

# **Empowering girls in STEAM through robotics and coding**

#### **About**

RoboGirls is an Erasmus+ project [2020-1- HR01-KA201-077760] launched last December that aims to empower and encourage girls to actively engage in STEAM activities in order to narrow the gender gap and consider a relevant STEM career in the future. To achieve that, the project aspires to build the capacity of educators to implement hands-on STEAM activities focusing on the use of robotics, coding and other technological tools following gender equality approaches.

**Innovation** is a priority of the project since it promotes gender equality in the digital sector and enhances the interest and excitement of girls in the STEAM field (Science, Technology, Engineering, Arts, Mathematics), through the use of innovative educational approaches and the use of gamified technological tools.



In the framework of the project and in order the objectives to be fulfilled, the following will be developed:

- A comprehensive Guide for educators in STEM education and inclusive approaches
- A repository of rich pedagogical material for primary and secondary school teachers and students (experiential workshops, lesson plans etc.)
- A STEM career choice simulator for girls
- A professional development programme for educators (MOOC)
- A report with a collection of best practices, challenges and suggestions emerged from the project

## **Kick-off meeting**

The project was officially launched on 17th December 2020 with the participation of all partner countries (University of Zagreb – Croatia, CARDET-Cyprus, Regional Directorate of Primary and Secondary Education of Attica –Greece, University Autonoma Madrid – Spain, The Rural Hub CLG – Ireland, INNOVADE LI LTD -Cyprus). The meeting took place online, due to the pandemic, but all project partners were delighted to commence this ambitious project and used our time together to lay the foundation for the upcoming research and investigation actions.



# **RoboGirl's Committee**

In all partner countries, a committee of teachers, students and experts has been established who will be actively engaged and support the project activities ensuring high-quality of the outputs. If you would like to get involved in your local committee and feel you have a contribution to make, please get in touch with your local partner.

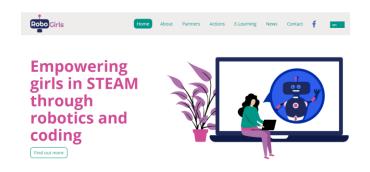
# **IO1 - Comprehensive Guide for Educators**

So far, partners have been working on the development of a Guide on theoretical and practical knowledge about STEAM education and inclusive practices. It will be comprised of three parts. Part I: Theoretical/Research level, Part II: Inquiry-based process, Part III: Practical Activities. To this end, European and national desk research per partner were carried out. Following desk research, each partner-country conducted focus group discussions with STEM experts, teachers and academics/researchers in order to collect grassroots information on: a. The factors which can contribute to the encouragement or discouragement of women's participation in the STEM professions, b. Which educational practices can promote girls' participation in the STEM disciplines. The Guide will be accessible through the project's e-learning platform.

### What's next?

We are now starting to create an E-Learning Toolkit and Open Educational Resources that will include materials for experiential workshops and thematic school days together with ready-to-implement lesson plans. Alongside the learning material, an interactive career choice simulator for girls will be designed. A crucial part of the learning resource will be the pilot implementation with teachers, students and key stakeholders in order to test and validate all of the materials that we will develop. The E-learning Toolkit is expected to be available on the e-learning platform in Spring 2022.

For more information, visit our website: <a href="https://robogirls.eu/en/">https://robogirls.eu/en/</a>



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### Consortium



University of Zagreb (Croatia)



Centre for Advancement of Research and Development in **Educational Technology (Cyprus)** 



**Regional Directorate of Primary** and Secondary Education of Attica (Greece)



Madrid (Spain)



The Rural Hub CLG (Ireland)



INNOVADE LI LTD (Cyprus)