

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

## Multiplier Event report

Organiser: Universidad Pompeu Fabra (UPF)

### E5: International Conference on Environmental Pedagogy and ICT Skills



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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:	<a href="http://www.teaspils.eu">www.teaspils.eu</a>
Project e-mail address:	<a href="mailto:teaspils.euproject@gmail.com">teaspils.euproject@gmail.com</a>
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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# E5: International Conference on Environmental Pedagogy and ICT Skills

## Dates

01/07/2022 to 02/07/2022 - Maker Faire Barcelona  
13/10/2022 - STEAMConf Barcelona  
18/02/2023 - Lego League Barcelona  
16/03/2023 - Cacao Workshop Barcelona  
22/04/2023 - Oracle4Girls Workshop  
06/06/2023 - Joint Technology Enhanced Learning Summer School

## Participants

Number of local participants: **65**  
Number of international participants: **36**

## Description of the multiplier event

UPF conducted several multiplier events along the project duration. This strategy was agreed by the consortium as it provided the following benefits:

- a) Achieving early dissemination and stakeholder feedback of the project outcomes. TEASPILS achieved significant advancements in its first half of the project duration and was ready for their dissemination.
- b) Taking strategic advantage of existing events directed to relevant stakeholders. TEASPILS was able to agree co-location of multiplier events with well-established events happening in Spain (mainly in Barcelona, e.g., Maker Faire Barcelona, STEAMconf conference) and which naturally attract the participation of stakeholders. The synergy achieved in the co-location increased the impact of the events, due to the genuine interest of the participating stakeholders and a larger dissemination of the project existence and concept to the audience of the co-located events (even if they didn't participate in the TEASPILS ME), as they had TEASPILS information in the programs and distributed at the physical events.

We have collected signatures of a total of 65 national and 36 international participants. But more than 150 participants actually participated in the multiplier events, and the information of the project reached an audience of over 1500 people.

**TEASPILS co-located with Maker Faire Barcelona** (1-2 July 2022): The ME included a panel and two workshops. The panel focused on the project concept, outputs and two real experiences in which the TEASPILS dashboard was already used in classrooms. The presentations of the experiences were done by two teachers that participated in the TEASPILS SPOC. One of the workshops was oriented towards educators and academic managers and the other towards children and their families. In the workshops they were able to use practically the ILDE+ TEASPILS and the dashboard.

Info: [https://www.upf.edu/web/tide/news/-/asset\\_publisher/dKNklStbUqGZ/content/id/260051052/maximized#.YthsbRNBy3I](https://www.upf.edu/web/tide/news/-/asset_publisher/dKNklStbUqGZ/content/id/260051052/maximized#.YthsbRNBy3I)

+70 participants (signatures of 38 national, 4 international)

+500 participants at Maker Faire Barcelona



**ME co-located with STEAMConf Barcelona** (13 Oct. 2022): The audience were science, technology, art and mathematics teachers. After the presentation of project outcomes, participants were guided in the design of their own TEASPILS activities. The participants were especially interested in the examples they could explore in ILDE+ and three schools showed interest in participating in pilots.

Info: [https://www.upf.edu/es/web/tide/home/-/asset\\_publisher/Ld8TYIfVJaAm/content/id/260998529/maximized#.Y0nTAexBy3K](https://www.upf.edu/es/web/tide/home/-/asset_publisher/Ld8TYIfVJaAm/content/id/260998529/maximized#.Y0nTAexBy3K)

We collected 18 signatures (18 national). +150 participants at STEAMConf Barcelona were able to see TEASPILS information.

**ME co-located with Barcelona Lego League** (18 Feb. 2023): The project was presented to interested children, their teachers, and families attending the co-located event. An interactive activity encouraged participants to think about the relationship between technologies and environmental awareness.

Info: [https://www.upf.edu/web/tide/news/-/asset\\_publisher/dKNkIStbUqGZ/content/teaspils-events-at-the-campus-of-universitat-pompeu-fabra-in-february-and-april-2023/maximized](https://www.upf.edu/web/tide/news/-/asset_publisher/dKNkIStbUqGZ/content/teaspils-events-at-the-campus-of-universitat-pompeu-fabra-in-february-and-april-2023/maximized)

We collected 8 signatures (national) but many more people participated. +800 participants at Barcelona Lego League.



**ME co-located with Oracle4Girls** (22 April 2023): A practical workshop for girls between 11 to 16 years old was developed based on the TEASPILS technologies. Meanwhile, families received information about the project.

Info: [https://www.upf.edu/web/tide/news/-/asset\\_publisher/dKNkIStbUqGZ/content/teaspils-events-at-the-campus-of-universitat-pompeu-fabra-in-february-and-april-2023/maximized](https://www.upf.edu/web/tide/news/-/asset_publisher/dKNkIStbUqGZ/content/teaspils-events-at-the-campus-of-universitat-pompeu-fabra-in-february-and-april-2023/maximized)

We didn't collect signatures, as (the 12 participating) girls were minors.

+80 participants (and families) at O4G received information about TEASPILS.



12:00-13:30

**Teaspils: plantas y tecnología**

¿Qué sabemos de las plantas? ¿Qué tecnologías conocemos? ¿Cómo podemos conectar las plantas con la tecnología para contribuir a la conservación del medio ambiente?

En este taller nos centraremos en las plantas que nos rodean y conoceremos la tecnología Teaspils, que tiene como finalidad monitorizar las condiciones ambientales de nuestras plantas. Diseñaremos nuestros sensores utilizando prototipos de papel, exploraremos una aplicación que visualiza datos de sensores para comprender las mejores condiciones ambientales para una planta y reflexionar sobre la importancia de las plantas.



**ME for CACAO international visits** (16 March 2023): UPF hosted a visit of international researchers and educational practitioners (field of biology education). As part of their visit, UPF organised a ME devoted to the presentation of the TEASPILS project and the developed ecosystem. Participants discussed the intersection of environmental awareness in learning spaces, technologies (such as ILDE+ platform, the spike, the dashboard) music, and arts.

Info: [https://www.upf.edu/web/tide/news/-/asset\\_publisher/dKNkIStbUqGZ/content/teaspils-event-at-upf/maximized](https://www.upf.edu/web/tide/news/-/asset_publisher/dKNkIStbUqGZ/content/teaspils-event-at-upf/maximized)

23 international participant signatures



CACAO event



JTELSS event

**ME co-located with JTELSS Summer School (17th EATEL Summer School on Technology Enhanced Learning)** (6 June 2023): Project results were presented in a workshop for educational technology researchers. They were able to use the outputs and engage in discussions about the potential of TEASPILS to enhance learning and how this type of technology and related conceptual approaches can evolve in the future.

Info: [https://www.upf.edu/web/tide/news/-/asset\\_publisher/dKNkIStbUqGZ/content/tide-with-teaspils-at-the-jtelss-summer-school/](https://www.upf.edu/web/tide/news/-/asset_publisher/dKNkIStbUqGZ/content/tide-with-teaspils-at-the-jtelss-summer-school/)

10 participant signatures (1 national, 9 international).