



LOESS

LITERACY BOOST THROUGH AN OPERATIONAL EDUCATIONAL
ECOSYSTEM OF SOCIETAL ACTORS ON SOIL HEALTH



**LOESS CO-DESIGN WORKSHOP 2:
A MASSIVE OPEN ONLINE COURSE (MOOC)
ON SOIL HEALTH**

22 May 2024

(16:00–18:30 CEST)

TABLE OF CONTENTS

1. INTRODUCTION	3
2. MASSIVE OPEN ONLINE COURSE ON SOIL HEALTH	3
3. AGENDA	4
4. QUESTIONS	5
Session 1: Content and topics to be included in the MOOC.	5
Session 2: Training teachers to design engaging learning activities.	5
5. REFERENCES	5



1. INTRODUCTION

The International co-design workshop **“A Massive open online course (MOOC) on soil health”** invites participants – e.g., teachers, teachers’ trainers, professionals, researchers, experts on soil, etc. – to discuss on the content and activities to include in a MOOC on soil health and its applications in secondary school (i.e., students aged 12 to 18+).

The workshop offers the opportunity to share ideas, experiences, and reflections in an informal, facilitated conversation. The aim of this discussion is to identify suitable content to include in the online course opening in March 2025, which aims to train secondary school teachers on ways to teach soil health in an effective and interdisciplinary way.

The workshop is divided into two sessions. **Session 1** will investigate the content and topics to be included in the MOOC e.g., examples of interdisciplinary educational activities on soil; while **Session 2** will discuss ways to train teachers to design engaging learning activities. Join us in this vital conversation as we explore ways to train teachers on soil education and foster a deeper connection to nature.

Soil knowledge and health hold a crucial role within the **European Green Deal**¹, and they are also important for reaching the **long-term vision for the EU’s rural areas**² as well as the objectives of the **EU Soil Strategy 2030**³. In the realm of education, the integration of soil into curricula is crucial, offering students immersive experiences that inspire curiosity about soil and foster a sense of environmental awareness.

The workshop is organized by **LOESS**⁴, a Horizon Europe project under one of the EU Mission areas – **A Soil Deal for Europe**⁵. The goal of LOESS is to raise awareness on the importance of soil and its functions and to increase soil literacy across Europe. All in all, LOESS will boost soil literacy by building an educational ecosystem that enhances capacity building, knowledge exchange and peer-to-peer learning.

2. MASSIVE OPEN ONLINE COURSE ON SOIL HEALTH

While soil education varies across European countries due to differences in educational systems and priorities, there is a general trend towards integrating soil-related topics into school curricula. There is also a “need for educational programmes that create awareness of the role of soil in the life of individuals, communities and European society as a whole” (van der Putten, et al., 2018: 28). Despite progress in certain countries, achieving comprehensive soil education across Europe faces challenges. One significant issue is the lack of consistent

¹European Commission – A European Green Deal: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en.

²European Commission – Long-term vision for the EU’s rural areas up to 2040: https://rural-vision.europa.eu/index_en

³European Commission – Soil Strategy for 2030: https://environment.ec.europa.eu/topics/soil-and-land/soil-strategy_en

⁴LOESS – Literacy boost through an Operational Educational Ecosystem of Societal actors on Soil health: <https://loess-project.eu/>

⁵European Commission – A Soil Deal for Europe: https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/soil-deal-europe_en



approaches to teaching soil science across different regions and educational systems. Moreover, the level of emphasis placed on soil education varies, with some regions prioritizing it more than others. This inconsistency highlights the need for increased collaboration and coordination at the European level to promote soil literacy and awareness among students and educators.

LOESS aims at overcoming these obstacles by proposing an online training course for teachers co-designed with the support of different stakeholders across Europe. Hence, in this international co-design workshop, we will exchange ideas, trying to identify suitable content and best practices to successfully train schoolteachers on soil health and its application to teaching. The discussions taking place will be analysed and summarised into a document – deliverable D3.6 under Work Package 3 of LOESS – which will lay the ground for the creation of a Massive Open Online Course on soil health opening in March 2025.

The MOOC will be free of charge and run in English on the **European Schoolnet Academy**⁶ platform – it will offer course certification to those participants who successfully complete it. The online course will build the capacity of teachers to design and implement interdisciplinary educational activities on soil health and last 5.5 weeks: during the first 4 weeks, one module with content, activities and (possibly) live events will be opened each Monday; then, participants will have 1.5 week to complete their assignment and peer review those of others.

Participants will be able to go through the content of the MOOC at their own pace but are encouraged to do it week by week. The time required to successfully complete the online course is of approximately 3-4 hours per week, the idea being that participants spend about 20 minutes per day as part of their professional development.

3. AGENDA

Time (CEST)	Session
16:00 – 16:10	Welcome, tour de table and brief presentation on LOESS
16:10 – 17:10	Session 1: Content and topics to be included in the MOOC. Introduction (5-10min) Discussion by all participants
17:10 – 17:20	Break
17:20 – 18:20	Session 2: Training teachers to design engaging learning activities. Introduction (5-10 min) Discussion by all participants
18:20 – 18:30	Summary by EUN

⁶ European Schoolnet Academy: <https://www.europeanschoolnetacademy.eu/>



4. QUESTIONS

Session 1: Content and topics to be included in the MOOC.

1. What content and topics should the MOOC tackle to successfully train teachers on soil health and its application to school?
2. How can teachers be successfully trained to employ an interdisciplinary approach to teaching soil health?
3. Explore strategies to train teachers on ways to make soil health education relevant to local context, while linking educational activities to national curricula.

Session 2: Training teachers to design engaging learning activities.

1. How can teachers be successfully trained to design engaging and cooperative learning activities on soil health?
2. Explore strategies to train teachers on ways to jointly design and conduct educational activities on soil health.
3. Explore strategies to train teachers on ways to design educational activities on soil health that emotionally engage students.
4. Explore strategies to train teachers on ways to design experiential learning opportunities, such as outdoor field trips, hands-on soil sampling activities, and citizen science projects, on soil health.

5. REFERENCES

van der Putten, et al., (2018). Opportunities for soil sustainability in Europe. (EASAC policy report; No. 36).

