

Teaching Environmental Awareness with Smart IoT Planters in Learning Spaces [TEASPILS]

Intellectual Output 2

Extended report

SPOC and open online course to foster environmental awareness in schools



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Project information

Acronym:	TEASPILS
Title:	Teaching Environmental Awareness with Smart IoT Planters in Learning Spaces
Agreement number:	2020-1-ES01-KA203-082258
Sub-programme or KA:	KA203 – Strategic Partnerships for higher education
Project website:	www.teaspils.eu
Project e-mail address:	teaspils.euproject@gmail.com
Twitter:	@eu_teaspils
Project period:	Starts on 01/09/2020 and ends on 31/08/2023
Project manager:	Dr. Bernardo Tabuenca
Project coordinator organisation:	Universidad Politécnica de Madrid (UPM)
Consortium Partners	Doukas school (DOU) Hochschule für Agrar und Umweltpädagogik (HAUP) Open University of Cyprus (OUC) Pädagogische Hochschule Wien (PHW) Universidad Pompeu Fabra (UPF)
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SPOC and open online course to foster environmental awareness in schools

This IO consists of 2 main parts. In the first phase, a small private online course (SPOC) for pilot participants was developed. In the second phase of the project the SPOC was transformed into an unguided self-study open online course.

In the methodological conception, great importance was attached to linking theory and practice. The development of "knowledge and skills" and the ability to reflect, analyse and evaluate are high-quality "learning outcomes" of this educational offer. Diversity and gender competence are focused on in all sessions so that graduates in their role as multipliers can contribute to a social, ecological and economic balance both in their professional sphere of influence and in their personal living space.

1st phase: SPOC:

Partners created a course to promote environmental awareness using plants and ambient technologies in schools. In the first instance, a small private online course (SPOC) intended to support the study participants in their tasks during the later pilots.

The SPOC was designed in a blended learning format, combining 5 online synchronous sessions with asynchronous learning in between them. The online sessions took place in the period from September 2021 to January 2022.

General Informations

Here is the official project website:

<https://www.teaspils.eu/>

Dates of the Online-Units:

- Session 1: 07.09.2021: 14:00 – 16:00 CET
- Session 2: 20.10.2021: 16:00 – 18:00 CET
- Session 3: 17.11.2021: 16:00 – 18:00 CET
- Session 4: 15. 12.2021: 16:00 – 18:00 CET
- Session 5: 19.01.2022: 16:00 – 18:00 CET



Info Teaspils



About the TEASPILS teacher community platform



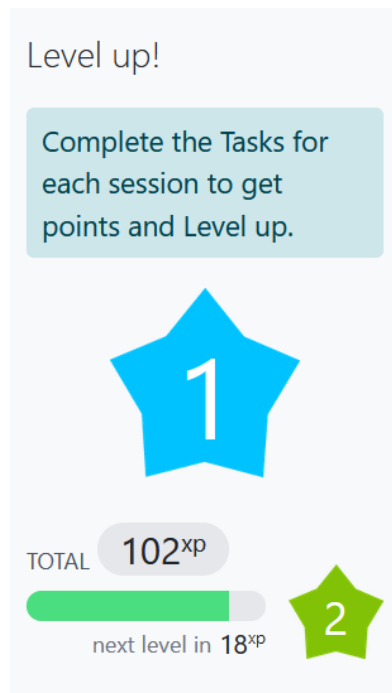
Certificate of Completion

Based on the predefined learning objectives, each session was assigned to a specific topic and consisted of short presentations by different experts and reflection and discussion phases to enable an exchange of experiences between the international participants.

Topics of the Sessions:

- Influence of plants
- Plants/plant requirements/planters
- Plants - Humans – Society
- Pedagogic action research
- Planters, Sensors and visualisation technology

The presentation documents and accompanying material were made available on the moodle learning platform. For completing the SPOC and getting a certificate the participants had to complete various tasks such as developing learning/teaching settings, observation diaries etc. between the online sessions. Each topic was concluded by a self-learning test to consolidate the learning success.



Gamification elements, such as badges, were integrated throughout the SPOC to increase learning motivation.

The SPOC was rounded up at the live face-to-face meeting in Vienna in June 2022 (C1 LTT Workshop).

Advertising: to make sure, that there were participants for all the partner countries, advertising material such as info sheets and flyers were prepared.

"TEASPILS" information sheet

"Teaching Environmental Awareness with Smart IoT Planters in Learning Spaces"

In the project, pupils learn to take responsibility for plants by cultivating indoor plants. They carry out measurements and observations and recognise connections between plants, nature or environment and humans. Plants and measuring instruments are provided to the participants.



Target group: Educators of school classes from primary level

Target: Strengthening environmental awareness, building responsibility among students, showing connections in the natural sciences, improving the social and room climate through plants in classrooms

Duration: September 2021 till January 2022

Where: Greece, Spain, Cyprus and Austria as well as ONLINE

Exchange for educators: national meetings as well as a large international exchange in Vienna



Image: Freepik.com



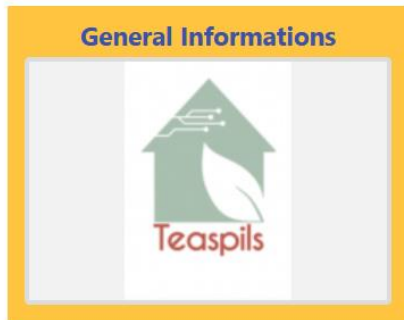
A total of 26 participants from took part in the SPOC.

2nd Phase: Self-guided open online course.

<https://fortbildung.haup-lp.at/course/view.php?id=4596>

In this project phase, the content of the earlier SPOC is shared openly through an open licence and access to the course is opened up to everyone. This open online course not only serves the continued exploitation of the developed materials and methods, it also enables self-study and deep learning of the topic area. Teachers may use the material in their own settings.

The open online course consists of 5 modules, whereby all modules (influence of plants, planters, plants - humans – society, pedagogic actions research, plants, sensors & visualisation technology) have the same structure, and, thus, easy access to content has been created.



Module 1: Influence of plants



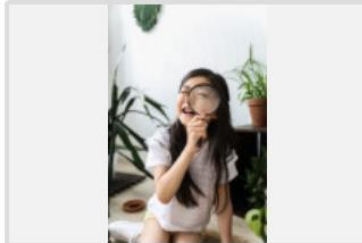
Module 2: Planters



Module 3: Plants - Humans –...



Module 4: pedagogic action...



Module 5 : Plants, Sensors &...

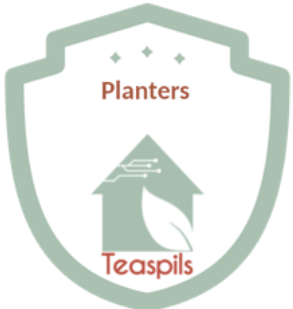
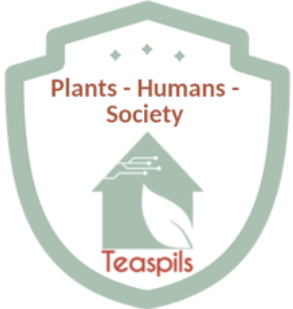


At the beginning, the **learning objectives** are presented, followed by the **compulsory materials** such as documents, presentations and videos. In the next chapter, the **tasks of the modules** are explained.

In some modules, optional **deepening materials** are offered.

For attending the open online course, there are two options. First, access is possible without registration as a guest. All content can be used, but no certificate of completion is possible. In order to receive a certificate of completion, registration is required.

The online course is also equipped with gamification elements. Therefore, A new set of badges based upon the updated module titles was developed.

	Planters	Complete the Session 2 - Self-Assessment quiz
	Plants - Humans – Society	Complete the Session 3 - Self-Assessment quiz

In order to check the tasks for those participants willing to make the whole certificate, the activity completion criteria based on each module tasks were fixed. Then, the badges were combined with the tasks for each module. Participants get a badge automatically when they complete the relevant module tasks. After completing all module tasks, the participants get a certificate of completion which is issued automatically.



Link to the learning objectives of the SPOC:

<https://docs.google.com/spreadsheets/d/1FpovApDseAck9IJWsczCKViqbSqXQC2l/edit#gid=1815335097>

Link to the open online course: <https://fortbildung.haupt.at/course/view.php?id=4596¬ifieditingon=1>

Hochschule für Agrar- und Umweltpädagogik English (en) Q You are currently using guest access (Log in)

Open-Online Course - TEASPILS

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Latest badges

You have no badges to display

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"Teaching Environmental Awareness with Smart IoT Planters in Learning Spaces"

Dear Teachers, Lecturers and Educators! Dear Learners!

We appreciate your interest in our innovative online-course. In this course you will learn how technology and plants fit together in classroom settings. In **5 different modules**, you get background information about plants and find ideas how they can be used in classrooms. In addition, you will receive methodological inspirations for teaching and learning settings.

Structure of the modules

- Each module consists of **compulsory materials** such as documents and films.
- After studying these, you can take a **quiz** after each module.
- When you have successfully completed all modules, you can print out your **certificate of participation**.
- In some modules, optional deepening materials are offered.


Note: To receive the certificate, please register at the learning platform. The certificate can only be issued if all tasks have been completed under your own account.


We wish you interesting and successful experiences in the big garden of TEASPILS.


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Target group: Teachers of different levels

Target: Strengthening environmental awareness, building responsibility among students, showing connections in the natural sciences, improving the social and room climate through plants in classrooms

 Ankündigungen



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Latest announcements