Europeana Learning Scenario

Title

A symbolist AR-tist

Author(s)

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Abstract

We all know some given important artists, and this learning scenario is a great opportunity to create a learning experience using STEAM practices to highlight these artists' creations using AR/VR technology and coding. The aim of this work is to create a virtual museum about Julio Romero de Torres, a famous Spanish artist belonging to the artistic style of symbolism, exposing his work using CoSpaces Edu. The students have to look for information about their pictures in the Europeana gallery and create a virtual Space to expose the context. The visitors could enjoy the museum scanning QR codes to get access with their smartphones or tablets. After the visit, the visitors should fill a survey in order to gather information to assess if it has served to learn the most important thing from that given artist.

Keywords

Code, AR/VR, STEAM, art, computational thinking

Table of summary

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Subject	*Computer Science, Geography and history, Mathematics.*
Topic	*computational thinking, symbolism*
Age of students	*13-14*
Preparation time	*2 hours*
Teaching time	*Three 60 minutes lessons*
Online teaching material	*Information about Julio Romero de Torres and his pictures included in Europeana* *Genially presentation* *CoSpaces Edu tutorial*
Offline teaching material	*Computers, Paper sheets to print the QR Codes, smart phone or tablet to enjoy the museum*
Europeana resources used	• [Cuadros de Julio Romero de Torres] [Material Gráfico] • [Cuadros de Julio Romero de Torres] [Material Gráfico] • The Retable of Love • Retrato de señora de Romero de Torres • Julio Romero de Torres y sus modelos [Material Gráfico] • Julio Romero de Torres [Material Gráfico]

Licenses

Integration into the curriculum

General integration into the curriculum:

> The national curriculum establishes the need to develop in our students a series of competences and skills that allow them to incorporate the use of technological tools in their daily lives. This work should be done in an interdisciplinary way to create multimedia content that serves for the dissemination of culture and knowledge. Likewise, students should learn to create small programs to develop skills associated with computational thinking, as well as mathematical reasoning itself.

Into the Mathematics curriculum:

> To use information and communication technologies in a habitual way in the learning process, looking for, analysing and selecting relevant information on the Internet or from other sources, preparing their own documents, making presentations and arguments and sharing these in environments to facilitate interaction.

Into the Geography and History curriculum:

> To compare and analyse the different artistic manifestations existing throughout history, contextualising them in the social and cultural milieu of each moment, through knowledge of the elements, techniques and functionality of art and valuing the importance of the conservation and dissemination of the artistic heritage as a resource for development, individual and collective well-being and the projection of our culture throughout the world on the basis of its artistic heritage.

Aim of the lesson

Students create a virtual exposition about Julio Romero de Torres that could be visited scanning QR codes.

Outcome of the lesson

QR codes to explore several scenes created with CoSpaces Edu to expose the main characteristics of this author's works. Each code will give access to a virtual space in which a picture will be exhibited with all the information.

A survey to evaluate the learning experience of the visitors.

Trends

- STEM learning: using cross-cutting science to promote cultural heritage
- Mobile learning: use the power of technology to create learning processes
- Collaborative learning: student will work in groups
- Augmented Reality: by pointing devices like smartphones and tablets to objects of reality you receive extra information.

21st century skills

- Critical Thinking: analyzing skills and finding solutions to improve the idea.
- Creativity: Thinking outside the box and developing unique ideas.
- Communication: Cultural and social understanding, empathy and communication skills
- Digital Literacy: Coding and other digital skills essential to future careers.
- Collaboration: Working with others and developing teamwork by creating together.

Activities

Name of activity	Procedure	Time
Introducing CoSpaces Edu	Students have to create a single space in CoSpaces Edu in order to learn how to use this educational resource.	45 minutes
Pictures information	Students have to look for pictures in the Europeana repository about Julio Romero de Torres and complete the information about these pictures visiting other pages.	45 minutes
Creating the museum	Students have to create a virtual scene to each picture in order to show the picture and the main characteristic about it including a text, sound and animations.	1'5 hours
Additional activity 1	Students create a survey for visitors to rate the work done. Each group of students have to create their own survey and visit the exposition of other students and rate the work using the survey provided.	
Additional activity 2	Create a survey with Mentimeter to collect feedback from students	

Assessment

Cooperative learning rubric

Rubric to assess the museum: Single point rubric to assess the museum

Student feedback

Students have completed a survey using Mentimeter by returning the following information. Each question is marked from 0 to 5:

- This kind of projects are interesting in order to know local heritage (4.7).
- This kind of projects help us to learn how to work in groups (4.5).
- This kind of projects allow us to learn curricular contents in a more effective way (4.4).
- This kind of projects are useful to learn something new and interesting (4.7).
- This kind of projects allow us to learn in a more active way (4.8).

These results indicate that students see positively educational practices in which learning process is developed in a more active way. They also think that this kind of practices are appropriate in order to learn about local culture developing working in group skills.

Teacher's remarks

The work experience has been very positive because this plan has allowed the students to learn about an important cultural issue as something fun instead of something academic thanks to RA-based educational technology. It has also been a very good experience to prepare the students for a future visit to the official

museum of this artist, which will be carried out giving them an important role since they will be able to share with other students their work and acquired knowledge.

In order to help the students to start with the project, I prepared an example space. It has all the characteristics they should include in their own virtual space, so it helped them a lot and it allowed all the works to have the same format.

About the Europeana DSI-4 project

Europeana is Europe's digital platform for cultural heritage, providing free online access to over 53 million digitised items drawn from Europe's museums, archives, libraries and galleries. The Europeana DSI-4 project continues the work of the previous three Europeana Digital Service Infrastructures (DSIs). It is the fourth iteration with a proven record of accomplishment in creating access, interoperability, visibility and use of European cultural heritage in the five target markets outlined: European Citizens, Education, Research, Creative Industries and Cultural Heritage Institutions.

European Schoolnet (EUN) is the network of 34 European Ministries of Education, based in Brussels. As a not-for-profit organisation, EUN aims to bring innovation in teaching and learning to its key stakeholders: Ministries of Education, schools, teachers, researchers, and industry partners. European Schoolnet's task in the Europeana DSI-4 project is to continue and expand the Europeana Education Community.
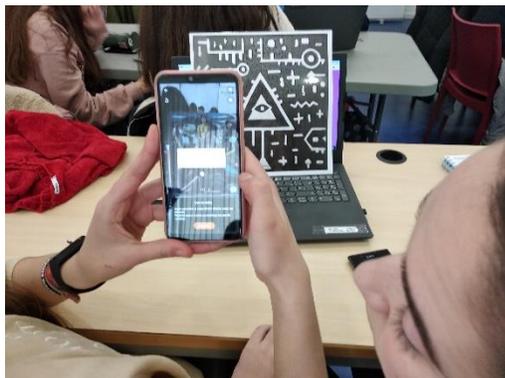
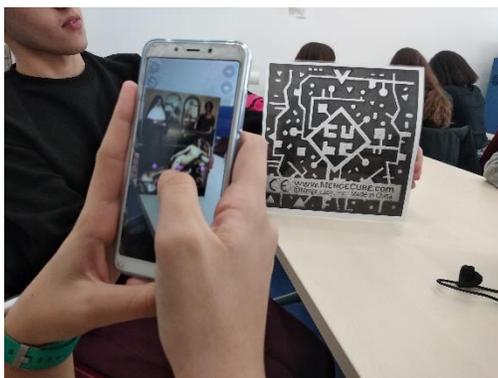Some pictures from the LS implementation:

Figure 1 CC-BY-SA Alvaro Molina

Figure 2 CC-BY-SA Alvaro Molina

Figure 3 CC-BY-SA Alvaro Molina

Figure 4 CC-BY-SA Alvaro Molina