

10 MAR 2021

CONFERENCE TEACHING & TECHNOLOGY



What is your profession?

19% other
64% education professional
17% museum professional

I want to explore the universe

What is your key take-away?

Cool stuff
a lot of inspiration
It makes me happy
I can use it in my class
Hope for the future

AUGMENTING STORIES



GAGARIN INTERACTIVE
an experience design studio

content space
storytelling
We want people to play with the content
often nature based exhibitions

LAST PROJECT
1906 Reykjavik

exhibition of the old days in a model.

What can you do with it?

How can you explore?

the model is the centerpiece

Every 10 minutes little stories happen



What is tinkering?

To experience frustration and learn to be able to get out of it

- A way of thinking and working
- Hands-on activity, playing with inspiring materials.
- Experimenting with materials, technology or physics.
- It's all about the process, to explore, play and be creative.

Pixels in full color print
Look at a full color print with a magnifying glass

you can see it exists of colored dots

Pixels in art

Pointillism
The artist paints small dots of color on the canvas

from a distance they visually blend together

Examples of pixel art

- embroidery
- mini-teck
- iron beads

- Demo Lab
- Ars Electronica
- NEMO info desk
- chatter in space
- Tips & Tricks teachers NEMO

You can hop from bar to bar!



KEYNOTE

Visual journey through the universe

A virtual visit to the Ars Electronica Centre in Linz, Austria.

The rings of Saturn are the thinnest things we can find in the universe



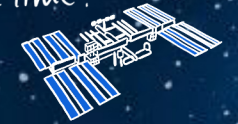
view of the earth in real time!

DEEP SPACE 8K

3D

Astronauts in the international space station can see the sun come up 16 times a day

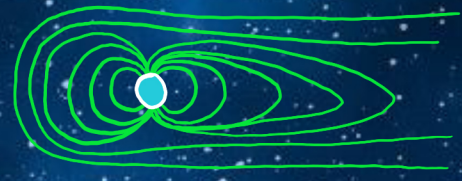
ISS



It takes them 90 minutes to circle the earth!

Magnetosphere

Aurora borealis you can see as the polar light



Mars is red because of the iron in the ground. It's half of the size of the earth

If we find water then we could find traces of life.

www.stellarium.org
opensource planetarium

All the dots are all galaxies

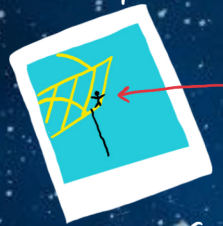


When we zoom out, our sun is just a star like the rest of the stars

TINKERING

With LIGHT AND SHADOW

Make a picture of a shadow of an object on the wall with your smartphone



You can draw a little person on the shadow and create a little story.

Go outside in the sun and draw a shadow with chalk on the ground



Marbles in water give beautiful colored shadows



VR AR MR

IN MUSEUM EDUCATION

AR = Augmented reality
Adds digital elements to a live view by using the camera of a smartphone

VR = Virtual reality
A digital experience that shuts out the physical world

MR = Mixed reality
Experience which combines elements of AR and VR



London Museum of Natural History and the Rijkmuseum in Amsterdam

are using VR technology

Pixels and space travel

Satellites make pictures of earth



PIXELART

Satellites collect data about:

- moisture in agricultural ground
- status of the cities
- state of seawater or water level

far away → little detail, less pixels
close → much detail, more pixels