

Drones4STEM at a glance

The project **D4STEM** aims to support school education organisations in 4 countries (ES, GR, SI, IT) and across Europe in their efforts to deliver teaching methodology for helping students to develop relevant skills in STEM (science, technology, engineering and mathematics). The consortium includes 2 Secondary Level VET Schools, 1 H.E.I., an adult learning organisation and a European Digital Learning Network. All organisations will benefit from the expertise in different educational contexts, professional profiles and competences.

D4STEM aims to:

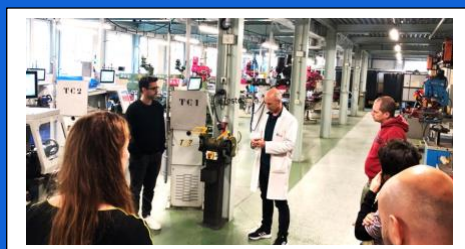
- A) introduce a low-cost educational drone platform easily programmable e.g. through Scratch;
- B) develop an e-learning course for relevant STEM activities;
- C) develop specific use cases and educational materials for carrying out project-based learning activities based on the advanced uses of drones in domains like smart farming, environmental monitoring and restoration;
- D) promote teaching leveraging the advanced STEM methodology for helping students to develop relevant skills.

D4STEM will deliver an easily programmable and customizable educational drone platform. 3 use cases with all supporting educational material and HW and SW designs will be developed to help teachers develop engaging STEM activities to reach the D4STEM educational goals. Training on the methodology will be delivered in all partner languages through an e-learning course. All results will be piloted, evaluated and demonstrated through impact creation activities and an **EU community of practice**.

KICK-OFF MEETING, Derio (Spain), 12th-13th March 2024

Drones4STEM project got underway with its first Transnational meeting, hosted by the coordinator Politeknika Txorierri, in Derio (Spain). The TM was an opportunity to discuss the need analysis results and to draft the blueprint/plan for the development of the use cases, including discussions about pedagogy, structure and HW/SW/drone technology to be used.

First planning for the E-learning training for teachers was established, while the Quality management plan, as well as the Dissemination and exploitation plan have been validated by the consortium.



The D4STEM Community of Practice is now open!!! We are waiting for you!



The CoP has the ambition to act as a European “think tank”, where best practices, contemporary developments, lessons learned, cutting edge tools for Drones and STEM education will be shared. The European CoP will provide a dynamic tool for dissemination and stakeholders’ engagement.

The CoP want to be an open innovation space for collaboration at EU level:

- To provide teachers with the necessary knowledge and skills to operate and program drones for educational purposes.
- To increase the awareness of drone technology and its applications in secondary education.
- To promote the use of drones as a tool for teaching STEM subjects, including computer programming, mathematics, and engineering.
- To foster creativity, critical thinking, and problem-solving skills among teachers and students through drone-based projects.

Becoming a member is easy!!!! Just go to:
<https://www.facebook.com/groups/1150832056245424/>

We’re waiting for you!!!

D4STEM Project partners....

POLITEKNIKA TXORIERRI

Politeknika Txorierri is a subsidised High School for **Science and Technology** and Vocational Education and Training (both EQF levels 4 and 5) in the Spanish Basque Region. Each year the school provides education for over 400 full time students and 1000+ adult part time learners with a staff of 50 people. The centre **specialises in:** Environmental Education, Telecommunications, Network Management and Informatics, Robotics, Sales and Commercial Management, Mechanical Design and Mechanical Production. Politeknika Txorierri also provides **specialization courses** for HVET students (EQF level 5) in two different fields:

- Digital Transformation (Industrial IoT and Cybersecurity)
- Advanced Robotics (Collaborative and Autonomous Robots and Artificial Vision)

Txorierri also has a Career Guidance department that provides our students with educational and professional support, as well as entrepreneurial support. The center is also an authorised Employment Agency.

Politeknika Txorierri operates as a Cooperative made up of families, companies and local councils, and staff. Politeknika Txorierri is part of the **Mondragon Group** with a strong emphasis on community and cooperative ethics. Politeknika Txorierri also collaborates closely with **TKNIKA**, and has participated in many innovative projects with a strong emphasis in providing STEAM and digital/technological education.

Txorierri has implemented a **collaborative learning model based on challenges** called BATXILAB. Students from the same field achieve their learning outcomes by working together in teams to solve a challenge that resembles a problem in real life.

STAY TUNED!



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