

PREPARING YOUNG GENERATIONS TO DEAL WITH TODAY'S CHALLENGES

Noëlle Billon and Martyna Bajorinaitė

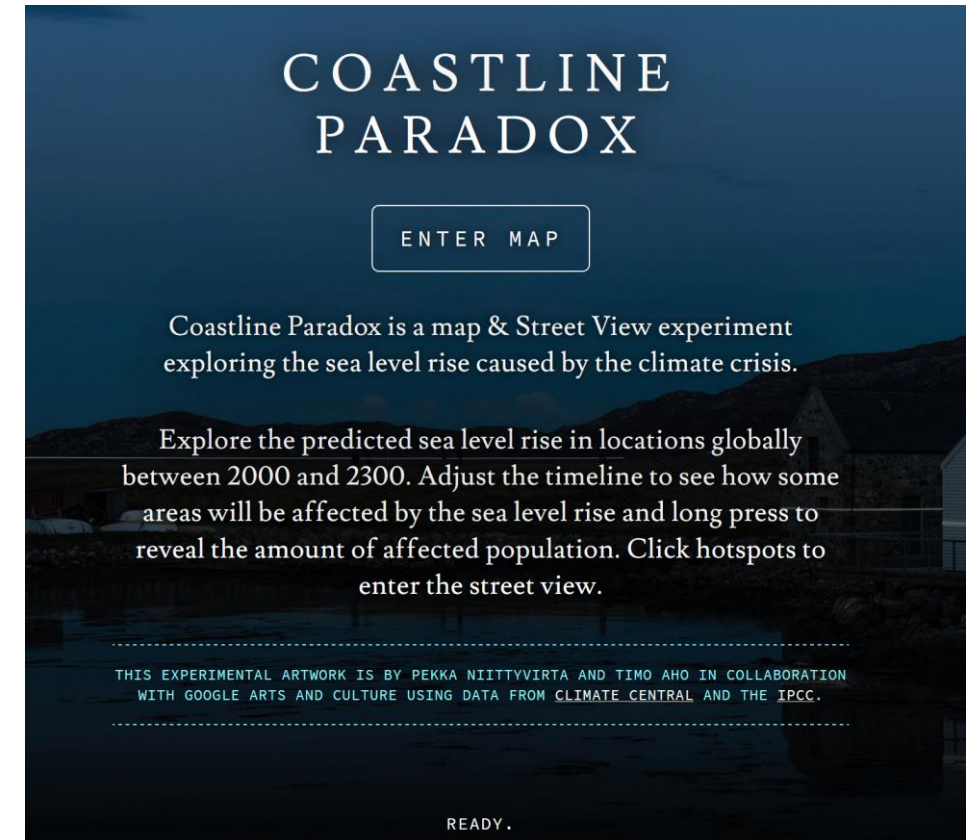
23-24 October 2020



Image credit: © cienpiesnf - stock.adobe.com

EXPERIMENT

- Go to [Coastline Paradox](#) (link in the chat)
- Find your city
- Tell us in 1 word your impressions about this experiment



Go to www.menti.com and use the code 35 32 92 3

choose 1 word to describe your impressions about this experiment



CLIMATE CHANGE



SOCIAL AND ECONOMIC IMPACT OF CLIMATE CHANGE

- The World Meteorological Organization (WMO)-
Statement on the State of the Global Climate in 2018



CLIMATE CHANGE & OUR DAILY AGENDA

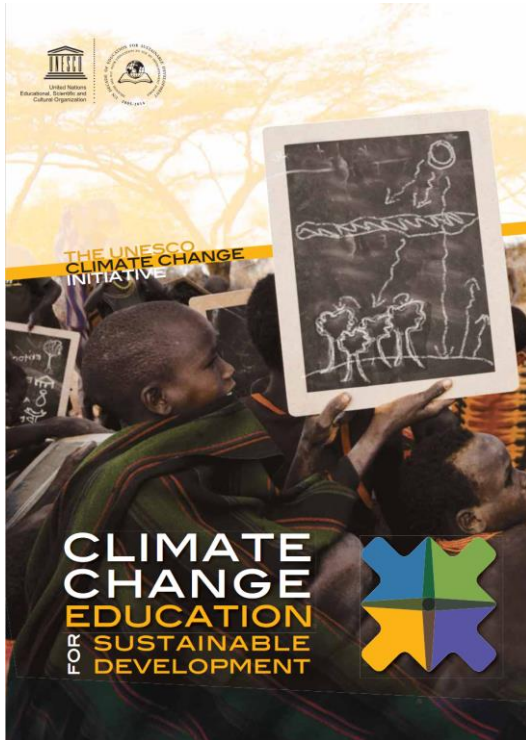


CLIMATE CHANGE AND FUTURE JOBS

- **24 million** green jobs by 2030
- **Climate awareness – part of every job**



CLIMATE CHANGE AND EDUCATION



ABOUT US



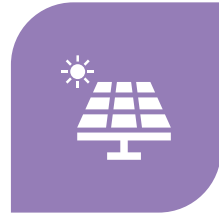
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CONTENT
KNOWLEDGE



METHODOLOGY



PEDAGOGY



TECHNOLOGY



RESEARCH



PERSONALISED
TEACHING



CULTURAL
BACKGROUNDS



21ST CENTURY
SKILLS

Scientix

the community for
science education
in Europe



SCIENTIX

The community for science
education in Europe

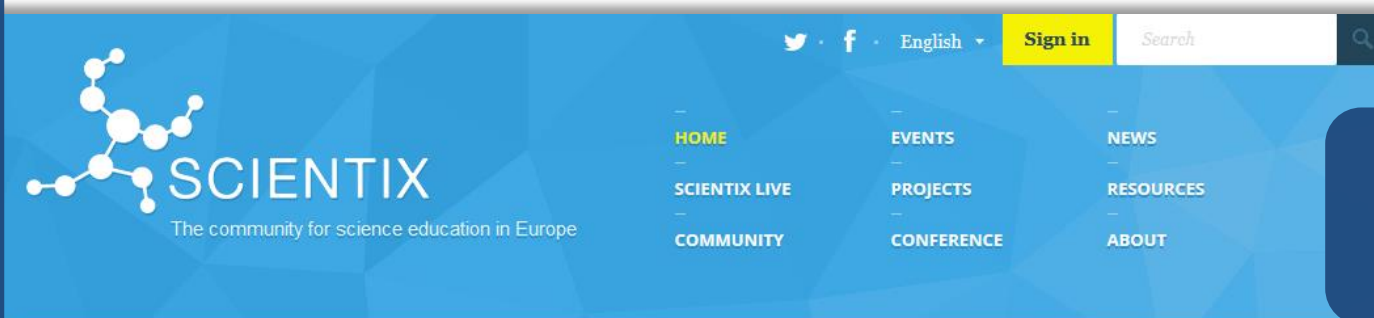
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Information

- Projects on STEM education
- Resources
- Scientix observatory papers
- Newsletters
- Blog entries
- Translation of resources(*)



<http://www.scientix.eu>



>8,000 monthly unique visitors
reaching +100,000 students
every month

The banner is divided into two main sections. The left section, titled 'ENROL FOR THE STEM MOOCs PACKAGE', features a star icon and text announcing the 'Integrated STEM Teaching' MOOCs for primary and secondary school teachers, starting on 26 October 2020. It includes a 'Read more' link. The right section, titled 'Enrol for the STEM MOOCs PACKAGE', features an illustration of a person holding puzzle pieces and text announcing the 'STEM is Everywhere! Return' MOOC, starting on 7 September 2020. At the bottom, there are logos for various partner institutions including the European Schoolnet Academy, STEAM-IT, and several European universities.

SOMR available to any
teacher, Ministry of
Education, STEM expert
during the current
COVID-19 lock-down
period:

[READ THE INSTRUCTIONS!](#)

In your country

Observatory

Scientix Moodle



Training: online and face to face



- Workshops for teachers (both in FCL in Brussels and other events)



- Online courses on the EUN Academy



- Webinars





bloom

"Boosting Bioeconomy Knowledge in Schools"

MOOC for teachers

Starts on
4 March 2019



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MOOC

Our Fragile Planet

START: 24 FEBRUARY 2020

#spaceMOOC



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Cooperation



Science Topics
Networking
Seminars



Conferences



Ministries of
Education STEM
representatives
Working Group
(and National
Contact Points)



Scientix
Ambassadors
“Old” and “new”



STE(A)M
Partnerships



PROJECTS UNDER SCIENTIX: EU4OCEAN COALITION FOR OCEAN LITERACY



EU4OCEAN:OBJECTIVES

- **Contribute to enhancing awareness and the engagement of all parties involved in the sustainable management of our oceans and seas**
- Help coalition members to become **ocean advocates**
- Put ocean literacy **high** on the policy agenda

COMPONENTS

The coalition is made up of three components:

- **a Platform for organisations and individuals** engaged in Ocean Literacy initiatives
- **a European Youth Forum** for the Ocean
- **a Network of European Blue Schools**

A NETWORK OF EUROPEAN BLUE SCHOOLS



THE BLUE CHALLENGE



A NETWORK OF EUROPEAN BLUE SCHOOLS

- **Activity:**

- **STEP 1:** Find a topic that connects students to the ocean and to act actively on their sustainable preservation
- **STEP 2:** Think of a **project outcome (preferably linked to the curricula)**
- **STEP 3:** design the activities
- **STEP 4:** think about the local partner you want to involve in your activity
- **STEP 5 :** Go to [Padlet](#) (link in the chat) and Share the main ideas of your project with us!

STAY TUNED ABOUT THE PROJECT



<https://webgate.ec.europa.eu/maritimeforum/en/frontpage/1482>

PILOT STUDY: NATURE BASED SOLUTIONS IN EDUCATION*



NBS for teachers: how and why

HOW. The pilot study **co-created** 15 **learning scenarios** (LS) for addressing NBS in class

- Co-creation: involve teachers, allow for exchange of ideas and feedback
- **Learning scenarios**: structured lesson plans, tested and validated by teachers across Europe
- Serve as a ground to address NBS in class

WHY. Approaching NBS in class is crucial as it allows:

- The use of **innovative pedagogies**: *project-based learning, eco-pedagogies, outdoor-learning...*
- The inclusion of (non)STEM subjects: **interdisciplinary nature** of the topic
- Raised awareness on **real-life global concerns** (e.g. *climate change*) and **available solutions** among **students**
- Stimulates the formation of active young citizens



Milan's Bosco Verticale is an example of vertical garden, a urban NBS © Boeri Studio





LIFE TERRA

500 million trees in 5 years





Why planting trees?

- To combat climate change, by far the most cost-effective of all the big solutions is to protect and restore **forests**. Forests extract and store **CO₂** from the atmosphere and produce the **oxygen we breathe**.
- But these complex ecosystems have been **systematically destroyed**. We have already lost nearly half the world's trees, most within the **last 100 years**.

- Jane Goodall and Marc Benioff

LIFE Terra and Education

- **Online course for 8-14 years old pupils on Climate Change and Sustainability**



UNIVERSITAT DE
BARCELONA

- **Topics**
 - 1) Climate change
 - 2) Energy transition
 - 3) Waste
 - 4) Circular economy
 - 5) Water
 - 6) Agriculture
 - 7) Air quality
 - 8) Trees



LIFE Terra Sustainability Course

Demo version (spring 2021)

English

Dutch

- ✓ Teachers & children feedback
- ✓ Student questionnaire
- ✓ Improvement & continuous update

Final version(s) - 12/2021

Spanish

German

Italian

Portuguese

Greek

(+ local specific content)

LIFE Terra Sustainability Course

Each participating school/class:

- ✓ 10 sessions
- ✓ Digital certificate of completion
- ✓ Participate in a tree planting event
- ✓ Class Project

Create together a solution for an environmental issue

✓ EU-level contest

- ✓ Best Life Terra Climate Action Class project will be awarded during Green Week

✓ eTwinning

- ✓ International student exchange



LIFE Terra and Education

- **Educational website (.academy),**
designed for teachers and
students
- **Online course for teachers on**
Climate change and Sustainability
in **EN, PT, IT, ES, DE** and **GR**
- Engagement of youth in planting
events





Prepare your pupils

- Imagine you bring your students to a planting event: what lesson should be taught in advance?
- Think of **1 collaborative lesson plan (3 to 5 steps)**
- Involve at least **1 teacher of other discipline than yours**
- Post the lesson plan on **Padlet** (link in the chat)



THANK YOU