



Learning **science** outside the  
**classroom** for a sustainable  
future



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 101006482

# PROJECT PROFILE

**Duration:** September 1st, 2021 – February 29th, 2024

**Overall budget:** € 1 598 748.75

**EU contribution:** € 1 598 748.75

**Topic(s):** SwafS-24-2020 - Science education outside the classroom

Horizon 2020 project



# CONSORTIUM

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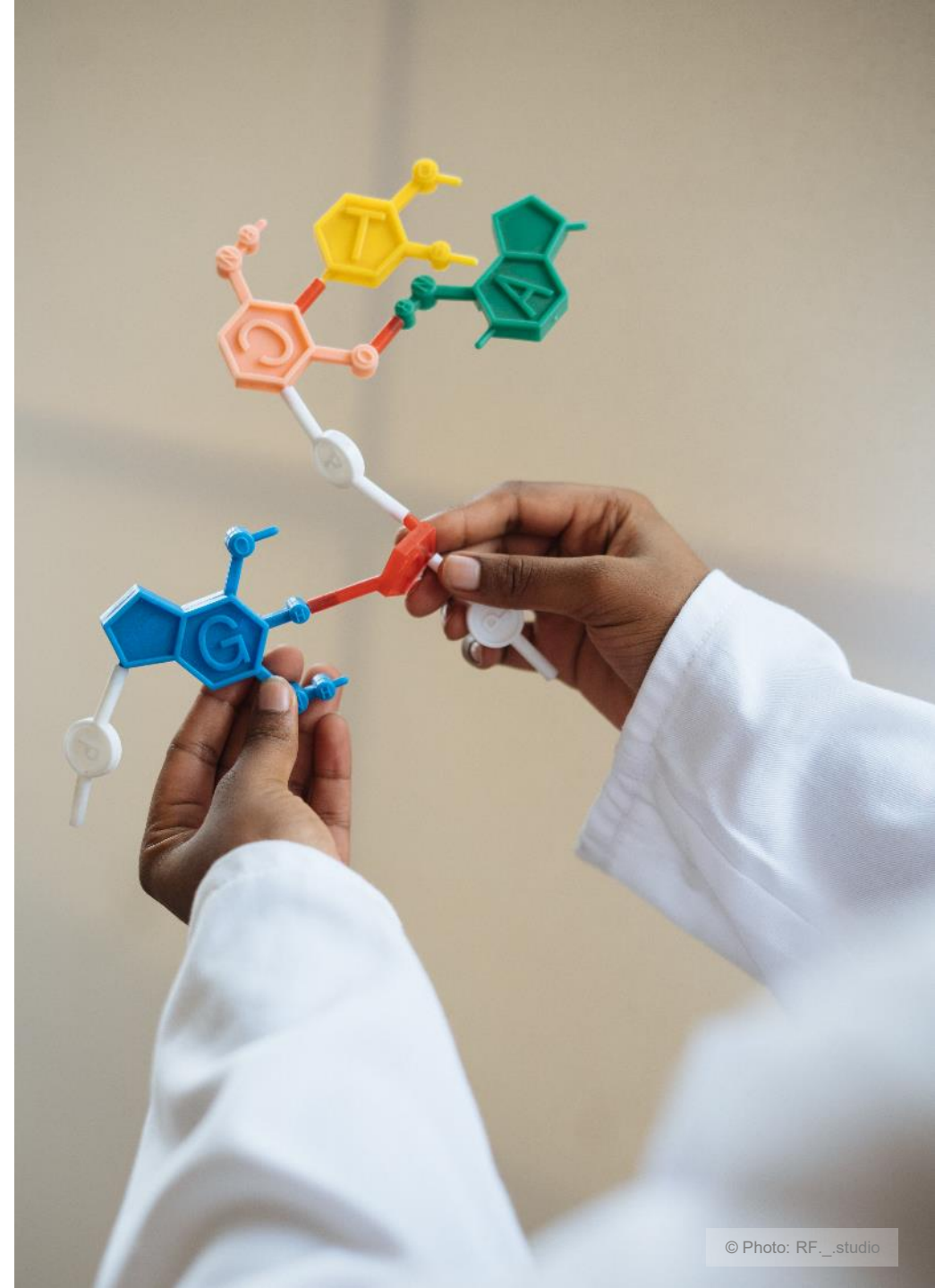
# Why OTTER?

Interest in science, technology, engineering arts, and mathematics (**STEAM**) subjects among young people is in decline<sup>1</sup>.

Students do not chose university studies in STEAM either because **they do not see the relevance of science to their lives** or they do not see themselves as future scientists<sup>2</sup>.



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© Photo: Vlad Tchompalov

# Why OTTER?

However, **science learning** plays an important part in the foundation for **lifelong learning** across all levels, since it includes the development of **scientific skills** that are transferable in other subjects, as well as **observation, reasoning, co-participation and argumentation.**



# OTTER project

In OTTER project, we aim at **increasing the interest in scientific topics among young people through Education Outside the Classroom (EOC) methods and pedagogies.**

Furthermore, we want to understand how EOC can help improve the acquisition of **scientific knowledge and transferable skills\*** in students, specifically in the field of environmental sustainability.

*\* cognitive, affective, social / interpersonal and physical / behavioural*



# What is Education Outside the Classroom?

EOC methods are out-of-school settings such as **outdoor activities, fieldtrips, community and botanical gardens, museums, zoos, scientific centres, community settings, the internet, enhanced digital learning and media**, that keep students healthy both physically and mentally, and that have proven to positive effects in them such as:

- **Cognitive** (knowledge and understanding)
- **Affective** (attitudes and feelings)
- **Social / interpersonal** (such as empathy, team work and communication skills)
- **Physical / behavioural** (civic, moral and ethical skills).



# How do we achieve our mission?



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## EOC HUBS

**Connecting** experts from Spain, Hungary, Ireland, Finland and multi-country



© Photo: Jens Johnsson

## GUIDELINES

Developing **guidelines** and **tools** to implement the OTTER Labs



© Photo: Lukas from Pexels

## OTTER LABS

**Training Educators** on EOC methodologies and testing our pedagogy with a focus on **sustainability**





# EOC HUBS

We will strengthen **EOC networks** within Europe, connecting specifically experts from four different regions within the continent (Finland, Hungary, Ireland and Spain)



and one international network for all other countries.



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# OTTER Labs



© Photo: Lukas  
from Pexels

We will work together with teachers from schools to train them on EOC pedagogies.

Together with them, **we will implement an EOC programme through our OTTER labs** for kids from primary and secondary school.



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# OTTER Labs

We will focus on **plastic waste and recycling** as a common theme to teach STEAM subjects (science, technology, engineering, arts and mathematics) in the EOC programme.



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# Post - OTTER Labs

- 🧠 We will analyse the effect our programme has on the **science performance** of participating students, including their levels of **sophisticated consumption\*** and **scientific citizenship\*\***.

\* **Sophisticated consumption:** *A consumer who has the knowledge and impetus to purchase a product not just based on its price, but on other factors such as its environmental impact or the ethicality of the production process.*

\*\* **Scientific citizenship:** *A citizen who has a sufficient level of scientific knowledge to enable them to make informed decisions, being open to other points of view and revising their individual preference in the light of information and other arguments.*







© Photo: George Milton

- 🗣️ We will consider different **geographical locations and gender differences** of students who participated in the pilot schemes and those who were taught through formal educational methods.



# Guidelines

- 🗣️ We will identify methods for measuring and **accrediting the recognition of Education Outside the Classroom** as a method to acquire relevant knowledge and skills



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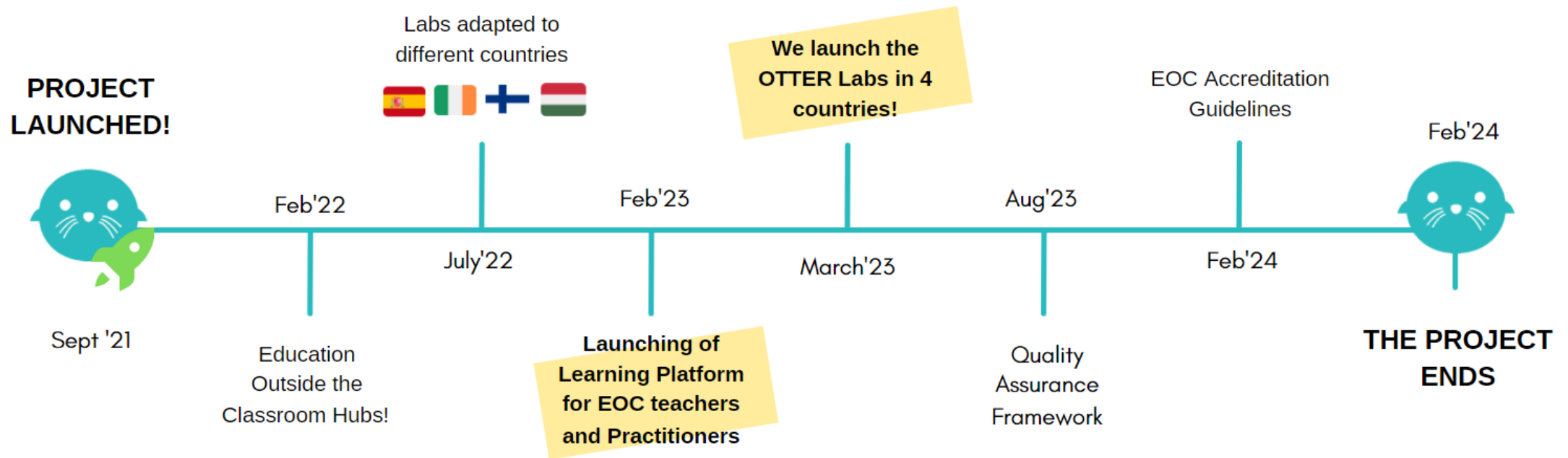
# Toolkit

- 🌐 We will create the Learning Platform with resources for teachers and EOC practitioners to replicate OTTER across Europe!



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# Timeline



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# How can I get involved?

- If you are a **teacher** or an **EOC practitioner**, [join a Hub!](#)
- If you are a **parent** living in Spain, Hungary, Finland or Ireland and would like your kid's school to participate, [get in touch](#).
- If you are a **student** from anywhere in the world, follow us in our social media!



# How can I get involved?

- We also want **policy makers** [joining us](#) to help us push EOC methods as an accredited activity!
- Are you a **researcher** looking to collaborate? [Contact us!](#)
- Are you an **organization / museum/ centre** working with sustainability? [Join the Hub!](#)





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Coming soon!



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THANK YOU!



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[info@otter-project.eu](mailto:info@otter-project.eu)