



# Space for All

Rosa Doran

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ESA-GTTP 2022 – ESAC - Madrid



We are all super excited  
and prepared to have a  
job in space industry



A long-exposure photograph of a night sky over a body of water. The Milky Way galaxy is visible as a bright, hazy band of light stretching across the upper half of the frame. The sky is filled with numerous stars. The horizon is dark, with silhouettes of trees and land. A bright light source, likely the moon or a low sun, is visible on the horizon, creating a strong yellow glow and reflecting in the water. The water's surface is calm, showing clear reflections of the sky and the horizon. The overall scene is serene and majestic.

# A 21<sup>st</sup> Century Tale

# Let's revisit one year in the life of a Teacher



I really love teaching.  
Just wish I could  
always find the best  
way to empower my  
students....



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# Technology can makes teacher's life easier right??



© VHargyono (WMF)

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Google

solar system



Tudo

Imagens

Vídeos

Notícias

Compras

Mais

Ferramentas

Cerca de 1 190 000 000 resultados (0,77 segundos)

Google

solar system activity



Tudo

Imagens

Vídeos

Notícias

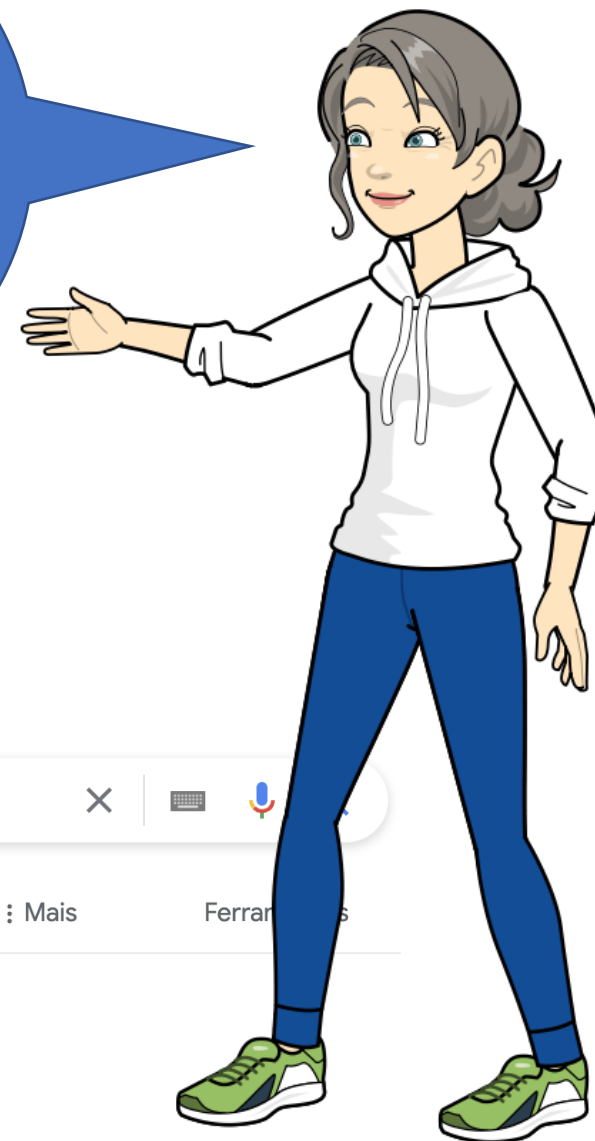
Compras

Mais

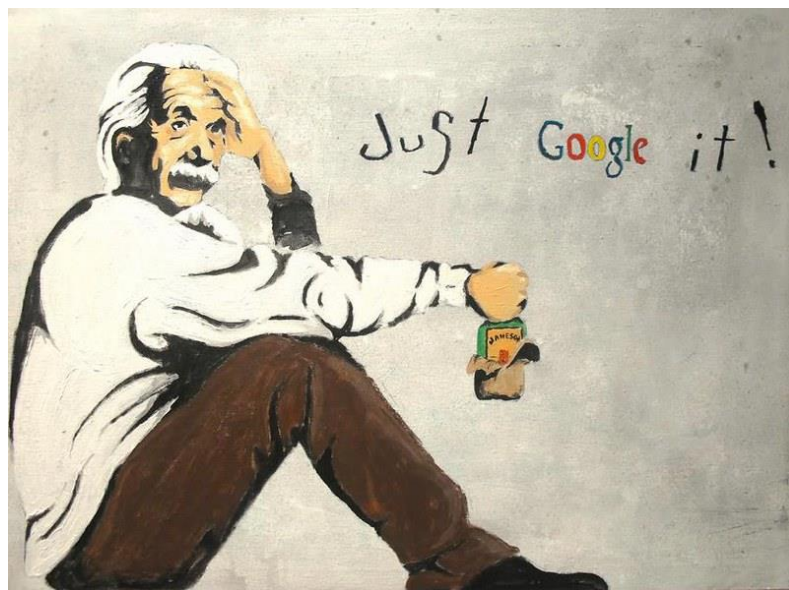
Ferramentas

Cerca de 559 000 000 resultados (0,53 segundos)

I just need to find the resources. I learned in that conference that they are for free. I just need to find them....



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Google

solar system activity 4th grade



Tudo

Imagens

Vídeos

Compras

Notícias

Mais

Ferramentas

Cerca de 16 100 000 resultados (0,97 segundos)

Did anyone  
use this  
before ?

Does it have  
copyright?

Is there any  
support?

Does it fit  
the  
curricula?

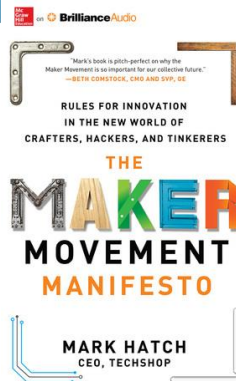


It has to be free

Does it have  
good  
quality?

Does it  
require  
software?

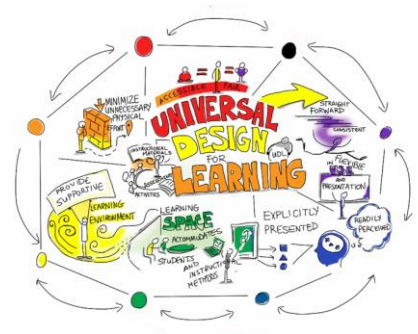
Can I  
repurpose  
existing  
one?



THE FLIPPED CLASSROOM



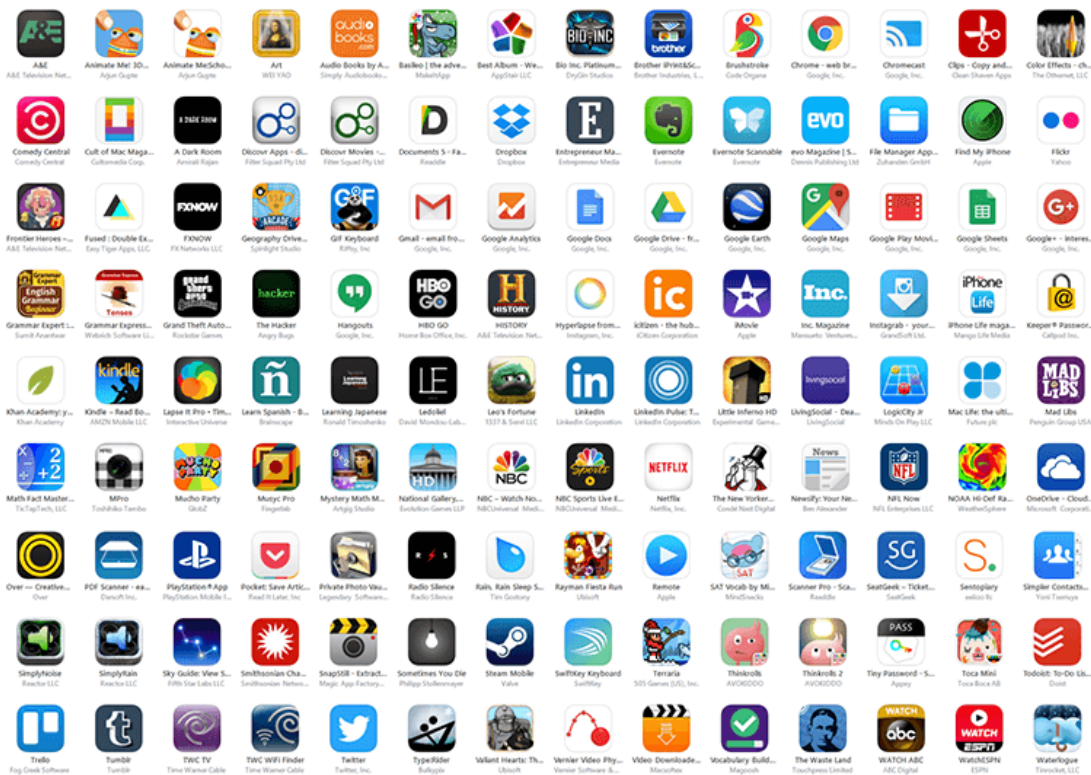
Integrating new methodologies is an excellent idea. I think this can completely change the environment in the classroom

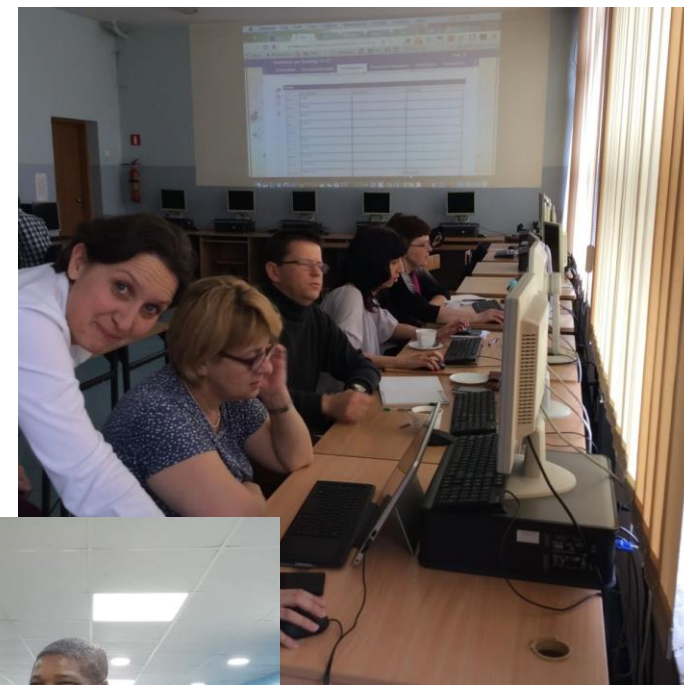


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I just need to  
choose the best  
apps!!

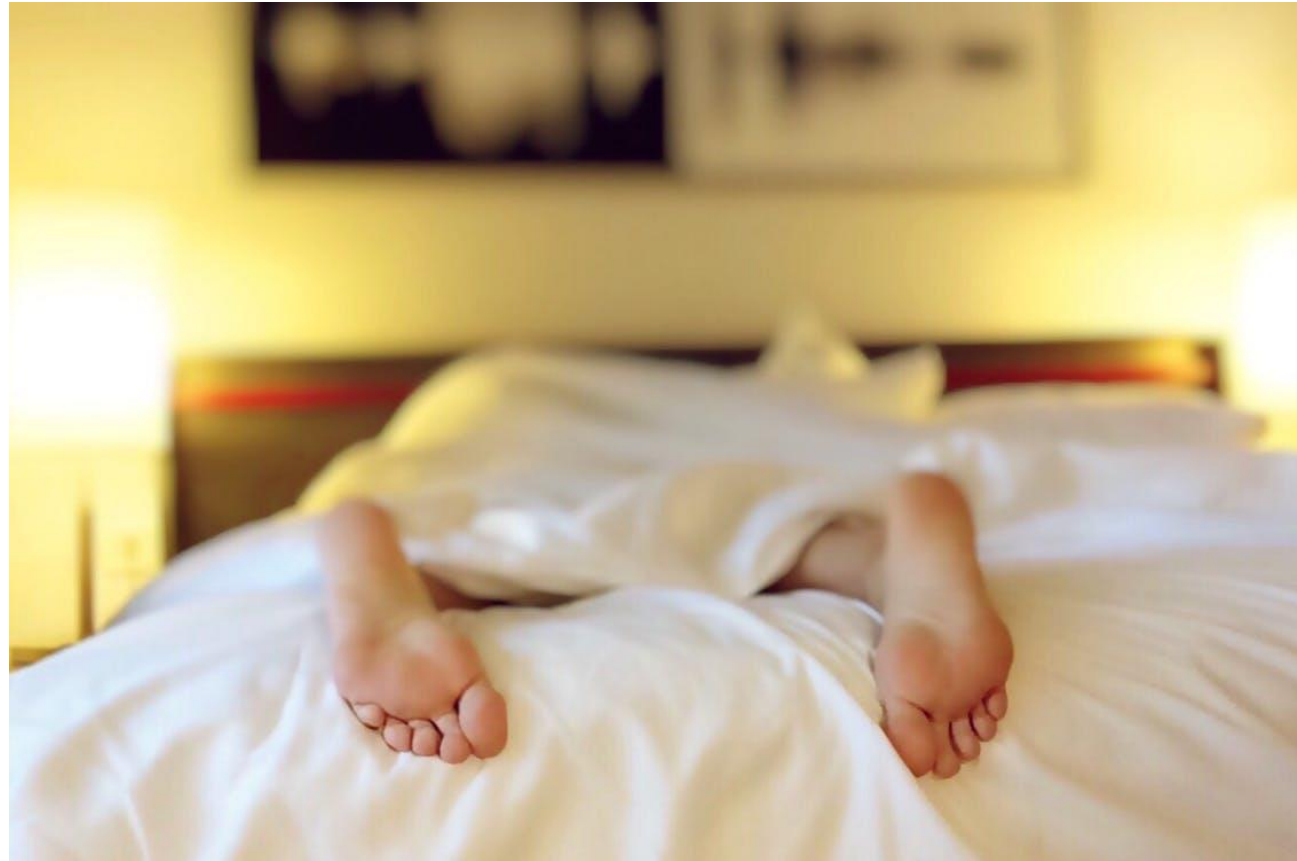




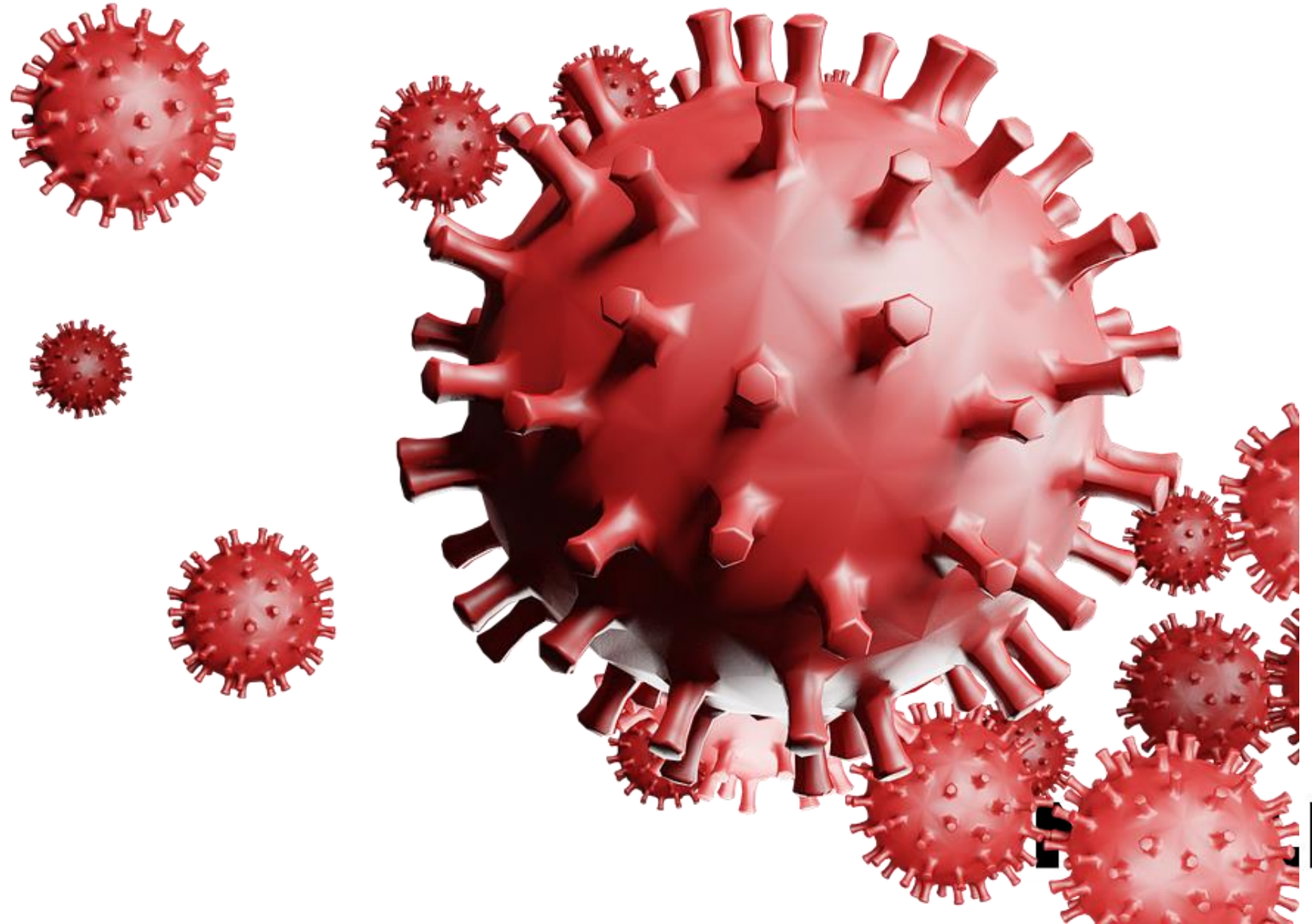
I definitively need to participate in more training events !!

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I will think about it tomorrow ...



And suddenly life changes ....



Simple ... Just replicate what is done in the classroom ....



Oh wait .... Not working... Need to change something





© Trompe l'oeil graffiti at CEPT university -- inspired by Banksy's *Sweep It Under The Carpet*



How do we solve  
this problem?

# Technology can makes teacher's life easier right??



REMOTE AND RURAL SCHOOLS

# Schools as Learning Hubs of the Rural Community

How can schools become innovation incubators and accelerators by fostering collaboration between schools and local communities?



## CALL FOR PROPOSALS

Find out more about the support that can be offered by the Learning From Extremes Project



## EDUCATIONAL RESOURCES

Find out more about the support that can be offered by the Learning From Extremes Project



## LFE COMMUNITY

Get access to the LFE Community of teachers and educators as well as relevant stakeholders



## SELF REFLECTION

Reflect on the status of your school through the LFE Self-Reflection Tool.

Does it have  
copyright?



It has to be free

Does it have  
good  
quality?

Did anyone  
use this  
before ?

Does it  
require  
software?

Is there any  
support?

Does it fit  
the  
curricula?



Can I  
repurpose  
existing  
one?

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## Courses

[Search](#)
[Hide filters](#)

8 Results

Quick filters

[New content](#)

Languages

English (GB) (8)

German (2)

Greek (2)

Portuguese (PT) (2)

Skills

My professional competences (6)

My pedagogic competences (7)

My learners' digital competences (1)

[Improve skills](#)


### Module 1 – OERs and OEPs – An introduction

Available for an unlimited time

In progress Improves skills



### Module 2 - Finding suitable OERs

Available for an unlimited time

English (GB) In progress Improves skills



### Module 3 - Assessing the quality of OERs

Available for an unlimited time

In progress Improves skills



### Module 4 - Copyrights and IPRs

Available for an unlimited time

English (GB) In progress Improves skills



### Module 5 - Creating OERs

Available for an unlimited time

English (GB) Improves skills



### Module 6 - Sharing OERs & the Open Teach Community

Available for an unlimited time

English (GB) Improves skills



### Module 7 - Innovation, instruction & technology in school

Available for an unlimited time

English (GB) Improves skills



### Module 8 - How to... Basic digital skills

Available for an unlimited time

English (GB) In progress Improves skills



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## A PROJECT FOR SCHOOLS IN THE DIGITAL ERA

Shelfie supports teachers and school leaders in building digital competences for education



## SHELFIE IN-DEPTH STUDY

The project carries out an analysis of the challenges, opportunities and threats facing schools in integrating digital teaching and learning. The analysis starts from a questionnaire structured in line with the [SELFIE](#) tool. [READ MORE](#)

Leaders questionnaire

Teachers questionnaire



Shelfie roadmap will be available through an international portal with multilingual contents

All the contents will be available in:

ENGLISH

SWEDISH

DANISH

FINNISH

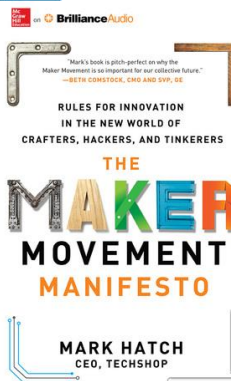
ITALIAN

PORTUGUESE



Integrating new methodologies is an excellent idea. I think this can completely change the environment in the classroom

THE FLIPPED CLASSROOM



## PLATON e-Agorá

Access the PLATON materials

### The 3D Interdisciplinary Map of Science Ideas

Introduce an interdisciplinary approach in your science class



### Interdisciplinary Inquiry-based Activities

Get access to the PLATON interdisciplinary inquiry based activities



### PLATON training materials

Get access to the PLATON training materials and Massive Open Online Courses



### PLATON Roadmap Towards Innovation

View the PLATON roadmap and learn about the outcomes of the project



### Inquiry Under the Microscope Toolkit

Develop your teaching style by adding inquiry practices



### PLATON Assessment Toolkit

Discover assessment tools for you and your students



### PLATON Schools: Hands-on and minds-on classrooms

Find out what the PLATON schools are up to and the activities they did



### PLATON materials in other languages

Access the PLATON materials for teachers and trainers in Greek, Portuguese and Spanish



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# DESIGN THINKING IN STEAM EDUCATION

See book

A legacy from  
the Islands Diversity  
for Science  
Education project



## ISLANDS DIVERSITY FOR SCIENCE EDUCATION

An innovative project that brings together powerful tools and engaging learning methodologies



Screenshot



## Top contents

Are you interested in additional learning content? You will find the perfect learning offer in our catalogue.



[Show more in catalogue](#)

## My Bookshelf



The rusty spotted cat

Recommended on May 27, 2022

WB/Express



Challenges of digital learning

Recommended on May 27, 2022

Multimedia file



Assessment in a digital environment

Added on Jan 11, 2022

Multimedia file





## Sharing and Authoring Ecosystem

Find the largest collection of online labs, try-out interactive inquiry apps, combine labs and apps into Inquiry Learning Spaces, and share these with your students and colleagues.



Thousands of schools all over the world remain closed for the next weeks or even months due to the SARS-CoV-2 (COVID-19) pandemic. In order to support them in delivering online education, we invite all schools and teachers to use the Go-Lab Ecosystem for online STEM teaching. The platform and all tools (including premium labs and apps) are available free of charge. Find more information [here](#).

New to Go-Lab? Visit our [Quick Start page](#) to learn about the platform!

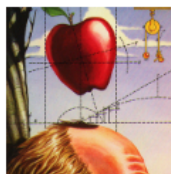
### LAB



#### Electrical Circuit Lab

In the Electrical Circuit Lab students can create their own electrical circuits...

### LAB



#### Gravity Force Labs

There are two similar labs that you can see if you create a spa

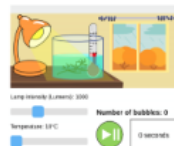
### APP



#### Hypothesis Scratchpad

The Hypothesis Scratchpad helps learners formulate hypotheses.

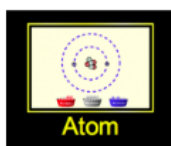
### LAB



#### Rate Of Photosynthesis Lab (Html5)

This lab is an abridged Html5 version of the Flash-based

### LAB



#### Build An Atom

Build an atom out of protons, neutrons, and electrons, and see how the element...

### LAB

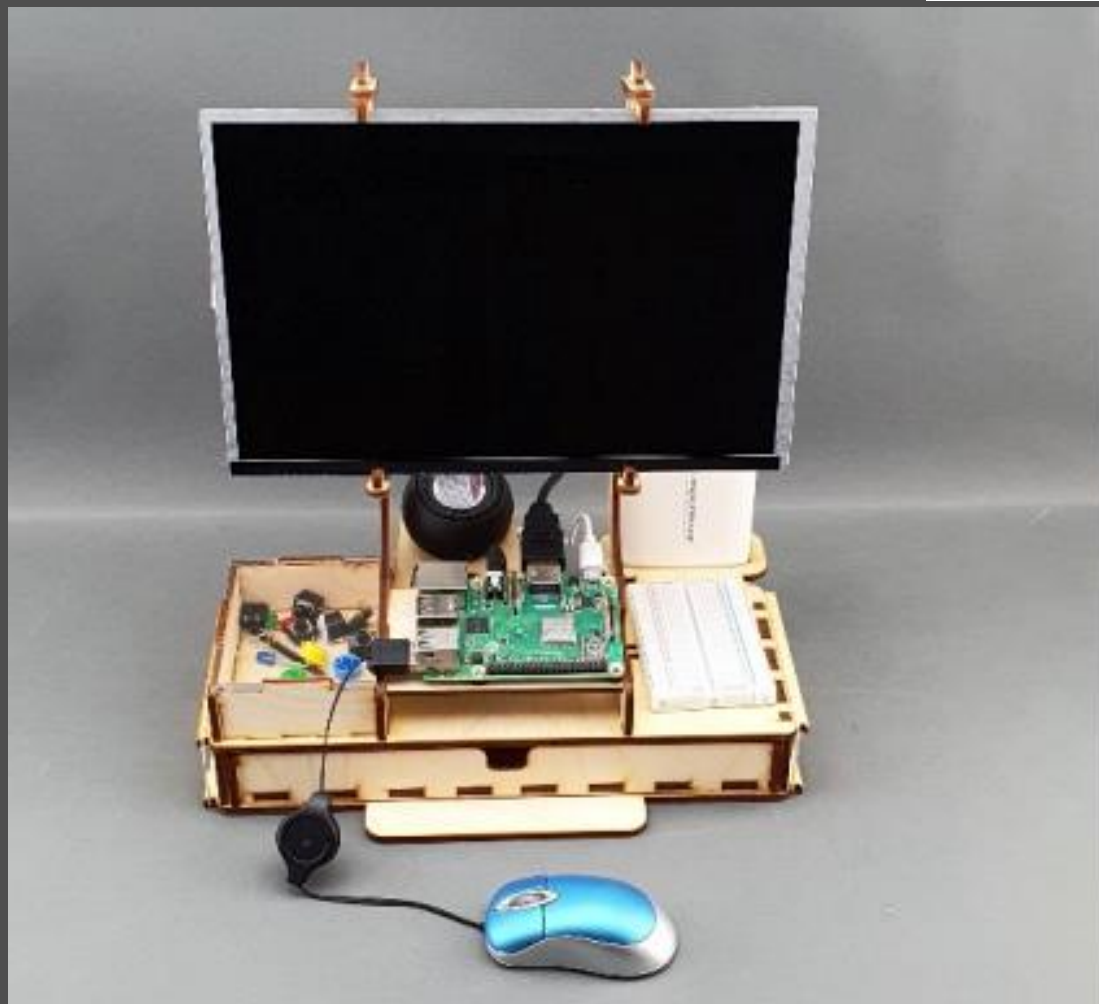


#### Acid-Base Solutions

How do strong and weak acids differ? Use lab tools on your computer to find out!



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the European Union



**Figure 1 Front Side of STEM4CLIM8 Console**





Co-funded by  
the European Union



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LATEST NEWS

DiSTARS PLATFORM

RESOURCES



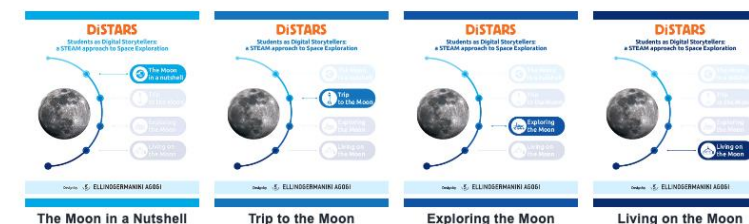
## STUDENTS AS DIGITAL STORYTELLERS: A STEAM APPROACH TO SPACE EXPLORATION

DiSTARS aims to test a synchronised integration of Art and STEM in the primary curriculum, simulating the ways in which subjects naturally connect in the real world.

Combining scientific inquiry with artistic expression (e.g. visual and performing arts), storytelling, and by using existing digital tools (such as the DiSTARS storytelling platform) along with AR and VR techn  
Screenshot ect aims to capture the imagination of young students and provide them with one of their early opportunities for

### INFORMATION ON MARS & THE MOON

Background information on the Moon and on Space Exploration: challenges, ideas and classroom activities.



Background information on the Mars and on Space Exploration: challenges, ideas and classroom activities.



Screenshot



Co-funded by  
the European Union



O NUCLIO e a InovLabs uniram-se para trazer às escolas e à comunidade o CHANGE MAKERS! Um espaço de criação, aprendizagem e inovação onde o único limite é a imaginação. O Change Makers oferece a estudantes, professores(as), cidadãos(ãs) e criativos(as) a oportunidade de desenvolverem projetos trabalhando com tecnologias de ponta (impressoras 3D, cortadora Laser, Máquina CNC, Estúdio Web, entre outros) e com o acompanhamento dedicado de profissionais com expertise em diversas áreas científicas e da educação. Change Makers: Jovens empreendedores para o desenvolvimento inclusivo e sustentável é um projeto que pretende:

#### DAR VOZ A CIDADÃOS(ÃS)

Apoiando a criação de soluções inovadoras com impacto na comunidade, e com o potencial de fazer a diferença.

#### CAPACITAR A COMUNIDADE

Oferecendo formação a todas as faixas etárias, promovendo competências, e oferecendo um melhor perfil no acesso ao emprego.

#### INOVAR NA EDUCAÇÃO

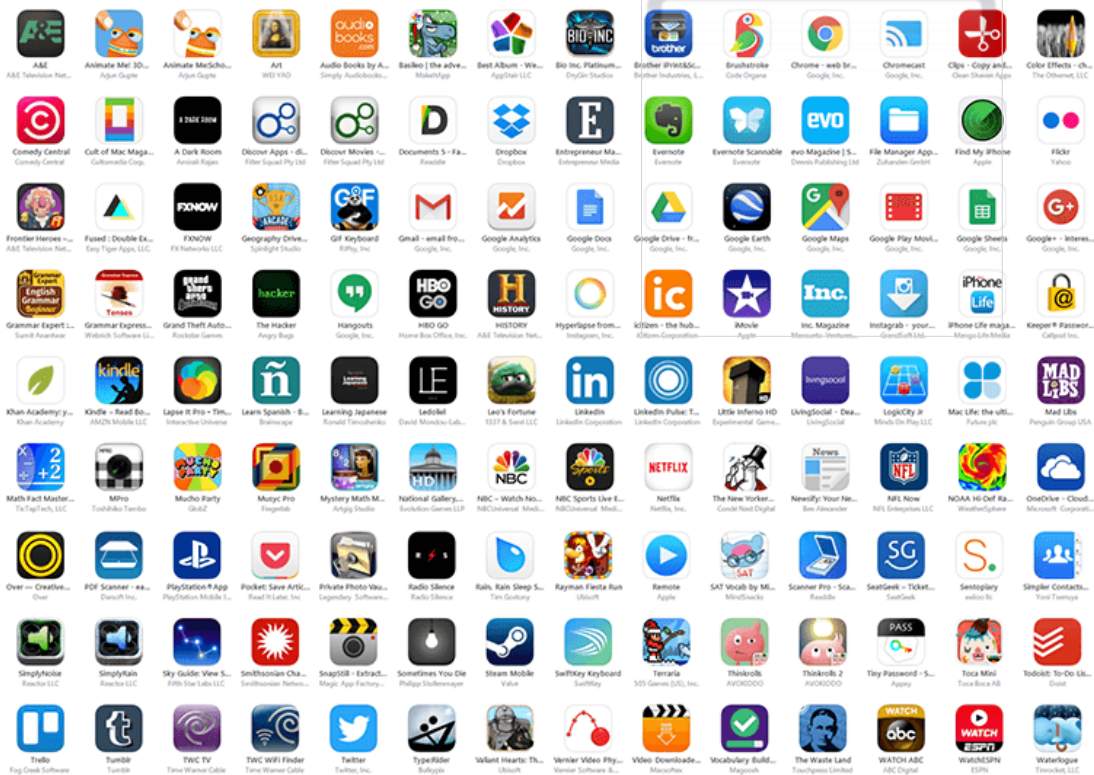
Envolvendo as escolas e promovendo competências fundamentais para um futuro mais culto, competente e sustentável.



I just need to  
choose the best  
apps!!

ASSESS

Digi-Science



DESIGN CT  
create teach train

LaSeiL

Open  
TEACH

NUCLIO



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the European Union

## An innovative assessment for the 21st century



Have you ever considered what education could look like if student assessment was used as a holistic tool for development, growth and improvement? ASSESS aims to revolutionize student assessment by creating an innovative approach that promotes inclusion, equity and the principles of UDL (Universal Design for Learning) and helps both teachers and students to develop their skills.

### An Innovative Assessment framework



A theoretical guide that will include innovative ways of thinking about assessment, turning it into a powerful tool to promote the development of both students and teachers.

### An assessment toolkit and a digital app



A toolkit for formative and summative assessment and a **digital app** that integrates it to allow you to create relevant feedback reports and automatize the whole class assessment.

### An online training course for teachers and trainers



An interactive course for teachers and teacher trainers. Learn how to use the ASSESS tools but also how to design and create your own innovative assessment



**Co-funded by  
the European Union**

## Teachers' Workroom

Access the Digi-Science materials

Developing teachers'  
digital competences

Access our digital competences  
support package

Innovative practices for  
science education

Access our innovative practices  
guidelines

Fostering equity, inclusion  
and diversity

Coming Soon



Access the Digi-Science  
resources

Coming Soon



Access the Digi-Science  
Assessment tools

Coming Soon



Digi-Science Schools:  
Hands-on and minds-on  
classrooms

Coming Soon



# Resources

[Home](#) > [Resources](#)



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## LaSciL toolbox

The LaSciL toolbox offers a common entry point to the various tools and infrastructures being made available to the project.

LaSciL also provides guidelines for the use of each of the offered services with exemplary models on how to make the best use of each one, applicability across the curricula and inclusive aspects of each component.

### Topics include:

- Robotic telescopes
- Planetarium software
- Astronomy and space exploration simulations
- Analog space missions infrastructures
- Teaching tools
- Data science

**Below you will find the links for the resources developed so far. This list is being continuously updated!**



# Evolution



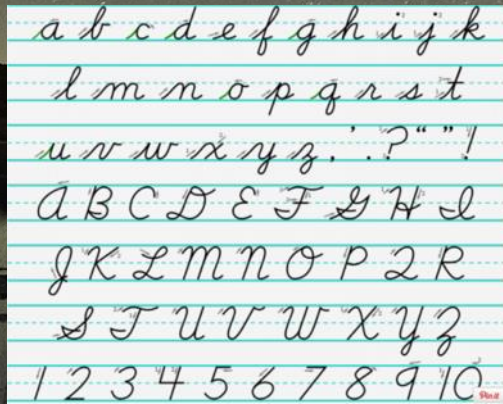
© Escola Horácio Bento –  
Madeira Island

© Agora School in the  
Netherlands

©Miguel Claro

# Evolution

???



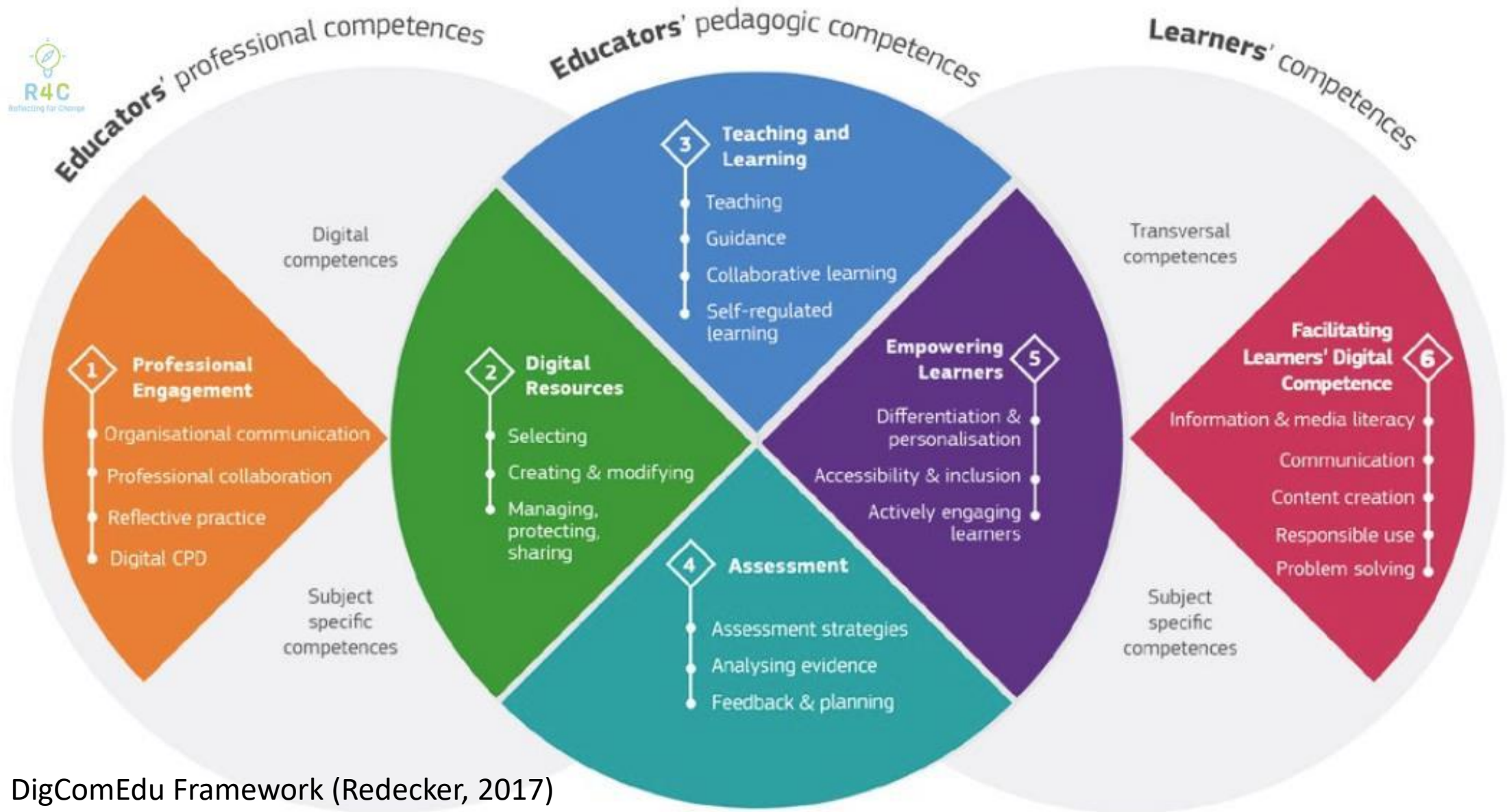
# 21<sup>ST</sup> CENTURY INSTRUCTIONS OF USE

**DIGITAL LITERACY:** know how to use it effectively to achieve goals, safety, science literacy, computational thinking, etc.

**21<sup>ST</sup> CENTURY SKILLS** for teachers and students: communication, collaboration , critical thinking, creativity, learning to learn, etc

**HUMAN SKILLS:** tolerance, patience, education, persistence, positive attitude, resilience, etc.

**21<sup>ST</sup> CENTURY METHODS:** visual thinking, design thinking, personalized self-learning, etc.



DigComEdu Framework (Redecker, 2017)

# SCIENCE

WHAT  
YOU  
KNOW

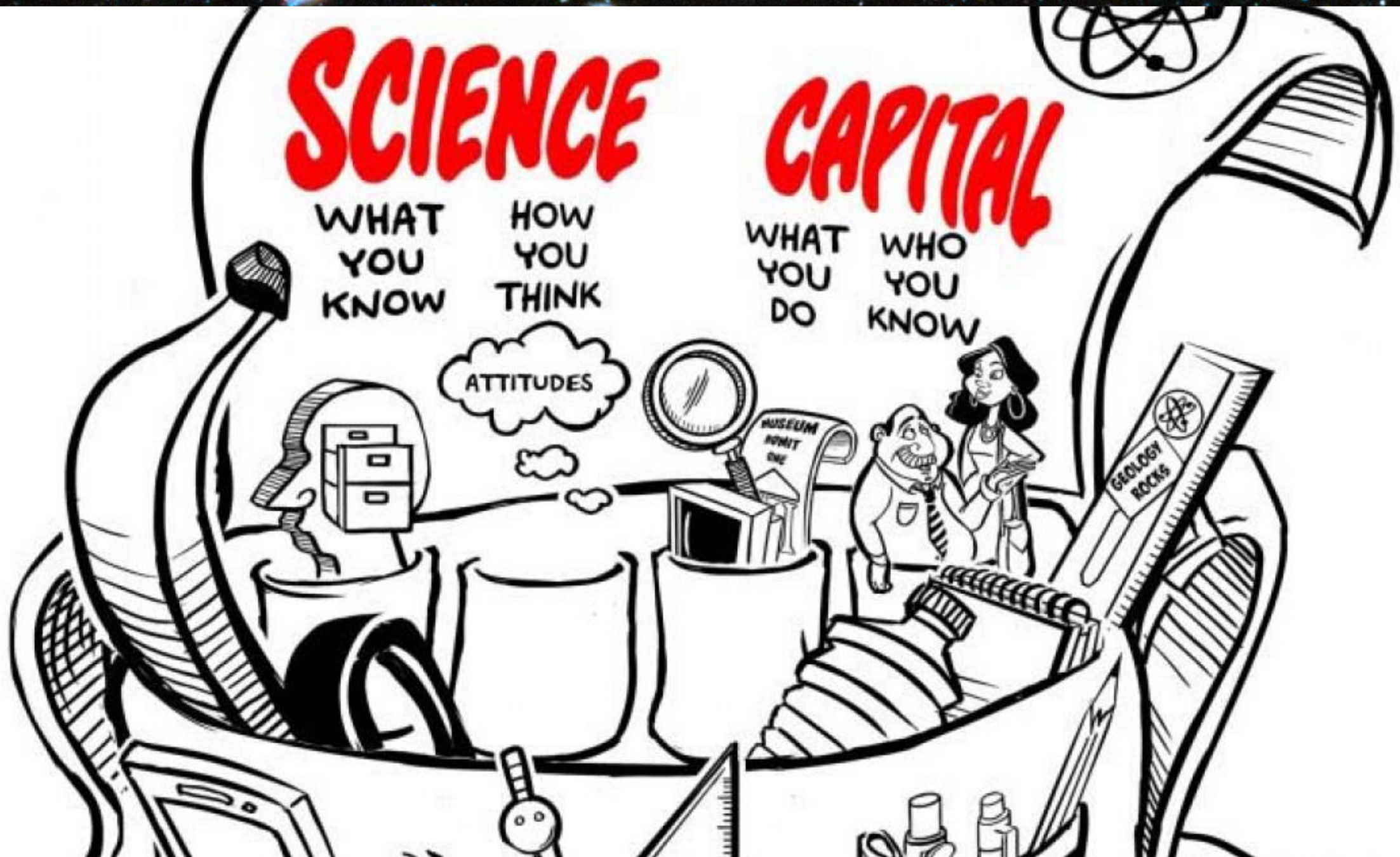
HOW  
YOU  
THINK

ATTITUDES

# CAPITAL

WHAT  
YOU  
DO

WHO  
YOU  
KNOW





**SUSTAINABLE DEVELOPMENT GOALS**  
17 GOALS TO TRANSFORM OUR WORLD



What is expected of all of us !!!



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Students taking ownership of their learning → A shortcut for their future

I have not learned Astronomy !!! How  
can I teach it ?!?!?



Where  
does  
life  
come  
from?



I do have some very smart students  
that might thrive in the world of  
Science!!



It is not Quantum Mechanics, but girls  
are not really into that !!!

# Innovation and Inclusion in Science Education



© rawpixel.(Freepik)

# Astronomy and Space Exploration in the Curriculum

A silhouette of a person with their arms outstretched, standing against a vibrant, starry space background. The background features a mix of green and blue nebulae and numerous white stars of varying sizes. The person's silhouette is centered, with their arms spread wide to the sides.

Interdisciplinary (STEAM)

Inquiry Based Learning

©Gerd Altmann  
- Pixabay



# Enthusiasm: Students

With your hands in scientific research



# Working with Scientists



# Empower Educators



**NUCLIO**

# Adapted and Localized Professional development Opportunities





Accredited Teacher Training Courses  
Synchronous and Asynchronous



**NUCLIO**

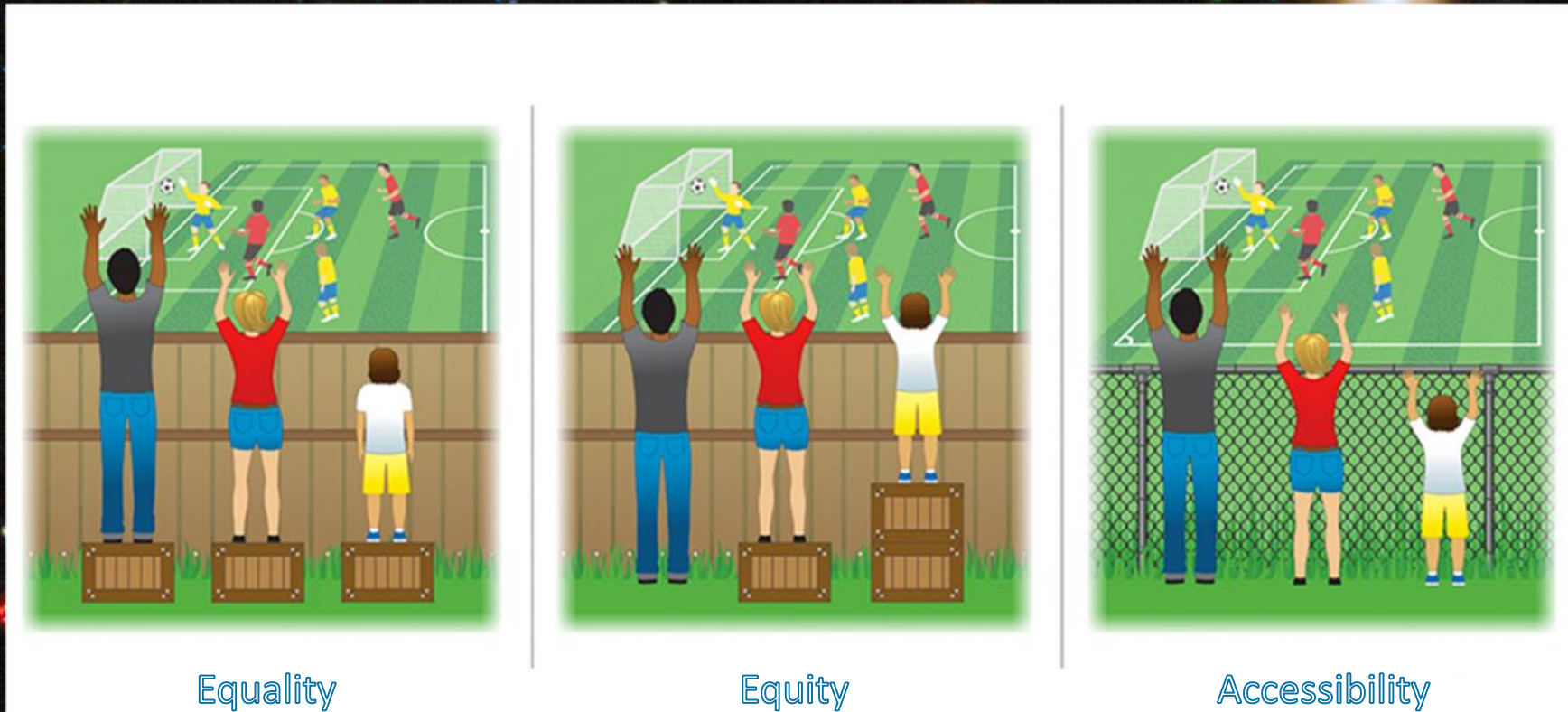


This image displays a collage of Zoom meeting windows, showing a large number of participants in a virtual session. The windows are arranged in a grid-like fashion, with some windows showing individual participants and others showing a grid of many participants. The background of the entire image is a dark space with colorful nebulae and galaxies.

The Zoom windows show various participants, including:

- Gustavo Rojas
- Maria Luisa Almeida - N...
- Rosa Doran
- Lucia Kemm
- Ana Pouseiro
- Susana Matos
- Lurdes Rocha
- Cibola Bragan
- Ana Paula Ferreira
- Ana Maria Gomes
- Maria João André
- Inês Dias
- Isabel Almeida
- Carla Guerreiro
- Romeu Almeida
- Rita Capela
- Susana Rute Oliveira Pro...
- Artur Coelho
- Claudia Saravia
- Anabela Tibério Prof1C
- Rafael Costa Silva
- Anabela Camilo
- Carmen Cravo
- João Cristóvão Pereira
- Maria Luisa Almeida - N...
- Marta Gonçalves
- Rosa Doran
- Ana Maria Conchita Gos...
- Carla Vieira
- Andreia Mateus
- Manuela Lagos
- Cristina Isabel Alcacer d...
- Maria José Pereira
- Márcia Pacheco
- Susana Tavares
- Augusta Delgado
- Maria Leticia
- Paula Furtado
- Ana Cristina Fonseca
- Isabel Paulos
- Maria Luisa Alme...
- Rosa Doran
- Antónia Rodrigues
- Sandra Gomes
- Prof. Carla Ferreira
- Celia Silva
- Zélia Rasteiro
- Oswaldo Campos
- Patricia Martins
- Adelaide Fonseca
- Sofia Fraga
- Antónia Rodrigues
- Oswaldo Campos
- Patricia Martins
- Prof. Carla Ferreira
- Rosa Doran
- Dilcina Frazão
- Sandra Gomes
- Celia Silva
- Clara Barreira
- Maria Teresa Correia
- ana rebelo
- Anabela Moreira
- Zélia Rasteiro
- Monica Campos
- Susana Cardoso
- Prof. Teresa Matos
- Celestino Magalhaes
- Carla Carvalho
- Maria Luisa Almeida - N...
- Honorata Pereira
- Rosa Doran
- Vitor Carvalho
- Erubense Caralho
- Adelaide Silva
- Claret Almeida
- Fernanda Maria Cama de...
- Maria Cruz
- Ana Veloso
- Teresa Nobrega
- Carmen Maria de Carvalho
- Olga Carvalho
- Ana Schreiber
- Adelaide Ribeiro
- Sandra Ciel
- Ana Lúcia Vaisconcelos
- João Semas
- Sonia Mesquita
- Daniela Sousa
- Francisca Braga Cavetto
- Helena Capela
- Margarida Bastos
- Vitor Carvalho
- Erubense Caralho
- Adelaide Silva
- Claret Almeida
- Fernanda Maria Cama de...
- Maria Cruz
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- João Semas
- Sonia Mesquita
- Daniela Sousa
- Francisca Braga Cavetto
- Helena Capela
- Margarida Bastos
- Celestino Magalhaes
- Paula Marinho
- Cristina Proença
- Leonor Melo
- Susana Matos
- Rosário Tavares
- Paula Antão
- Maria João André
- Ana Guedes
- Margarida Dias
- Cassiano Rosario
- Celeste Fontes
- Romeu Almeida
- Honorata dos Santos Co...
- margarida ferro
- ceusantos@aeobadela.pt
- Margarida Alves
- Manuela Mergulhão
- Manuela Costeira
- Maria José Teixeira do N...
- Gustavo Rojas
- Anabela Tibério Prof1C
- Glória Brigas
- Ana Pouseiro
- Ana Lidia Valentim Reis

# Bring Inclusion to ALL Classrooms



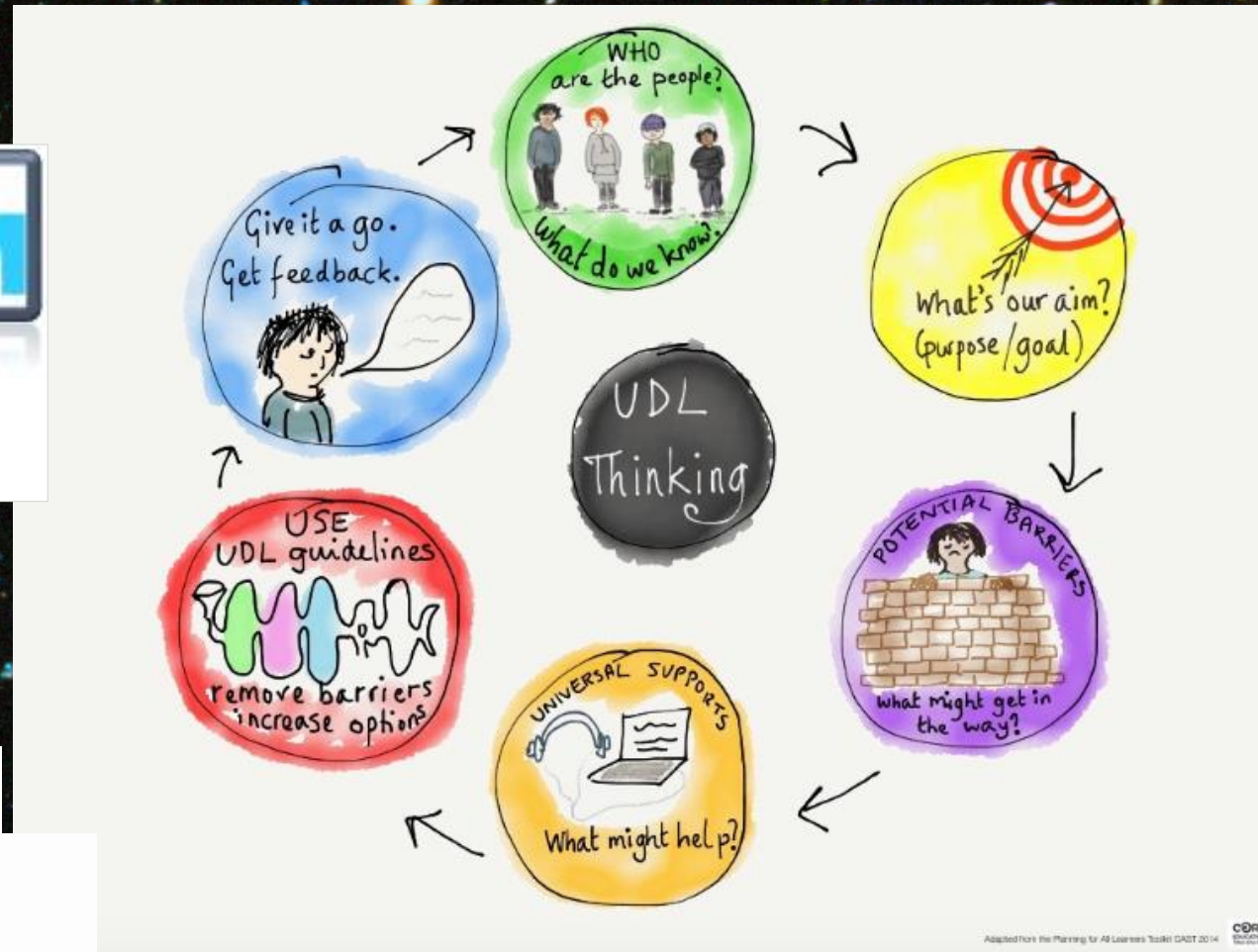
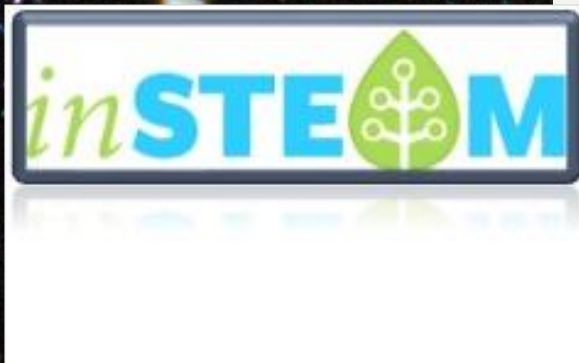
# UNIVERSAL DESIGN FOR LEARNING

## UDL Principles

3. **THE WHY:** Multiple Means of **Engagement**  
(Keep students interest)

1. **THE WHAT:** Multiple Means of **REPRESENTATION** (show information in different ways)

2. **THE HOW:** Multiple Means of Action and **Expression** (Freedom to approach tasks and demonstrate learning in different ways)





Inclusive Lessons



Inclusive Approach



Implementation guidelines



access

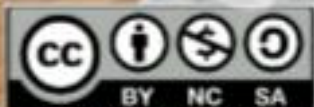
build

internalize

## ENGAGEMENT

## REPRESENTATION

## ACTION AND EXPRESSION



Background: freepik

based on an original from  miriam\_estracher

Sometimes people are invisible to us but if we look from another perspective ....



# DESIGN THINKING



Design Thinking  
for Learning



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# Take the NEXT STEP

*The NEXT STEP's vision for a **creative and innovative school** is the development of the creative and innovative classroom of tomorrow, the **STEAM IDEAS' Square**, in which education relies on an interdisciplinary, arts-based methodology within an entrepreneurship and design thinking framework.*

NEXT STEP project will provide well-tested and yet tailor-made solutions in Skills development and inclusion through creativity and the arts, proposing an effective operation of the "creative and innovative school".

[NEXT STEP PROJECT](#)

## PRODUCTIONS

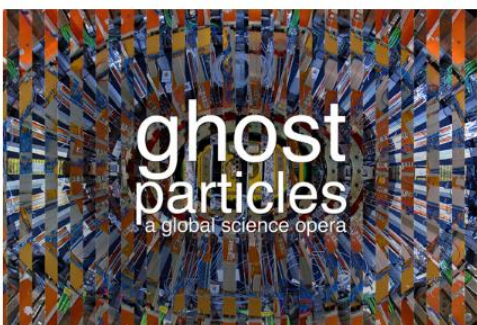
GSO produces one global opera production each year.



One Ocean (2018)



Moon Village (2017)



Ghost Particles (2016)



SkyLight (2015)



Creavolution (2022)



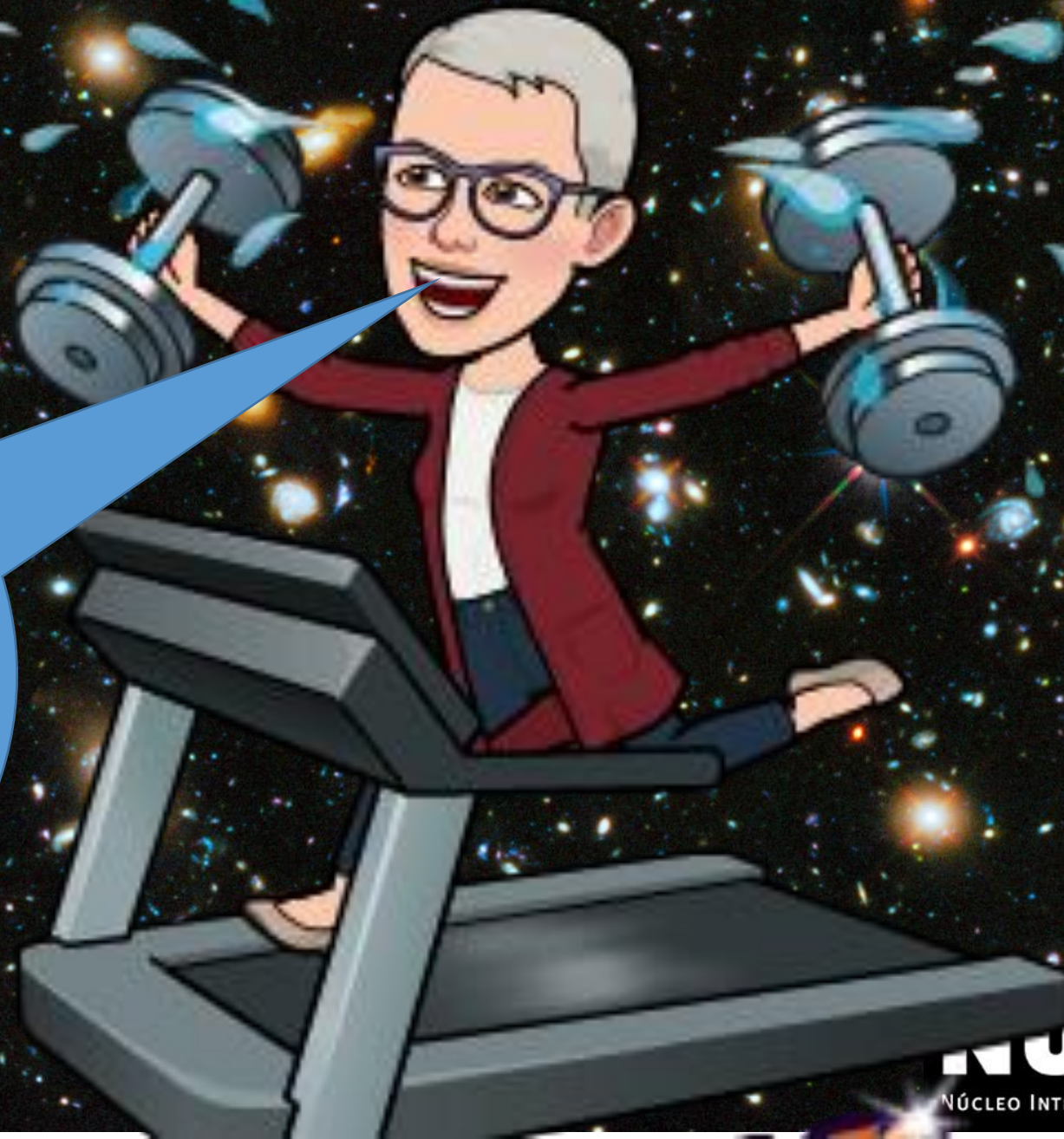
Thrive (2021)



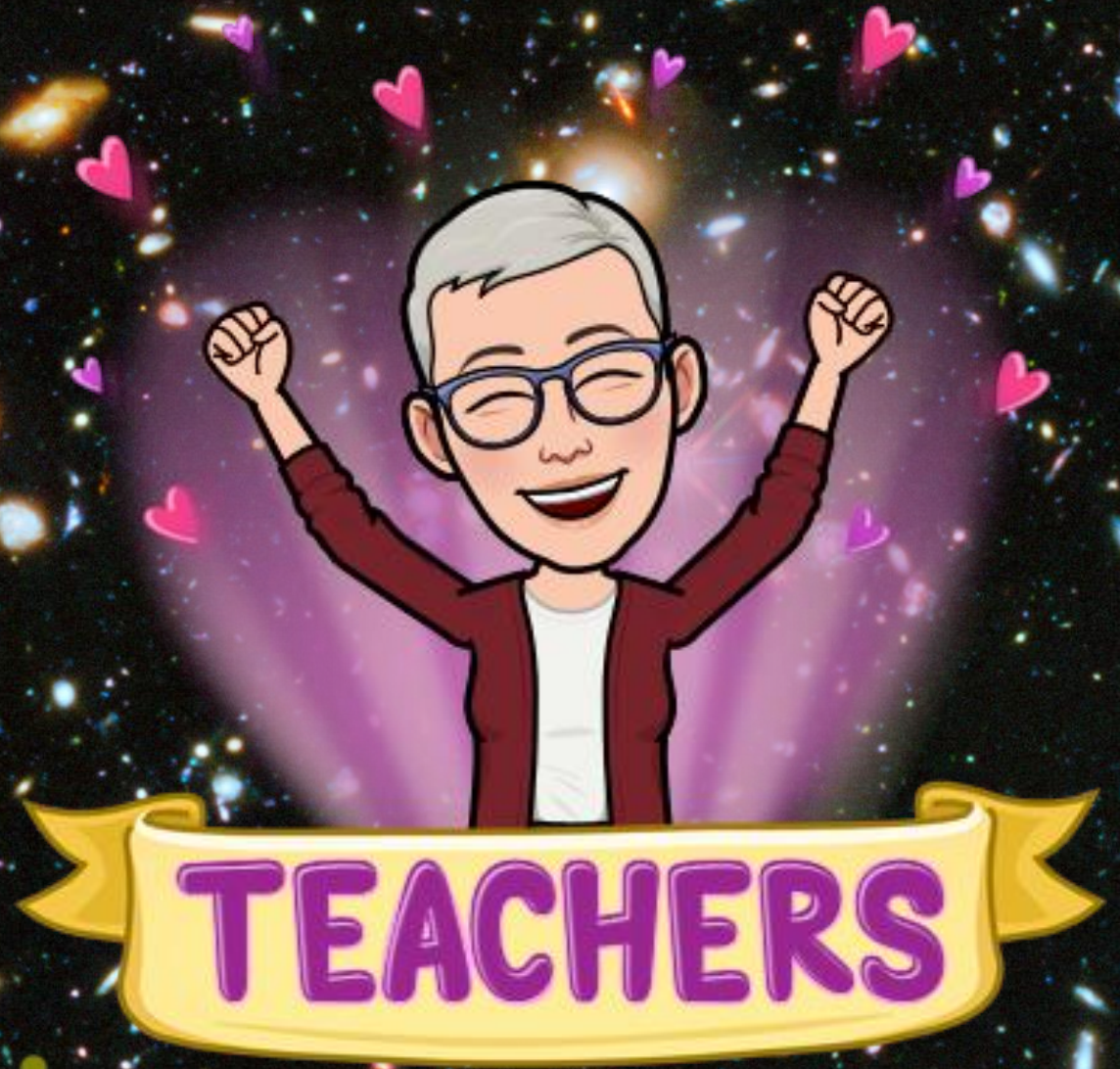
Screenshot GRAVITY (2019)

Do you really think  
all this is necessary  
!?!?!?

yes!!!!  
I never said  
being a  
teacher is an  
easy task.



The most  
important  
profession in the  
world !!!!!



THE 5 PILLARS OF  
COMMUNITY  
BUILDING

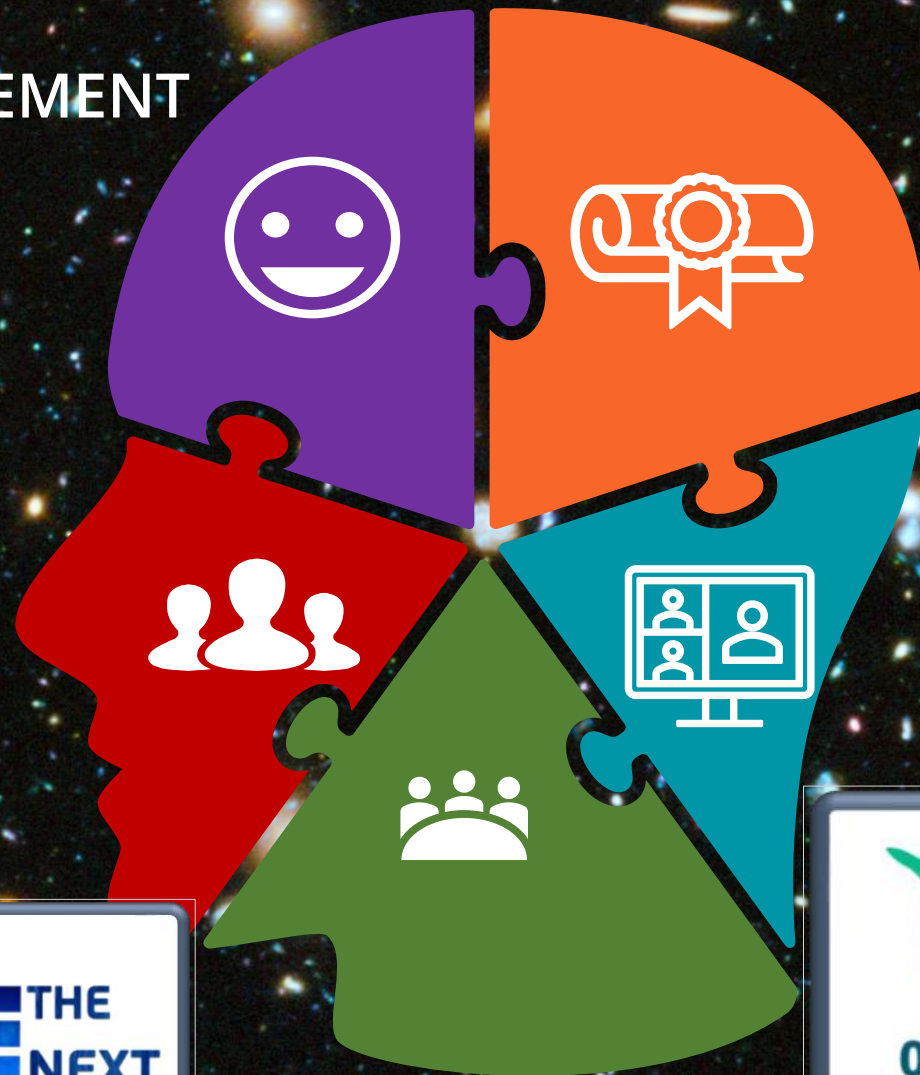
ENGAGEMENT



COMMUNITY

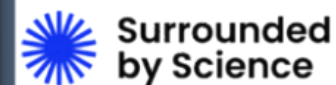


TRAINING



RECOGNITION

SUPPORT





69

Accelerators



740

Communities



1311

Schools



12837

Teachers



1270

Projects

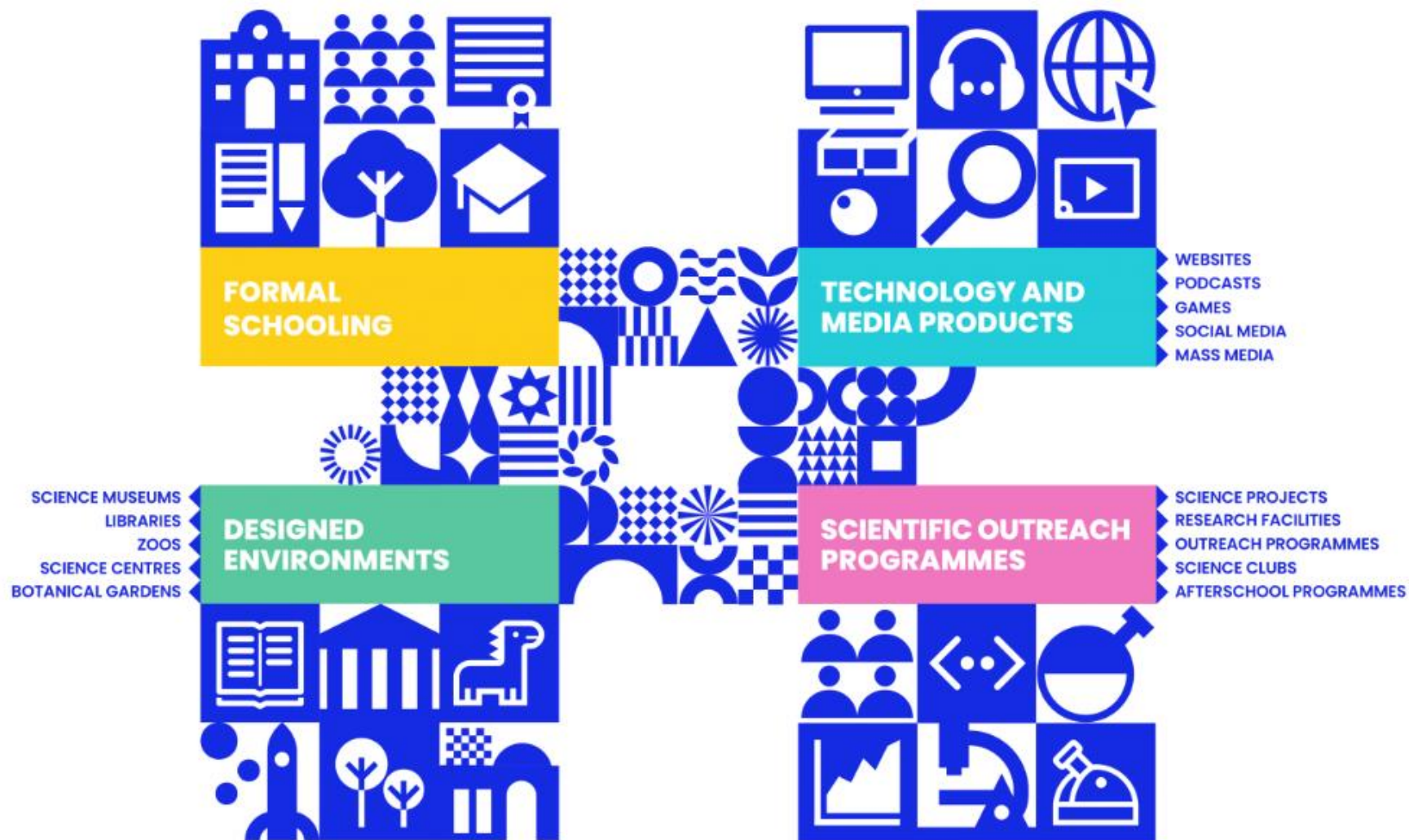
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Welcome to the Open Schools for Open Societies Portal





# **BUILDING BRIDGES BETWEEN SCHOOLS, POLICY MAKERS AND THE COMMUNITY**



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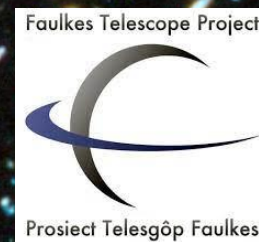
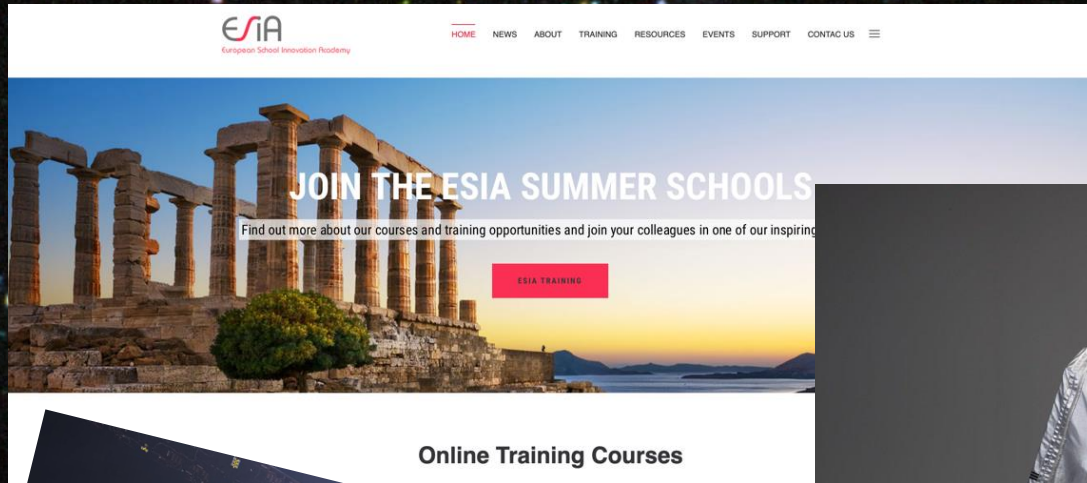
# OUR SPACE OUR FUTURE

A European Project that brings space science to the classroom, boosting the interest of students in space-related careers.



Global Hands-On Universe Conference

August 23-27, 2021

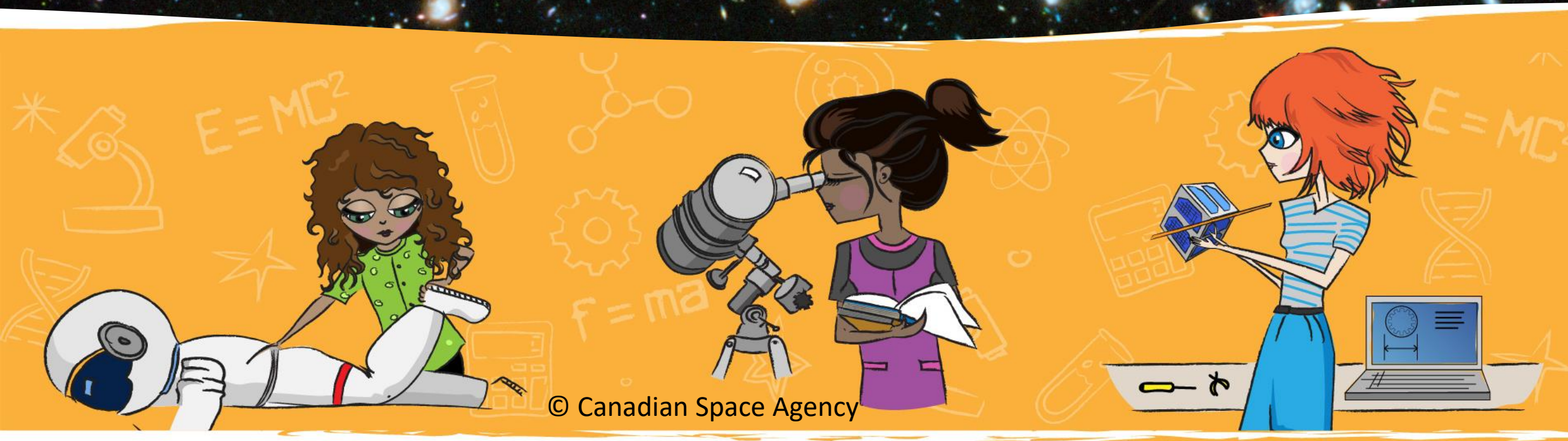


- GHOU / GTTP – OVER 70 000 TEACHERS FROM 100 COUNTRIES



# Can you list some Careers in the Space Exploration Industry

[http://bit.ly/Space\\_miro](http://bit.ly/Space_miro)



# Careers in Space

Accountant  
Aerospace Engineering  
Archaeoastronomer  
Architect  
Astrobiologist  
Astronaut  
Astronaut  
Astrophysicist  
Audiovisual specialist  
Biologist  
Chemist  
Civil Engineer  
Communication Expert  
Computer Engineering  
Cook

Cooker  
Costume Designer  
Designer  
Doctor  
Earth Observation Expert  
Economist  
Editor  
Education Specialist  
Electronics Engineering  
Film Maker  
Geologist  
Journalist  
Lawyer  
Materials Engineer  
Mathematician

Mechanical Engineering  
Meteorologist  
Mission Specialist  
Nurse  
Nutritionist  
Oceanographer  
Packaging Expert  
Payload Specialist  
Phone Operator  
Photographer  
Physicist  
Physiologist  
Physiotherapist  
Pilot

Plasma Physicist  
Project Manager  
Psychologist  
Public Relations  
Quality Control  
Radio Operator  
Receptionist  
Secretary  
Sociologist  
Software Engineers  
Statistician  
Systems Analyst  
Web Designer  
Writer

Etc  
Etc  
Etc

## CAREER PROFILES

The Space Industry offers a wide variety of careers and opportunities. You might be surprised at the variety of opportunities across maths, physics, chemistry, engineering and computing. Below you'll find a number of career stories of people working in diverse areas of the Space sector.



**Juan Miro**  
Former Head of Engineering  
at ESA Satellite Control  
Centre

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**Leonie Buckley –  
Computer Engineer**  
Computer Engineer - Ubotica

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**Rachel Dunwoody**  
PhD student in the Space  
Science group in UCD

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**Jessica Erkal**  
PhD candidate in star  
formation and protostellar  
at UCD

[VIEW PROFILE >](#)


**Eóin Tuohy**  
Trainee at Spaceship EAC



**Orla Punch**  
Architectural Designer



**Hannah Currihan**  
Space Systems Engineer -  
Realtra Space Systems  
Engineering



**Jan Walter Schroeder**  
Managing Director- CisLu  
Industries S.A. and Sens  
GmbH

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[VIEW PROFILE >](#)
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**Chris Anderson**  
Chief Technology Officer for  
Taoglas

[VIEW PROFILE >](#)


**Laurence O'Rourke**  
Space scientist and engineer  
at ESA

[VIEW PROFILE >](#)


**Dr Sophie Murray**  
Research Fellow in the  
Astrophysics Research  
Group, Trinity

[VIEW PROFILE >](#)


**Jesper Pedersen**  
Managing Director of  
Pedersen Focus Ltd, Cork

[VIEW PROFILE >](#)


**Joe Flanagan**  
PhD Researcher at University  
College Dublin & Enbio Ltd

[VIEW PROFILE >](#)


**Andela Zaric**  
Taoglas Ltd. In Subsidiary  
Taoglas GmbH in Munich,  
Germany

[VIEW PROFILE >](#)


**Karen O'Flaherty**  
Science Communicator at the  
European Space Agency

[VIEW PROFILE >](#)


**Liam Kenny**  
Ara Ltd. Product Design &  
Manufacturing Engineer

[VIEW PROFILE >](#)


**Niamh Shaw**  
Steam Artist, Performer,  
Science Communicator.

[VIEW PROFILE >](#)


**Jonathan Faulk**  
Space Social Media and  
Communications

[VIEW PROFILE >](#)


**Sean Mooney**  
PhD Researcher at UCD

[VIEW PROFILE >](#)


**John Noone**  
Postgraduate Researcher

[VIEW PROFILE >](#)


**Barry Kavavangh**  
CEO of O.C.E. Technology

[VIEW PROFILE >](#)


**Dr. Cairiona Jackman**  
Associate Professor of Space  
Physics

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**Hayret Abdula**  
Functional Website Analyst  
and Strategist

[VIEW PROFILE >](#)


**Shane Carty**  
Software developer for  
Skytek Ltd

[VIEW PROFILE >](#)


**Lána Salmon**  
PhD student in the UCD  
Space Science Group

[VIEW PROFILE >](#)


**Sam Franklin**  
Earth Observation Specialist  
at Archangel Imaging

[VIEW PROFILE >](#)

<https://esero.ie/career-profiles/>

☰

SPACE  
awareness

EU SPACE AWARENESS RELEASES BRAND-NEW SPACE CAREER BOOKLET

THE SPACE CAREERS BOOKLET IS NOW AVAILABLE IN 9 LANGUAGES!

# SPACE CAREERS



<http://www.space-awareness.org/en/news/eu-space-awareness-releases-brand-new-space-career-booklet/>



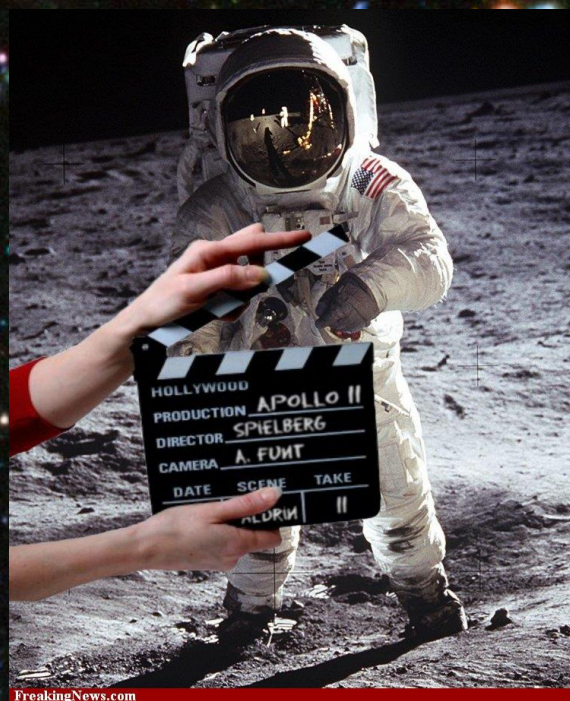
NUCLIO

# Space in our Daily Lives

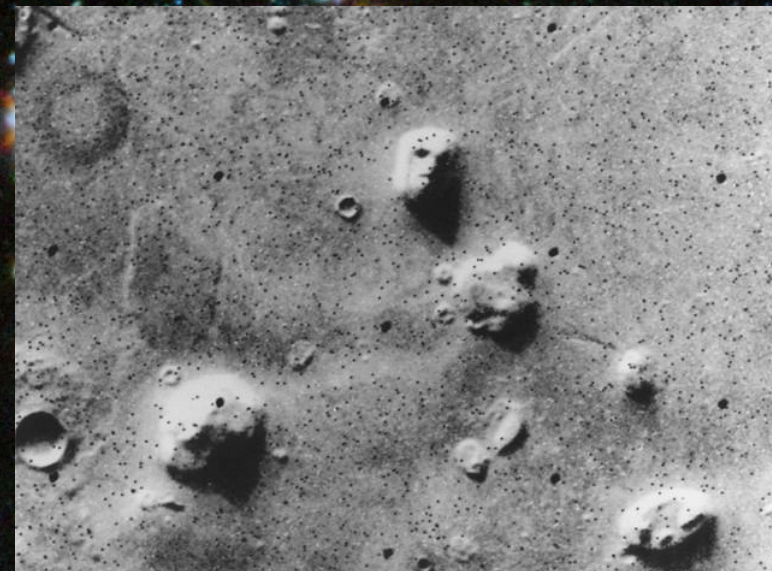
## Flat Earth Proof



## Moon Hoax



## Face on Mars



# Research in our Daily Lives

- CERN
- NASA@home



Magnetic resonance imaging utilizes aperture synthesis – first an astronomical technique and now a medical technique.

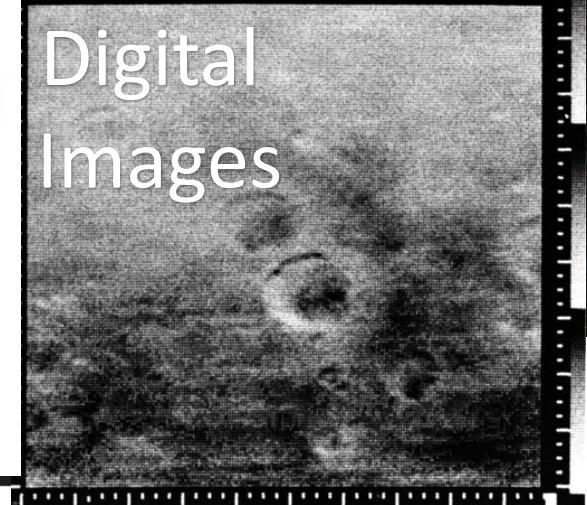


Anti scratch lenses



Every iPhone with has a built-in CCD

Digital Images



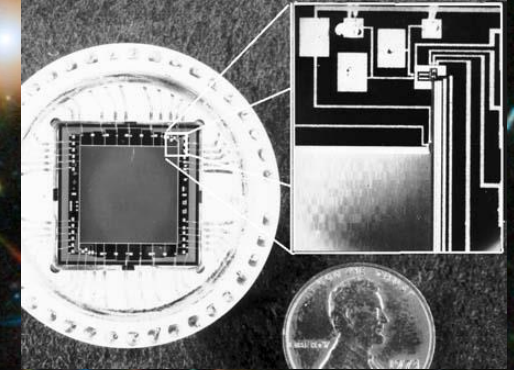
# Products inspired in materials developed for astronauts



IR thermometer



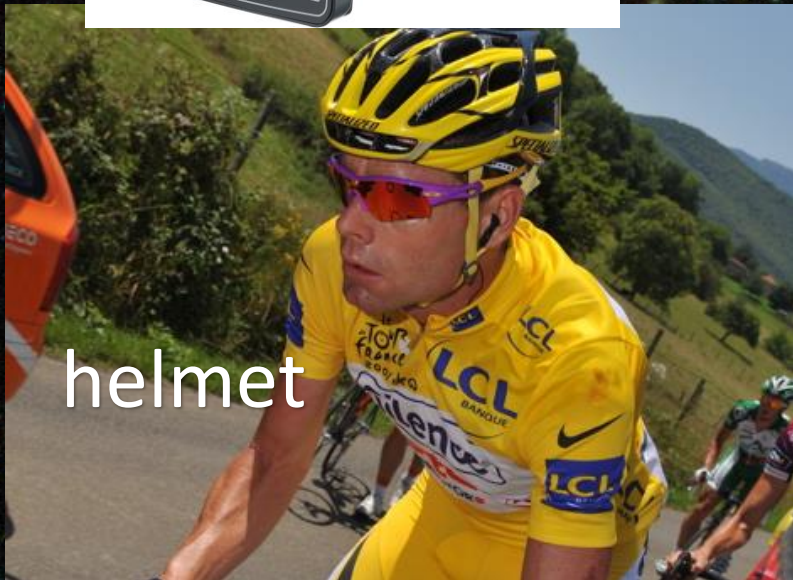
CCD Cameras



Cordless equipment



helmet



Food Conservation



Fire resistant Clothes



Many tks for Rui Silva from  
Univ. Coimbra

Ahhh .... The curricula .....



# SPACE



## INQUIRY

# INTERDISCIPLINARY LEARNING

# CURRICULA



# Space literacy x fake news or info

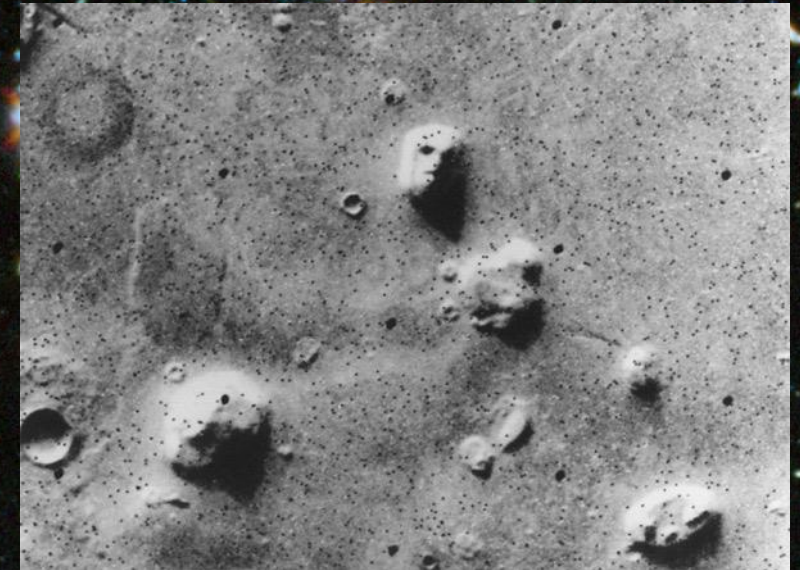
## Flat Earth



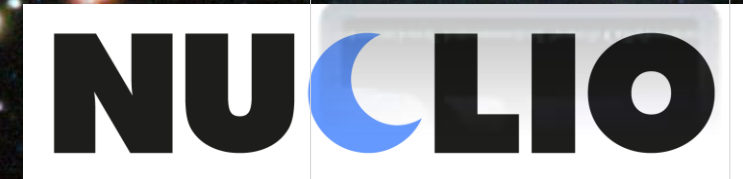
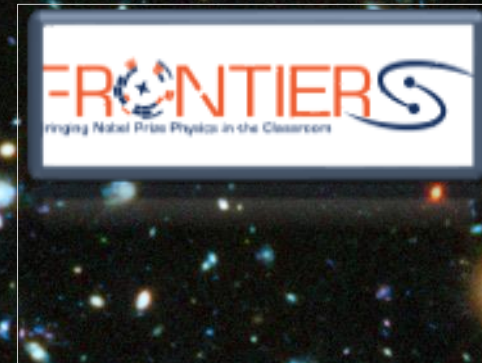
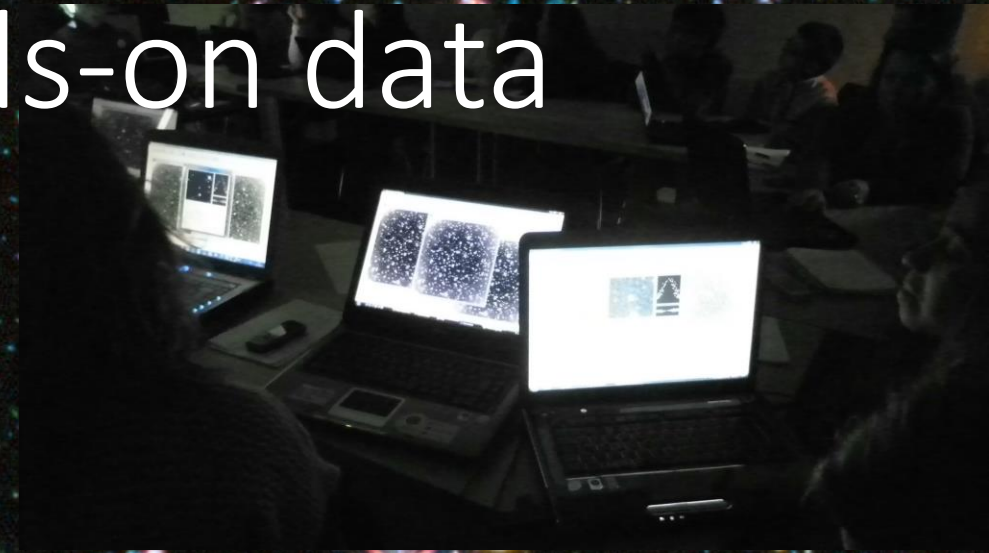
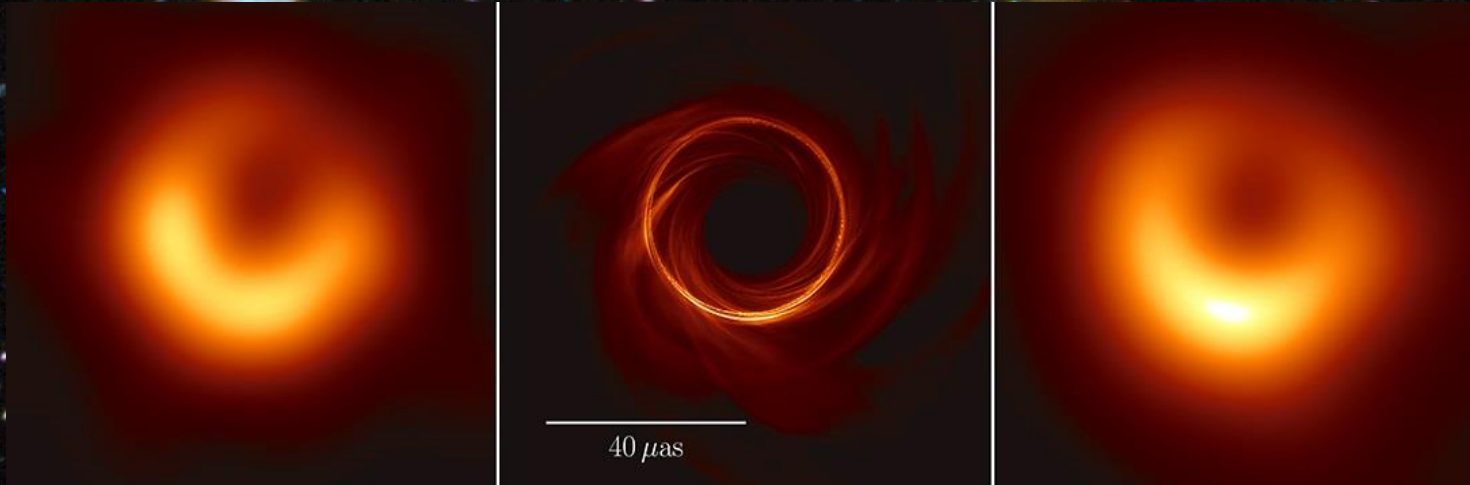
## Moon Hoax



## Face on Mars



# Empowering with hands-on data





**LaSciL**

An Erasmus+ project

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# Resources

LaSciL toolbox The LaSciL toolbox offers a common entry point...

[Learn More](#)



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SCHOOL EDUCATION

# Climate Action and Light Pollution Threat

Engaging students and the society in environmental and climate change activities to raise awareness and strengthen responsible citizenship.

[MORE...](#)

## POLAR STAR methodology and materials



### Methodology

Access the POLAR STAR methodology and tools and training materials

[Access](#)

### Kit of Activities

Access the POLAR STAR kit of Arctic Research and Space activities

[Access](#)

#### Advisors Collaborative Space

Visit our collaborative space for communication between advisors.



#### Dissemination materials

Get access to POLAR STAR dissemination materials and spread the word.



#### Affiliated Projects

Discover interesting and exciting EU projects affiliated to POLAR STAR.



#### POLAR STAR videos

View the POLAR STAR videos and find out more about the project's activities and materials.



#### POLAR STAR News

Keep in touch and learn all the latest news about POLAR STAR.



#### POLAR STAR Community

Visit POLAR STAR'S online community of schools and teachers.

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# Welcome to IASC

International Astronomical Search Collaboration

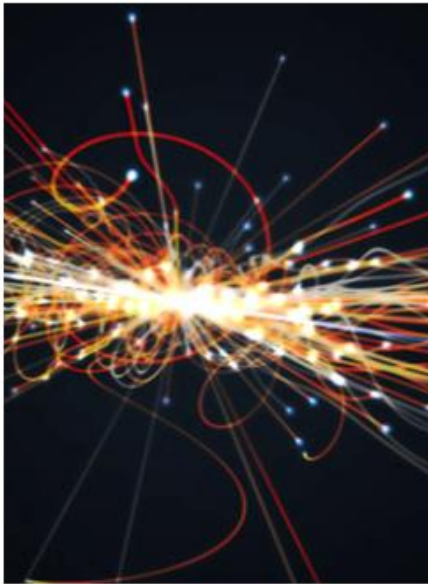
[Register](#)[Get Started](#)[FAQ](#)

The International Astronomical Search Collaboration (IASC) is a citizen science program that provides high-quality astronomical data to citizen scientists around the world. These citizen scientists are able to make original astronomical discoveries and participate in hands-on astronomy. This service is provided at no cost!

Asteroid Search Campaigns are the primary focus of IASC. A "campaign" is a month-long event in which teams search for asteroids. If you are new and would like more information on the asteroid search campaigns, please use the [Register](#) link.

# Frontiers Educational Resources

HOME • FRONTIERS EDUCATIONAL RESOURCES



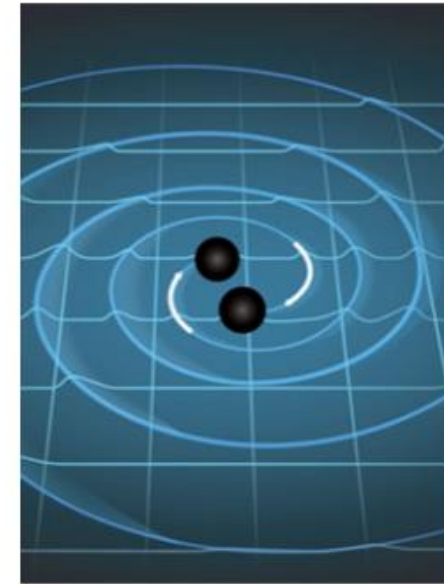
High Energy Physics



Astroparticle Physics



Astrophysics



Gravitational Wave  
Astronomy

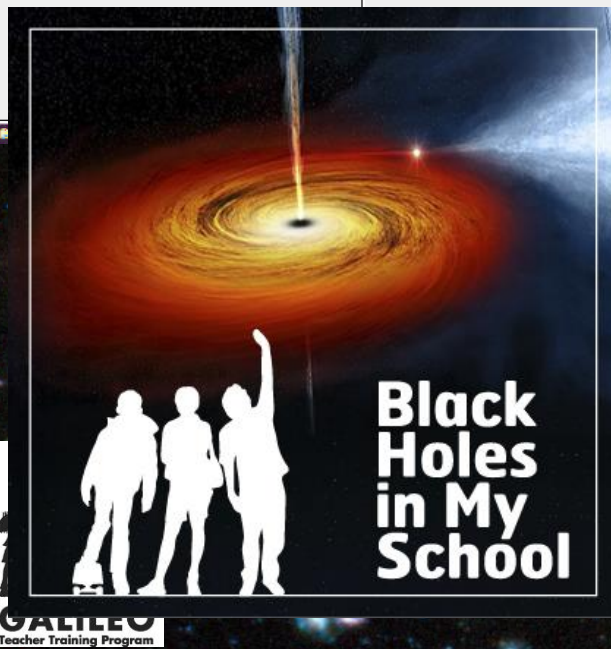
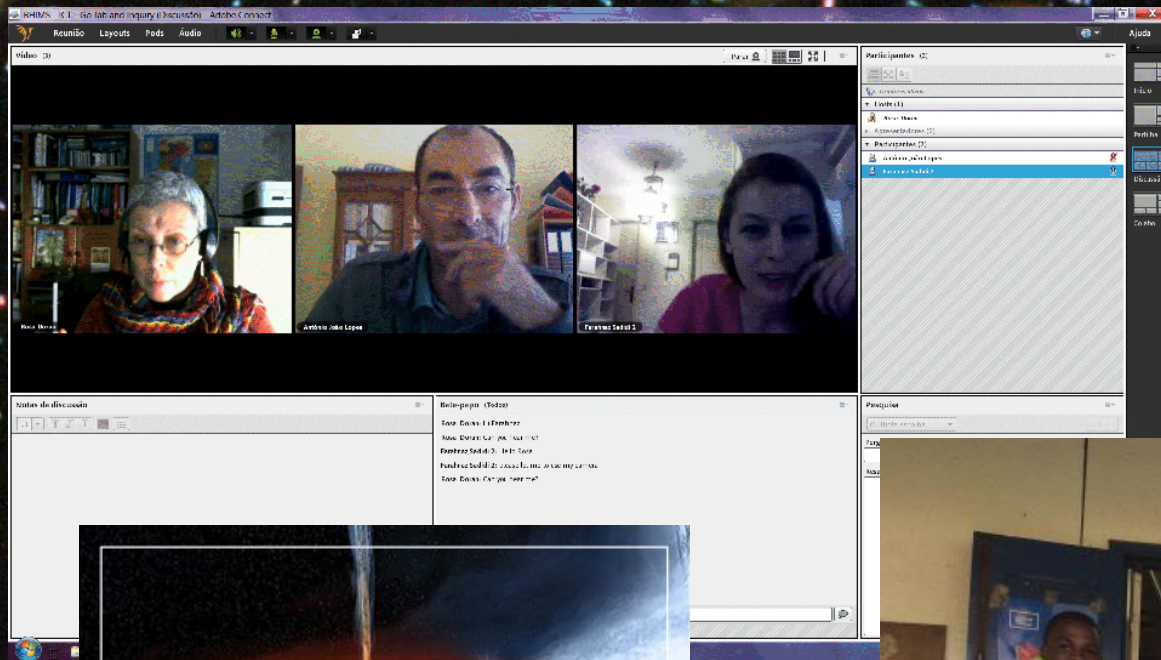
# Hands-on Universe – developing 21st century skills for over 30 years

- Supernova
- Asteroids
- Jupiter Moons
- Solar Activity
- Black hole in the Center of our galaxy
- Cepheids
- Exoplanets



NUCLEIO

# BHIMS



# Avoid Stereotypes

**WE ARE  
ASTROBIOLOGISTS!**



OUR SPACE OUR FUTURE

**WE ARE ASTRONAUT  
SUIT DESIGNERS!**



OUR SPACE OUR FUTURE



OUR SPACE OUR FUTURE



OUR SPACE OUR FUTURE

**WE ARE  
SPACE ENGINEERS!**



OUR SPACE OUR FUTURE

**WE ARE EARTH  
OBSERVATION SCIENTISTS!**



OUR SPACE OUR FUTURE

**WE ARE  
SPACE EDUCATORS!**



OUR SPACE OUR FUTURE



OUR SPACE OUR FUTURE



Horizon2020  
European Union Funding  
for Research & Innovation

UCLIO

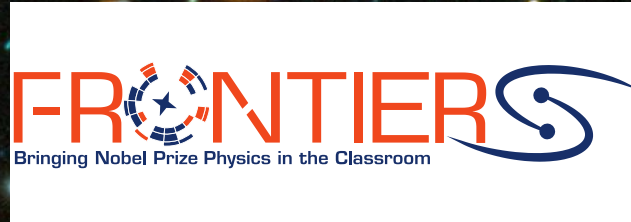
# MULHERES NA CIÊNCIA



- a ciência é feita de coisas que mudam -  
Maria da Sousa

15 de Outubro  
FIC.A , Oeiras

# Digital Skills, Open Schooling and Inclusion



# ALL IN ONE PLACE

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<https://nuclio.org/en/>



The screenshot shows the homepage of the NUCLIO website. The top navigation bar is blue and contains contact information (+351 960 356 909, geral@nuclio.org), social media icons (Facebook, Twitter, Instagram, RSS), and links to Newsletter, Contacts, and Privacy Policy. The main header features the NUCLIO logo and a navigation menu with links to Home, About Us, What we do, News, Media, and English. The hero section has a background image of Earth from space, with the NUCLIO logo and tagline "Núcleo Interativo de Astronomia e Inovação em Educação" and "Innovating in Education for a Better Future". Below this, there are four blue icons representing different activities: a book for Training, a network diagram for Projects, a person with arms raised for Outreach, and a rocket for Development. Each icon is accompanied by a title and a brief description of the activity.

**NUCLIO**  
Núcleo Interativo de Astronomia e Inovação em Educação  
Innovating in Education for a Better Future

**Training**  
Certified teacher training courses addressing cutting-edge methodologies and tools.

**Projects**  
Active participation in relevant international institutions and projects in the field of education and development.

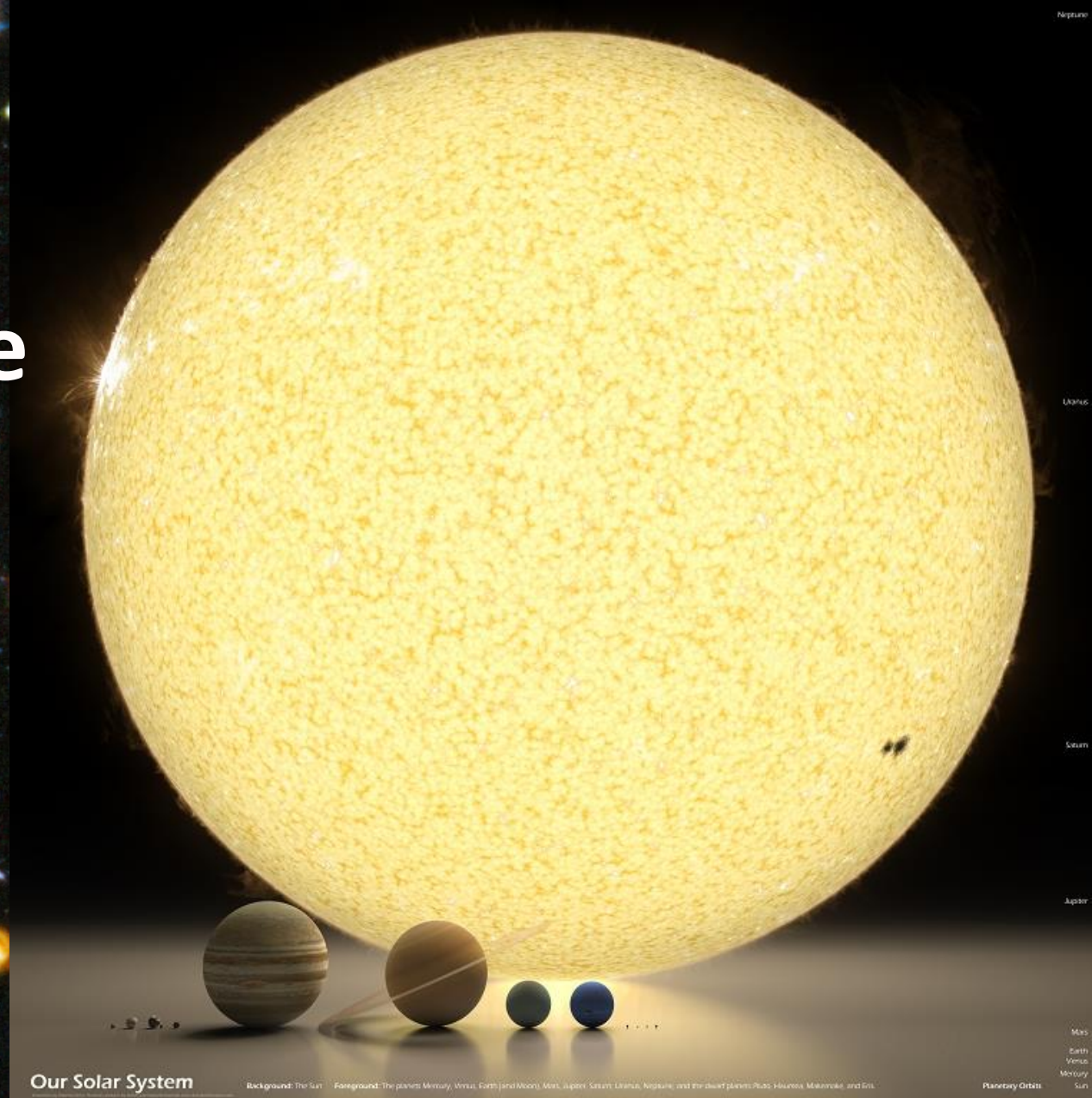
**Outreach**  
Outreach and non-formal education activities, because scientific literacy is essential for understanding our role in the future of our planet.

**Development**  
Participation in projects for development, because education is the key to personal, social, and economic development.

Science literate individuals capable to make wise decisions and understand our place in the cosmos



We are all made  
out of star  
dust...



Inhabitants of a  
magical place...



NUCLIO

But most  
humans don't  
know that ...

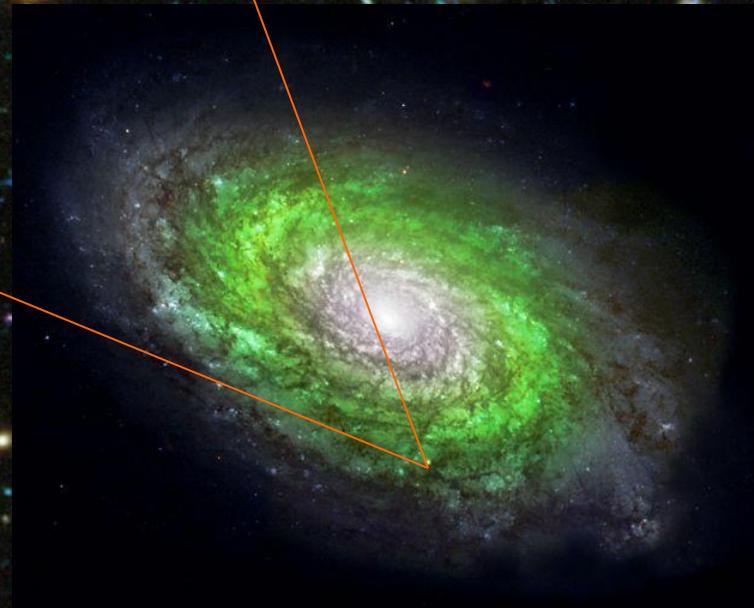
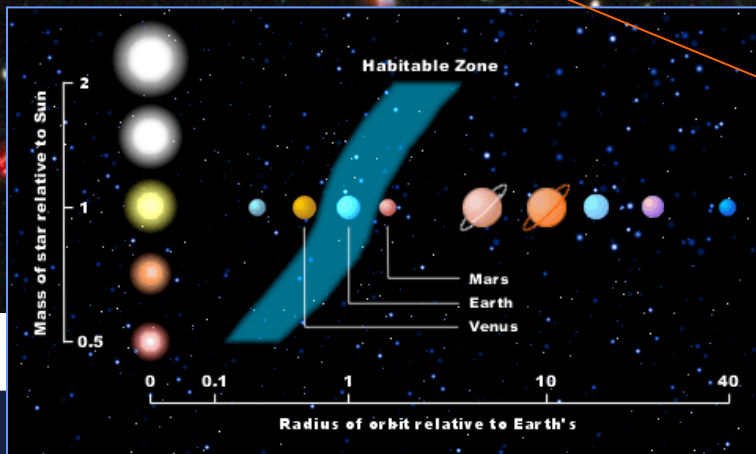
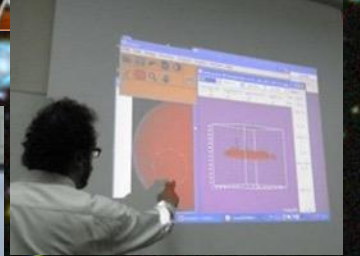


Image courtesy of Yeshe Fenner/Space Telescope Institute

# One World... One People... One Sky...





# THANK YOU



<http://nuclio.org>



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[https://www.instagram.com/rosa\\_doran](https://www.instagram.com/rosa_doran)



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