



EUROPEAN COMPETITION 'SCHOOLS IN ACTION FOR DAYLIGHTING RIVERS'

ANNOUNCEMENT

Italiano Spanish Greek

Learning to learn from an exceptional situation. In the past few weeks, the Covid-19 pandemic has changed our world. As most of the activities of 'normal' life everywhere are disrupted, so the Daylighting Rivers project is as well. At the same time, this situation gives us the opportunity to take note of a new reality and to enhance our environmental awareness. Therefore, although it is not mandatory, we invite participants in the competition to include a reflection on the implications of the pandemic — and the consequent changes in human activity — for the environmental systems they are studying.

Secondary schools from Erasmus+ Programme <u>eligible countries</u> (NB: Programme and Partner countries only) are invited to **apply for the scientific competition "Schools in action for DAYLIGHTING RIVERS!"**

"Daylighting Rivers" acknowledges that due to accelerated urban development, many rivers have been diverted or covered, in favour of urban infrastructures and new housing developments. This has increased the risks of flooding, led to the loss of biodiversity along the streams, increased water pollution and impaired other types of community services connected to the flowing water. The process by which culverted or covered rivers are uncovered and re-exposed to the environment is known as 'daylighting'.

In our educational context, "daylighting" also means *discovering* our rivers – knowing where they flow from and to, their characteristics, the threats they face, and the services and benefits they provide. At the same time, 'daylighting' refers to raising awareness – in terms of youth consciousness, and inspiring global action for sustainability among those who will determine our collective future.

"Daylighting Rivers" is launching the European Competition for the best "Daylighting Rivers Design Project" presented in the form of a "Daylighting Rivers Location-Based Game". The competition is addressed to classes of secondary schools (students of age 11-19) and focused on challenging issues related to urban rivers — with a special emphasis (although not exclusively) on those rivers which have been covered over and may be candidates for "daylighting".

PRE-REQUISITES

Who can participate in the Daylighting Rivers competition?

The competition is open to teams of secondary school students and teachers or other adults who would act as referents for the group. **Participation is free of charge**.

The adult (teacher or other supervisor) will be in charge of registering the group and submitting the competition entry.

HOW TO PARTICIPATE AND NEW DATES

Complete the <u>Registration form</u> by October 30th, 2020 with the with the team representative's contact details (see https://forms.gle/p9vnUuLq2r4txq8z7).





Once registered, your team will be requested to submit the competition materials by the **20th of November 2020** using the <u>submission form.</u>

(if you are not able to access the forms, you can contact and send the materials by e-mail to daylightingrivers@gmail.com).

Personal common data (name, surname and e-mail) will be used only by the person responsible of the competition, to communicate with the registered participant.

WHAT MATERIALS TO SUBMIT

The official language of the competition and the final event is English, therefore the material must be submitted in English.

A. <u>Design project outline (investigate issues of a river in or near your town/city) – prepared by the group of students</u>

Instructions (Use 1000-1500 words of text and map, with photos and/or other illustration media):

- 1. Name a river (or stream) in or near your town/city, which you would like to base your project on. Show the river and its surrounding area in a map (you may use Google Maps or any other mapping medium/software you prefer.
- 2. Describe the problem you would like to address, connected with the river and affecting your town/city e.g. the river is covered resulting in serious environmental problems, or the river is due to be covered or caged, or the river is flooding and various proposal are considered in relation to changing its route or deepening the riverbed or any other problem is about to bring an intervention in the natural shape of the river.
- 3. Describe the positive and negative consequences of the changes that are foreseen or planned along the river. Visit Daylighting Rivers website <u>daylightingrivers.com</u> and search independently for relevant bibliography to learn more about this. You may ask your teacher/supervisor for guidance.
- 4. Put together a proposal about how you can address the problem, what you need to do, where this needs to be done along the river. Give as much detail as possible and indicate you proposals on the map.
- 5. Explain why your proposal will be beneficial for your town/city, its environment and its people.
- 6. Name the main "actors" in your proposal, e.g. experts on the river environment, the local mayor and City Council, the people of the town, the school, the environmental association of the town, bird lovers, fishermen, town planners etc.

B. A Location-based game (LBG) created by the group of students

Construct a **location based game** (LBG) to show what the options are in implementing your proposal and what is the role of the various "actors" in it. Consult the <u>Guidelines of the Competition about LBGs</u> and seek the help of your ICT teacher or an ICT expert. <u>The Location Based Game should include details about how to play it</u> (make sure that that the game is public and the game function "to be played anywhere" is enabled).

You may Use the <u>Helpdesk</u> for clarifications throughout the process of constructing the game.

C. <u>A summary report describing the learning process</u> – to be prepared by the referent adult, teacher or supervisor

We recommend that you use the <u>learning materials</u> developed by the Daylighting Rivers project. (Click on your language to access an example of learning unit: <u>Italian</u>, <u>Greek</u>, or <u>Spanish</u>). You may





choose two units, according to the theme selected by the students and provide the information necessary to students through these. However, you may develop your own course of study, using the Inquiry-based Learning methodology. In your report, please indicate whether you used any of the Daylighting Rivers Learning Units or you developed your own learning material based on IBL. In your report you are invited to include information on:

- Engagement of the students by the teacher/supervisor (method of communication, geographical context and issues covered)
- Hypothesis, questions raised
- Investigation/practical activities carried out (e.g. field work, laboratory experiment, use of specific tools)
- Conclusions and achieved awareness
- Dissemination of the results (e.g. at science fairs, public events) and involvement of local institutions, if any.

Have a look on the website, the learning experiences and materials that have been developed and tested by the pilot classes during the 2018-19 school year. However, other Inquiry Based Learning experiences are also welcome (IBL – see the <u>learning methodology of Daylighting Rivers</u> for reference).

The teacher's/supervisor's report should also include an **evaluation of the learning outcomes** of the learning process leading to the creation of the Daylighting Rivers game. You are requested to deliver a questionnaire to students at the end of the process and include the findings of the questionnaires in your report, together with your answers to a questionnaire addressed to teachers.

Questionnaires for students:

Change in attitudes towards STEM: https://forms.gle/ts7jiJHCj4vG7DXt7
Change in career decision self-efficacy: https://forms.gle/WsiRVZX9ENZBXgYKA

Questionnaires for teachers:

Change in science teaching effectiveness: https://forms.gle/yqwdJR2oMTNiRJEx9 change in science teaching efficacy beliefs: https://forms.gle/sJDY2mtqW5hQNhFQ6 Just after filling in the questionnaires, contact daylightingrivers@gmail.com (Francesca) to receive the data and the Google summary of the results that you can assess and discuss.

What kind of app, you can use to create a LBG:

Any of the commonly available software apps for creating an LGB can be used (for instance <u>TaleBlazer</u>, <u>ARIS</u>, <u>Actionbound</u>, <u>EnigMap</u>, as well as any other LBG platform you prefer (or simply the QR codes). Online Helpdesk is available only for ARIS and Taleblazer. At the end of this document, see a list of easy and free Apps with their specifics. Then, take into consideration that from the website of any App you can access easy tutorials and useful examples.

WHAT is NEW! – Effects of the pandemic shutdown on rivers

In recent weeks we have been observing an uncharacteristic 'invasion' of urban spaces by a variety of flora and fauna – and looking at nature, we are learning that exceptional events may have unexpected and possibly long-lasting effects.

Within the framework of the competition, we invite participants to include a reflection on what they have observed or perceived during the time of the pandemic, in relation to the topic of the competition.





This is not a compulsory activity; participants are free to decide whether or not to include this reflection in the products of the competition, or to create an additional product. The format for this is flexible, and may include text, photos, slide presentations, drawings, etc. These additional products will not be evaluated by the jury, but they will be organized in a collection of products that will be published and promoted.

EVALUATION AND AWARD OF PRIZES

The competition products will be evaluated by a jury of experts, who will select **three finalist teams** – and representatives of these winning teams **will travel* to Florence**, **Italy** to be officially recognized at the Final Conference of the project (December 1-2, 2020).

The jury will consist of members external to the project, who will assess the competition entries using an objective method with criteria and weighted scores. The results of the evaluation will be announced approximately on the 30th of November 2020. See below the criteria for the evaluation of each category of product.

* Travel expenses for two or three representatives of the winner finalist teams will be paid by the Daylighting Rivers project, although the project organizers reserve the right to decide how many individuals per team will be funded depending on the price of travel and accommodation.

IMPORTANT DATES AND FINAL SUBMISSION (NEW!)

Pre-registration deadline: October 30th, 2020

Final submission of materials: November 20th, 2020

Announcement of the finalist teams: November 30th, 2020

Final award in Florence: December 1-2, 2020

CONTACTS

For any inquiry, contact daylightingrivers@gmail.com or the national referent:

Italy: Francesca: francesca: francesca.ugolini@ibe.cnr.it
Greece: Demetris d.mylonas@prismanet.gr
Spain: Gonzalo gbarbera@cebas.csic.es

CRITERIA FOR EVALUATION

What are the criteria for judging the winners of the Daylighting Rivers European scientific Competition?

A score is provided for each criteria used to assess any product. Criteria, score and weight are indicated in the following tables.

Point/score: The number of points include the weighting of the model (original assessment of point range x weighting = points. *Example*: clarity – Point (7) x weighting factor 1,5 = 10,5 points).

Report of the regeneration design projects

Criterion		Point range	Weight
1	Clarity of the objective	0 -10	1,5
2	Complexity of the scientific investigation (field work, laboratory experiences, technologies used)	0 -10	1,3
3	Originality	0 -10	1,3





4	Depth of arguments presented	0 -10	1,2
5	Clarity of the report.	0 -10	1,1
6	Feasibility of the proposed action	0 -10	1,1
7	Communication	0 -10	0,7
	Total	80	_

Location Based Games

Criterion		Point range	Weight
1	Creativity	0 -10	1,5
2	Learning value (about river conservation/regeneration)	0 -10	1,4
3	Originality in storytelling	0 -10	1,2
4	Clarity	0 -10	1,1
	Total	40	_

LIST OF ICT

*Location Based Games are virtual games that can be played in a real environment from mobile devices. This is a list of apps and platforms for developing Location Based Games

ARIS (www.arisgames.org):

- For developing the game online from PC, access the webpage: https://arisgames.org/editor/#login
- For playing the game on the mobile device, two ways:

For iOS: Download the App ARISGAMES from the Apple Store

For Android: Download the App ARISGAMES from this link: https://github.com/ARISGames/aris-android-client/releases/tag/2018032

Actionbound (https://en.actionbound.com/)

- For developing the game online from PC, access the webpage: https://en.actionbound.com/choose
- For playing the game on the mobile device (IOs and Android): https://en.actionbound.com/download/

EnigmApp (http://www.enigmapp.fr/).

- For developing the game online only with MAC, access the webpage: http://www.enigmapp.fr/
- For playing the game on the mobile device (IOs and Android): download the App EnigmApp from the Play Store or Apple Store

Taleblazer (http://www.taleblazer.org/)

- For developing the game online from PC, access the webpage: http://www.taleblazer.org/users/login
- For playing the game on the mobile device (IOs and Android): Download the App TaleBlazer from the Play Store or Apple Store

App and platform for creating a database of geo-referenced information (data collection and visualization)

SIFTR (https://siftr.org/)





- For developing Your database online from PC, access the webpage: https://siftr.org/login/
- For accessing Your database from the mobile, download the App SIFTR from the Play Store or the Apple Store

Google Maps (https://www.google.com/maps)

• For developing Your Map, with Photos and Tags, from "Your Places" => "Maps" => "Create Map". In the new map, you can import pictures of your sites from a Google photo Album.

Relive (https://www.relive.cc/)

• For 3D visualization of a real track with a selection of Photos in the interest points.

Geographic Information Systems for geographical analysis

QGIS (https://www.qgis.org/en/site/)

- Download and install the English version of QGIS3.2 version that suits with your PC (32 bit vs. 64 bit). https://qgis.org/en/site/forusers/download.html#
- Get help from the training materials developed for teachers and accessible from Daylighting Rivers daylightingrivers.com