# Community Science Lab

Introductory module

Student Syllabus









Dear Student,

we are excited that you want to learn about and participate in the improvement of your school and community through Community Science!

Community Science means that people in a community (e.g. a school) use scientific methods to investigate and improve their own community.

In this module you will learn more about community science and you will learn how to develop, conduct, and report your own community science project for school improvement and sustainable community development.

### Learning Goals

At the end of this module you will be able to:

- know important concepts of scientific research;.
- reflect on and shape the cooperation in your team by creating helpful group norms and behaviors;
- know and critically reflect on ethical dimensions of human science research and apply ethical research practices;
- select, adapt, and follow specific scientific methods and protocols to collect data;
- store, analyze, summarize, and interpret data;
- share and communicate analysis and interpretation of the data with local community stakeholders and other audiences.

# The OpenEvo Learning Hub



The online Module *Community Science Lab 1* on the OpenEvo Learning Hub will guide you in your learning journey.



To enroll in the module, follow these steps:

- Log in or create an account on the OpenEvo learning hub <u>here</u>.
- You will find the Community Science Lab 1 module <u>here</u>.
- **To enroll as a student as part of a team**, use the *team enrollment key* that your teacher provided you.
- If you are planning to learn **independently** and **individually without a teacher** or mentor, use the enrollment key *CSL1\_stu*

### Module Overview

**1 Introduction to Community Science** First we want to know what motivates you to be part of this project and you get to know some basic characteristics of community science.

**2 School Portraits** You get to know the School Portrait as a helpful tool to organize ideas about school and to find a direction for your community science project.

#### **3 Project Planning**

You plan your project, including developing a research question, identifying methods and participants, and deciding how you will share your results.

#### **4** Research Methods

You will learn more about research methods. You will directly experience a community science method related to school, and practise analyzing results.

#### **5** Project Implementation

Here you find tools and processes to help you implement your project and keep track of all task, including preparation, data collection, and data analysis.

**6 Communication, Reflection, and Next Steps** You prepare the presentation of your study results and experiences and identify next steps in the community improvement cycle.

# School Portrait

There are many things to find out about and improve in a school and in the education system.

The School Portrait is a framework to help organize these different questions and ideas. You will learn about the School Portrait and how to use it to map your knowledge and questions about your school and to identify a focus for your community science project.



# Working better together



Community science involves working in teams and working with the community.

But as you may know from your own experience, working together with others is not always easy or resulting in best outcomes for everyone!

So the ability to cooperate is an important competency of community scientists. In this module, you will also develop your cooperation competency by reflecting on and learning some important concepts and methods to help your project team work together well. These concepts and methods are introduced throughout the module under the heading "Working better together".



### The Community Improvement Cycle

Community Science is about understanding and improving communities. This usually involves several connected phases in a "Community improvement cycle". For example, before improving communities and implementing solutions, we need to first understand what the communities problems and needs are.

As you engage in your project, think about where in the Community improvement cycle you are and which questions and aims you want to - or need to - focus on.

