ROBO STEAM SEN

Training SEN Teachers to Use Robotics for Fostering STEAM

Context

Our current society demands professionals with XXI century skills. STEAM disciplines have shown to be especially relevant to facilitate their acquisition. However in such disciplines inclusion of students with intellectual or developmental disabilities (IDD) is very difficult.

Aims

- Understanding disabled students needs and adapting robotics and active learning methodologies to their different disabilities;
- Defining training programs for teachers so they can make adaptations to personalize the learning of students with IDD;
- Developing a community of practice supported by a technological ecosystem to provide a meeting point for teachers and decision makers about how to succeed in STEAM Education for IDD students.

Activities

The following activities have been implemented:

- Creation of a taxonomy for classifying resources addressed to students with IDD;
- Development of a user model to personalize learning paths;
- Reviews of resources and courses for teachers;
- Preparation of workshop models to spread the results beyond the project;
- Creation of a technological ecosystem to support a community of practice in the topic

Results

The main project deliverables are:

- A database of tools and resources to provide the knowledge to facilitate adapting robotics and active learning methodologies for different IDD
- An online course for teachers willing to make use of technologies applied to STEAM subjects for disable students
- A Community of Practice to share ideas on the project topic