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

### **Multiplier Event report**

**Organiser: Open University of Cyprus (OUC)** 

### E4: National conference in plantsupported learning and digital skills





The European Commission support for the production of this publication does not constitute an endorsement of the contents, which reflects the views only of the authors, and the Commission cannot be held responsible for any use, which may be made of the information contained therein.

#### **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: <u>www.teaspils.eu</u>

Project e-mail address: <u>teaspils.euproject@gmail.com</u>

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)

Copyright: <u>CC BY-NC-SA 4.0</u>

# E4: National conference in plant-supported learning and digital skills

Date

26/11/2021

**Participants** 

Number of local participants: 33 (Virtual event)

#### Description of the multiplier event

This event was planned as a mid-project input and output event. A host of national stakeholders were invited to actively attend the one-day symposium and listen to expert presentations on green pedagogy, plant appreciation, data competences and the digital agenda in combination with environmental awareness. The event was a pre-hoc activity that aims to connect to a wider range of public stakeholders like education authorities and policy makers, school leaders, teacher educators, teachers, and NGOs active in this field (e.g. Umweltbildung Austria: https://www.ubw.at/), thereby building a community of practitioners that can be further involved in the other phases of the TEASPILS project.

This Multiplier Event presented the current state and the future developments of the innovative work of Project TEASPILS. Since Project TEASPILS explores the utilization of IoT interventions in teaching and learning in Secondary Education, the event was organized in "workshop" format so that those interested could both see demos of project prototypes and also engage with the presenters with practical topics of interest regarding possible interventions.

All TEASPILS partners contributed to the Event with presentations focusing on the different aspects of the Project work. Specifically, Dr Bernardo Tabuenca, the TEASPILS Project Coordinator from the Universidad Politécnica de Madrid (UPM), first provided a general Project Overview and immediately after that he presented for the first time in public, the Smart Internet of Things Planters Prototype, which has various built-in sensors for automatic collection of data in learning spaces. Next, Ariel Ortiz Beltran presented the Pompeu Fabra University (UPF) work on Online Visualization Tools, which will be used to enhance the student understanding of data collected by the environmental sensors in the Planters. The following presentation by Veronica Hager provided an overview of a Moodle-based SPOC Pilot being developed by the University College for Agrarian and Environmental Pedagogy (HAUP) and which will be used by teachers in their class interventions and in the future will evolve into a MOOC. The workshop proceeded with a presentation by the Open University of Cyprus, regarding an emerging Gamification Framework that will utilise digital sensor evidence for environmental awareness and its application in the SPOC pilot. Next, in support of the overall education process, a rounded approach for utilizing Learning Analytics, was provided by Wolfgang Greller, from the University College of Teacher Education (PhWien). Next, in support of expanding the engagement with the Project, Thomas Economou, Elpi Margaritti from Doukas School (DOU), presented their work for building an eCommunity using Moodle, blogs, social media, ildeplus, eTwinning in supporting the exchange of ideas and relevant practices. Finally, before closing the Event, Doukas School also presented the overall pilot design for utilising a Quality Assurance Framework application.

Both OUC and Doukas partners targeted and invited members of all the project's target groups to join and participate in the on-line multiplier event, with a focus on Secondary School teachers. In Greece, Doukas School invited their network of Greek teachers established through annual conferences organised by Doukas and through multiplier events, while OUC communicated the event to Cyprus' policy makers, teachers and students as well as to general public via email and

Teaching Environmental Awareness with Smart IoT Planters in Learning Spaces [TEASPILS] Grant Nr: 2020-1-ES01-KA203-082258

social media.

Therefore, most of the participants were actually secondary school teachers with some University students attending programs in relevant subjects (i.e. pre-service Teachers in Education Programs, Information Technologies, Environmental Studies, etc). All of the participants had very good knowledge of English in addition to their native language, thus ensuring that everyone, from all countries could participate and engage in discussions, adding value to the event, despite the unfortunate Covid-19 circumstances that made it necessary to host it online.

A total of 33 participants registered for the TEASPILS Multiplier Event, and an average of 25 persons were active at any given time .

https://newsedu.eu/2021/05/30/teaspils-moodlemoot-greece-conference/

#### **Force Majeure explanations**

Covid-19 affected. This TEASPILS Multiplier Event was jointly organized by the Open University of Cyprus (OUC) and Doukas School (DOU) Greece and was implemented online via the MoodleMoot 2021 Greece Conference, after discussion and agreement by the coordinator and all the project partners.

It is noted that two multiplier events were originally planned to take place physically, one in Cyprus and the second in Greece. However, due to the sudden, very fast rise of new Covid-19 cases in Greece and Cyprus during the fall 2021 such events could not take place physically, hence OUC and DOU proposed to the rest of the TEASPILS partners to plan jointly one Event online via the MoodleMoot 2021 conference, so that TEASPILS work could be disseminated. Coorganizing an online Event under these difficult circumstances was deemed important, especially given the fact that both OUC and DOU would be addressing an international audience but mainly they would be targeting Greek speaking stakeholders, such as teachers, education technology experts, policy makers, etc. Therefore, following the partners' agreement, OUC and DOU proceeded with the planning of the Event in coordination with MoodleMoot 2021.