



PULCHRA PROJECT NEWS

Issue #3

Hear the latest news from the PULCHRA project

SCHOOL STUDENTS WORKING WITH COMMUNITIES AND EXPERTS TO
EXPLORE CITIES AS URBAN ECO-SYSTEMS

www.pulchra-schools.eu

Welcome to the PULCHRA Project and School news. This is the 3rd and final year of the PULCHRA project. Students, teachers, stakeholders, and coordinators have been on an open-schooling journey exploring the topic of cities as urban ecosystems.

This newsletter highlights the successful implementation of the PULCHRA project from multiple perspectives to showcase how students engaged with stakeholders, technology and science in their local community to become agents of change. We hope you enjoy reading!

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It's Science in the City!



Collaborating on Open Schooling

PULCHRA continues to engage with the open schooling collaboration called Open Schooling Together. This initiative represents 11 EU funded projects linked to science education innovation and are located in 33 different countries. To find out more sign up for the newsletter and follow us on Twitteror Facebook.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824466.

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PULCHRA Project Success!

Issue #3

The PULCHRA coordinating offices are happy to share that a total of 150 stakeholders were involved during the two rounds of City Challenges from 2019-2022. This number represents not onlv researchers scientists, but also parents, enterprise, representatives of local associations and local administrations (Meteorological Department, regional Environmental Department. Municipalities, etc.). This allowed the students both to place their research in the real local context, and to interact with the actors involved in the implementing solutions to the environmental challenges they face in their living area.

While project-evaluation is underway, already now coordinators, teachers, as well as OpenSchooling Participants are sharing their experiences. Their feedback highlights the of connecting students value practitioners to effectively inspire, raise and empower students to awareness. for implement actions sustainable development in their locality. Additionally practitioners, scientists, and local authorities who supported the students in implementing their PULCHRA projects noted an added value in learning from, and being inspired by student work.

See below to learn more about how experts can engage students through OpenSchooling:



COLLABORATION WITH EXPERTS WORKED!

During the project, the students contacted scientists from different disciplines and municipal representatives. Both sides were very appreciative of the cooperation. All the experts confirmed that they were looking forward to continuing the cooperation. They plan to motivate other colleagues to do similar projects with schools.



"The students' great interest in my lectures and field measurements motivates me to continue working with schools." "Contact with students and their projects has allowed me to explore new ways of disseminating science." "I liked the enthusiasm of the students and their involvement in the research work and their openness to learn and try new things."

"I encourage others to get involved in these projects. I liked the students' ability to get into challenging topics and manage them nicely.""

"It was nice to see that students care about our future."

WHAT DID THE EXPERTS HELP WITH?

- They consulted students' research plans and developed their ideas
- They educated the students on the topics of their projects, for example lecturing on biodiversity, climate change, urban infrastructure, planting a forest or establishing a compost heap.
- They helped plan and implement surveys around the schools
- They conducted experiments and added the necessary technical information.
- They provided technical assistance and contacts to other people.

WHAT THE PROJECT GAVE TO THE STUDENTS?

- Practical knowledge in environmental protection as well as biology and other disciplines.
- Loss of fear of reaching out to experts and a bridge between school and universities.
- · Connecting theory with practice and trying out real research.
- · Collaboration with experts to solve real problems.
- Feeling that it is worth trying to make a difference in their environment.
- · New contacts with students with similar interests.
- Greater awareness of community issues and also interest from the community in their projects.



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PULCHRA Project Success!

The 12 coordination offices further shared their positive experiences with stakeholder engagement and open schooling:

12 COORDINATORS WERE RESPONSIBLE FOR THE SMOOTH IMPLEMENTATION OF THE PULCHRA PROJECT IN 10 COUNTRIES

THANKS TO THE PROJECT, THEY DISCOVERED THAT:

- Students are enthusiastic about projects that can make a difference in their environment and have a strong interest in scientific research.
- Linking schools more systematically with researchers, educational organisations, local authorities and communities is very beneficial.
- People in the private and public sectors are willing to support students' efforts.
- The open schooling concept and inquiry-based approach work and students are able to apply them in original ways.

WHAT PLEASED THEM MOST WAS:

- To see the great work that students are able to do when given the freedom to explore.
- To experience how students develop their own projects, are curious and look for solutions to real problems related to their everyday lives.
- To find that the link between schools and professionals was perceived very positively by both sides.
- Observe how students' belief in their own power to change things has increased as a result of positive feedback during project presentations, meetings with local councils, etc.
- To hear how during some practical activities, such as planting trees or testing river water quality, students are thinking about what kind of work they would like to do in the future.



Of note was the frequency with which schools engaged local authorities in their PULCHRA project work. 20% of the participating schools actively involved local authorities to stimulate their interest in the PULCHRA challenges, or to share their suggested solutions to the sustainability challenge identified.

48 schools took part in the second year of the PULCHRA project with a total of 1064 students and 108 teachers involved. This is in contrast to 51 schools with 1081 students and 167 teachers who took part in the first year.

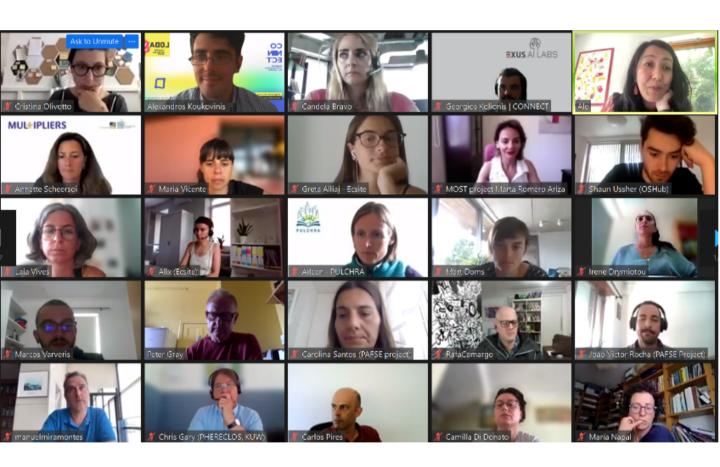




Open Schooling Together Event

The PULCHRA project was presented on July 5th at the 9th Inspiration session of the Open Schooling together group, hosted by the Connect Project on the topic of open schooling Project Evaluation.

It was an excellent event and featured valuable & insightful presentations and discussions on approaches for measuring the impact of open schooling.





Upcoming Events

The PULCHRA project will be presented at the 4th Scientix international Conference on Friday November 18th on the STEAM Projects for Teachers Panel.

See programme: <u>Agenda (eventscloud.com)</u>, and <u>register here.</u>

The conference will take place online Friday 18 and Saturday 19 November 2022. The conference, organised by European Schoolnet, is one of the major science education networking events in Europe. With 2,000 places available, the goal of the conference is to provide an overview of the challenges and opportunities in science education in Europe and highlight the potential and possibilities that the Scientix community can bring about. The Scientix conference is also a unique opportunity to learn more about different STEM education projects in Europe, deepening connections, generating new ideas and inspiring science educators to foster creativity and enthusiasm for STEM education and share their expertise, knowledge, and best practices.





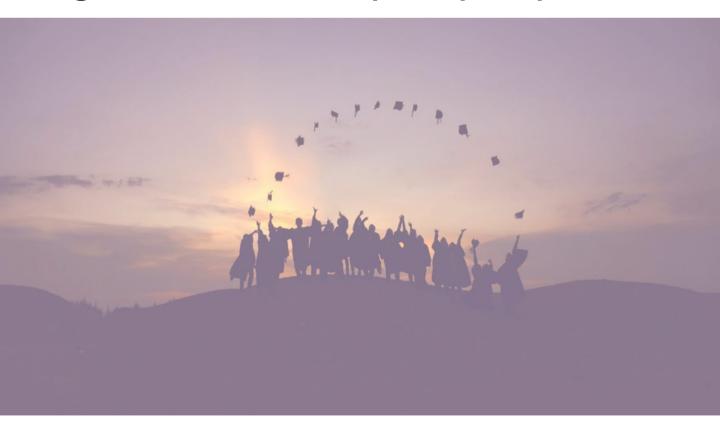
Upcoming Events

Cities and Climate change: New challenges for education at the school level

Monday, 7 November 10:00 - 16:00 (Athens Time)

"Kostis Palamas" Cultural Center, Akadimias 48, Athens GR

Registration for online or in person participation here







PULCHRA Partner Insight: Sweden

PULCHRA in Sweden runs on a different model!

Two summer schools were organized by KTH team and House of Science in August 2021 and June 2022, involving students from different schools in Stockholm region. The first summer school was related to City Challenge theme number 3 "Regenerating Urban Space to connect People in a Healthy Environment". The aims were to understand the role of insects in maintaining sustainable life in cities, considering how we can improve biodiversity in our neighborhood. After researching the issue, the students created a butterfly bar that was placed on the balcony of the House of Science.











In June 2022, the KTH team and House of Science developed activities both within the scope of City Challenge theme "Regenerating Urban Space to connect People in a Healthy Environment", and "Powering Cities without Harming the Climate". The first activity aimed to study urbanization and urban heat islands in Stockholm, Athens, and Beijing between 1990-2020. Around 80 high school students from different schools across Stockholm took part. The second activity related to the potential of wind power as a renewable energy source and involved 100 high school students.

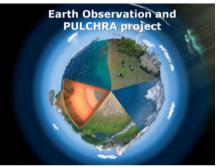


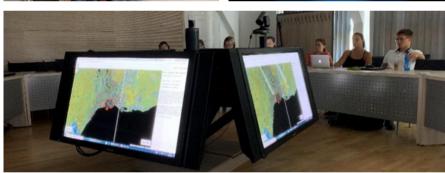


Open Schooling & Earth Observation: Charles University

The project PULCHRA has been exploring the open schooling concept in the theme "Cities as urban ecosystems", using geoinformatics (GIS) and Earth Observation. New partnerships of teachers, students and experts/stakeholders have been established. The PULCHRA summer school organized by Charles University in Prague, 19.- 22. July 2022 followed the PULCHRA aims of building a learning, exploring and activation network, which allows one to experience and understand the urban ecosystem as living organisms.







Almost 30 teachers and students visited the PULCHRA summer school and discovered more about PULCHRA project outputs as well as modern open scientific methods and technologies, e.g. satellite data from EU Copernicus programme. Teachers and students understood that City Challenges are situated in their own local living environment.

The results of the PULCHRA project demonstrate that Earth observation is comprehensible for both students and teachers. Cloud-based technologies are able to process data efficiently and to calculate and visualize the results of the analysis very fast and accurately.

The slides from the presentation are available here, for reference.





Sustainability Festival: Heinrich-Heine Gymnasium

PULCHRA students at the Heinrich-Heine Gymnasium organized a sustainability festival on June 22nd 2022.

Students presented a School LEAP (Learning, Exploring, Activity Path).

Student City Reporters communicated that "After the presentations, we went to the schoolyard and tried out a world first. Our HHG-LEAP (Learning, Exploring and Activity Path). There are now QR codes at four stations in our schoolyard. Codes that you can use to find out more about the biomass of trees, land cover, soil type identification and cloud detection. If you have not seen the QR codes then don't worry, they will stay there"

LEAP Learning, Exploring and Activity Path Station 3 Station 1 Learners Station at a specific place Students → Website Citizens Experiment Observation Smartphone Infotext App → Knowledge Measurement → Skills External data Video Teachers, Experience at a school, field trip guides Activation ▶Learning Presentation Guidance









STAKEHOLDER ENGAGEMENT



PULCHRA ITALY: Final Project Meeting

A representation of about 100 students - out of the more than 400 involved - participated in the final event of the PULCHRA project held on 14 October. In the large classrooms of the University of Udine, students and teachers from high schools were welcomed to present their activities carried out in over 2 years.

View the Blog Post Here



Open University of Cyprus hosts "Close the Loop"

The Open University of Cyprus (OUC), organized an open multiplier event entitled "Close the Loop" on July 12. 2022. During the event, the 5 PULCHRA schools that participated in the project presented their actions and relevant work, and discussed best practices to support sustainable development and urban planning.

View the Blog Post Here





A day dedicated to science and the environment. This is how the World Earth Day organized by GLOBE Italia took place as part of the Where is the Science? at the Brussa transformed for the occasion into a large open-air laboratory where to look for science, and open to everyone.

View the Blog Post Here

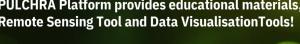
INSPIRE AND GET INSPIRED!

58 PROJECTS ARE PUBLISHED ON **THE PULCHRA PLATFORM**

Do you know?

REGENERATION URBAN SPACE to connect People in a Healthy Environment is the most common topic for the second project year.

PULCHRA Platform provides educational materials, Remote Sensing Tool and Data VisualisationTools!





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SHOW OFF YOUR PROJECT

Your article can be in the next issue of this

Newsletter.

Send your article to:

Email_address@country_coordinator.com and it could be shared on the PULCHRA social networks and on the blog! https://pulchra-schools.eu

Don't forget to follow and share the PULCHRA social media too on Twitter and on Facebook.

Compiled by TEREZA, Educational Centre and An Taisce EEU in cooperation with all PULCHRA partners. An Taisce Contact us **PULCHRA** website

