# prof. MARIA GEORGANTOPOULOU



EDUCATOR

#### **HEART Project**

(Help educators to teach through robotic tools) no. 2021-1-PL01-KA220-ADU-000035164
Database and Guide on Educational Robotics

#### WWW.HEARTROBOTICSPROJECT.EU

### • Please, introduce yourself

My name is Maria Georgantopoulou. I was an IT teacher in the high school level (ages between 15-18) for 20 years and now I am teaching in a Secondary School in Katerini (ages between 12-15). My bachelor degree was in Computer Science and my Master's degree was in Informatics and New Technologies in Education by the department of Educational & Social Policy.

### • Describe your work regarding robotics in the adult education.

During my Master's degree i created a Moodle course for teachers in high schools. The course was providing analytic information to the registered teachers, on how to program an Edison robot using various scenarios, from the beginners' level to a more experienced programmer.

The teachers were given an Edison robot so they could execute the proposed scenarios in the classroom. In the Moodle platform they could find various tests and exercises that would help them fully understand the programming of the robot and also test their level of knowledge.

# • Could you give some more information about the Edison robot?

The Edison robot is a programmable robot designed to be a complete STEM teaching resource for coding and robotics education for students from 4 to 16 years of age. It does not need an extra kit to be fully functional. It's a very cheap device and it is compatible with the lego tools and kits. The manufacturer provides three manuals for the user and software to program the robot.

#### • Did the trainees worked with the robots?

Yes they did. At first I had a couple of devices to share that had been bought by my school. During the thesis I translated the Edison software in Greek so the manufacturer sent us a compliment 10 more devices to use in my project. In that way every teacher could work with the device freely.

## • How long did it take for you to create these lessons.

Creating the Moodle platform and the educational scenarios was a task that took me about 4 months to be completed.



# prof. MARIA GEORGANTOPOULOU



EDUCATOR

#### **HEART Project**

(Help educators to teach through robotic tools) no. 2021-1-PL01-KA220-ADU-000035164
Database and Guide on Educational Robotics

#### WWW.HEARTROBOTICSPROJECT.EU

## • What skills do you believe your trainees obtain?

First of all they had their first experience with robots and programming and I think that through this course they build their confidence to use these tools for teaching. Also in that way they developed their mathematical and computational thinking which is very important especially for teachers that are not in science projects. They had to engage in this course on their own time and following their own pace something that helped them develop theirtime-management skills and understand the way their students could engage in such learning environments.

### • Did you face any problems with the Edison robot?

Well, the problems were similar to any other robot programming. This is a rather cheap device and the communication between the programmer's instructions and the response of the robot (sensors' response) was not ideal all the time.

## Did your trainees face any problems with the whole project?

The robots' programming and the learning curves that they had to be engaged proved rather easy for the trainees that were fully engaged to the project and rather blurry for those that were not so self-motivated.

# • Is your project suitable for a non- expert audience?

Yes, it is suitable. I had trainees in the Greek literature that followed the course successfully.

# • The trainees teach their students these scenarios given by you?

This is something i cannot confirm. I don't know what the trainees have done with my course.

## • Is it possible for you to share the context with us?

Yes, I will be happy to see my work being of use in a European level.



THIS PROJECT HAS BEEN FUNDED WITH SUPPORT FROM THE EUROPEAN COMMISSION. THIS PUBLICATION [COMMUNICATION] REFLECTS THE VIEWS ONLY OF THE AUTHOR, AND THE COMMISSION CANNOT BE HELD RESPONSIBLE FOR ANY USE WHICH MAY BE MADE OF THE INFORMATION CONTAINED THEREIN

# prof. MARIA GEORGANTOPOULOU



EDUCATOR

### **HEART** Project

(Help educators to teach through robotic tools) no. 2021-1-PL01-KA220-ADU-000035164
Database and Guide on Educational Robotics







