360° tour creation
Lesson plan

Created by the CoSpaces team

Education level: From primary
Subject: Adaptable to any
Format: Individual or in groups
Duration: Approx. 2 hours

Introduction and lesson objectives:

CoSpaces Edu is a great tool to create virtual tours using 360° photos! This can easily be done by students and can be a great way to let them research a topic and then create an educational tour based on their findings.

This lesson plan will present how to create a simple virtual tour using uploaded 360° photos. Virtual tours can be guided or not, and can be made more or less interactive.

Learning goals and student benefits:

- Learn 3D creation skills
- Develop research skills
- Develop digital literacy skills
- Foster creativity
Activity example:

1. Lead a discussion on guided tours in general. What are guided tours, what's their purpose and what kind of guided tours have your students participated in?
2. Explore examples of 360° tours in CoSpaces Edu with the class. Let your students explore them in VR for an immersive experience and even more fun!
3. Explain the assignment to your students. Define what their 360° tours will be about and how they’ll get the 360° photos for their virtual tours.
4. Ask your students to make a plan and create a short storyboard of their tour.
5. Ask your students to conduct research for the content of their tour and to collect the 360° photos they'll be using.
6. Give your students some time to create their virtual tours in CoSpaces Edu.

Extension idea:

- Encourage your students to share their creations with their classmates.
- If possible, give your students the possibility to explore their creations in VR.

Assessment and evaluation suggestions:

- Have your students managed to create their virtual tour in CoSpaces Edu?
- Did they follow a well organized process moving progressively from a scene layout, for example, to gathering photos and creating their scenes?
- Have your students conducted research and based their virtual tours on relevant and accurate information?
- Have your students managed to code switching between scenes in their tour?
- Is the viewer able to navigate the virtual tour through the different scenes easily?
Creation guide

First, create a scene layout to plan what you’ll show in your virtual tour.

Do some research on the place(s) and topic(s) that will be explored through your virtual tour.

Gather the 360° photos you’ll use to create your virtual tour and collect all the information you want to include.

How can I get 360° images?

- On the web, searching for 360° photos labeled for reuse or royalty-free.
- On Flickr: equirectangular images: www.flickr.com/groups/equirectangular
- On other websites with free images such as: www.freegreatpicture.com/seamless-360-degree-panorama pixabay.com/en/users/pixexid-4729217/
- Creating them from your device’s camera or with a 360° camera.

Time to start creating your 360° tour in CoSpaces Edu!

Go to CoSpaces, create a new CoSpace and create a 360° image scene or use the 360° tour template.

This will make the creation process even easier, as the basis of your 360° tour is already there!
Click **Environment** and **Edit** to add a 360° photo.

Each 360° photo in your tour will be placed in a new scene.

Planning the order of the 360° photos in your tour in advance will make creating the scenes easier!

Once all the scenes of your virtual tour are created, you can then add some information to be displayed.

Add **POI (points of interest)** related to this place onto your 360° photo.

You can search for **icons** directly in CoSpaces Edu. Click **Upload**, go to **Images** and **Search** and drag and drop icons into your scene.

Add as many scenes as you like!

Then, use markers to let the viewer move between scenes in your tour.

You can use the existing markers in the template or code your own.

Use the **when is clicked** CoBlock together with the **go to scene** CoBlock as shown on the next page.
1. When Play clicked

2. when Scene 1 is clicked
   go to scene First scene

3. when Scene 3 is clicked
   go to scene Third scene

4. when Scene 1 is hovered
   on:
   run parallel
   turn Scene 1 clockwise by 360° in 1 sec.

5. repeat 4 times
   move Scene 1 0.1 meters up in 0.1 sec.
   move Scene 1 0.1 meters down in 0.1 sec.
You can also add sounds, music or record your own narrated voice to make a guided tour for example!

Click **Upload** to add or **Record** sound. Use only music that is labeled for reuse or royalty-free!

You can then program your 360° tour further to make it interactive and add information.

In the **Events** CoBlocks, drag the **on hover of** CoBlock. This will let you define what happens when you interact with an element in your tour. For example, you can use the **item say** CoBlock from the **Actions** category to display additional information.

To play your sound recordings after an interaction, you can use the **Play sound item** CoBlock instead of the **item say** CoBlock.
Example CoSpaces

A Coruña City Tour
edu.cospaces.io/FHF-TYV

New York City Tour
edu.cospaces.io/YVH-DRA

Glenmerry School and Parks
edu.cospaces.io/WXP-NAW