impossible to gather together in the physical world.

Join Artsteps community and create your own virtual exhibitions. GET STARTED. logo. Artsteps provides you with a platform to create, design & share your own artworks.

<https://www.artsteps.com/>

Prezi - Prezi is a web- based tool that allows users to create a presentation using a map layout. They are able to zoom in and out of different items and show relationships from an interesting point of view. Keep in mind that Prezi is not capable of everything PowerPoint is.

Prezi is a Hungarian video and visual communications software company founded in 2009 in Hungary, with offices in San Francisco, Budapest and Riga.

Make stunning interactive charts, reports, maps, infographics, and more. Prezi Design.

<https://prezi.com/>

The Hubbub community chat server, written in TypeScript - hubbub-community/hubbub-chat-server.

<https://go.hubbub.live/>

Wordwall can be used to create both interactive and printable activities. Most of our templates are available in both an interactive and a printable version. Interactives are played on any web-enabled device, like a computer, tablet, phone or interactive whiteboard.

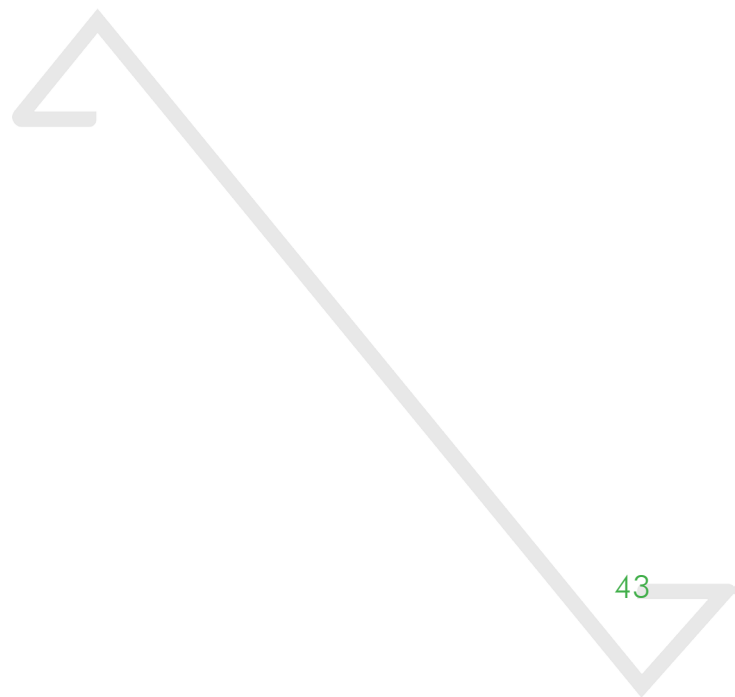
<https://wordwall.net/>

About. skribbl.io is a free multiplayer drawing and guessing game. One game consists of a few rounds in which every round someone has to draw their chosen word and others have to guess it to gain points! The person with the most points at the end of game will then be crowned as the winner!

<https://skribbl.io>

Camtasia by Techsmith is a simple, all-in-one video editing and screen recording software program. Built with beginners in mind, Camtasia allows designers to create professional training videos quickly and efficiently. It is available for both Windows and MacOS.

<https://camtasia.en.softonic.com/>







*Project*

KA 2 Strategic Partnership - 2020-1-AT01-KA226-HE- 092503

*Partners*

University of Innsbruck (Coordinator) - Austria

Municipality of Irschen - Austria

MOBILE 3D - Italy

Ionian University - Greece

Solidarity Tracks - Greece

ZRC SAZU- Slovenian Academy of Arts and Sciences- Slovenia



2021



Co-funded by the  
Erasmus+ Programme  
of the European Union



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