



## Digital Tools and Programming in Future Classrooms

Erasmus+ Project 2020-1-PL01-KA229-082139\_1



### Learning Design for: “Bringing robots to life”

#### Context

**Topic:** Design a simple maze and program mBot to navigate

**Total learning time:** 3 hours

**Designed learning time:** 3 hours

**Size of class:** 30

**Description:** By the end of the session, students will learn what movements mBot can do and what different programming blocks you can use to make mBot move

**Mode of delivery:** Classroom-based

#### Aims

- Discover mBot and its software and learn how to drive the robot with precision.
- Design a simple maze and program mBot to navigate

#### Outcomes

- To programme your own robot through a self-made maze

#### Teaching-Learning activities

##### ❖ Organising groups:

*5 minutes*

#### Step 1: Warming up

1. Robots in everyday life
2. Getting to know the mBot

## **Step 2: Hands on**

1. Getting acquainted with the different programming blocks of the mBot
2. Recreating and testing some programming examples to control the mBot

## **Step 3:**

1. Trying it out

It's time for the students to put their mBot to work. To do this the students have to draw a maze on a A3 sheet of paper for your mBot to drive through

## **Step 4: Showtime**

Showing what you did with the robot in your groups.

Soft science team

The Project Coordinator,

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