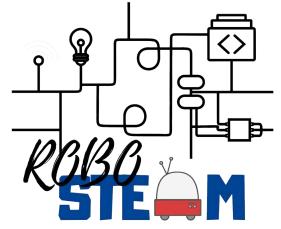


Co-funded by the Erasmus+ Programme of the European Union





# **RoboSTEAM Project** 2018-1-ES01-KA201-050939

Camino Fernández Llamas Miguel Ángel Conde González Francisco J. Rodríguez-Sedano Universidad de León May 31<sup>st</sup>, 2019

- Summary of the work in progress
- Dissemination Plan
- O2. A4 and Piloting
- Managerial issues
- Karlsruhe meeting dates
- Questions





- Summary of the work in progress
- Dissemination Plan
- O2. A4 and Piloting
- Managerial issues
- Karlsruhe meeting dates
- Questions





# Work in Progress

#### • O2. A1. – Analysis of the existing PD&R

- 260 papers
- Inclusion and Exclusion finished
- Data extraction
- O2. A2. Definition of competencies related requirements depending on age and cultural contexts
  - Still missing Finnish answer
  - Only two instruments have been uploaded
  - Importance of this task





# Work in Progress

- O2. A3. Identification of the contexts to be tested
  - Only one answer
  - We need at least one context per partner
  - This is critical in order to understand which are the contexts where the pilots will be carried out





- Summary of the work in progress
- Dissemination Plan
- O2. A4 and Piloting
- Managerial issues
- Karlsruhe meeting dates
- Questions





# **Dissemination plan**

- Dissemination Plan
  - Image upload
  - Next steps?





- Summary of the work in progress
- Dissemination Plan
- O2. A4 and Piloting
- Managerial issues
- Karlsruhe meeting dates
- Questions





### O2. A4

• O2. A4. – Design of Open Hardware Kits to be applied during the learning challenges. Definition of some PD&R kits taking into account the competencies that students should acquire and the best way to facilitate this acquisition taking into account the socioeconomical contexts where challenges take place.





# O2. A4 and Piloting

- Kits to be tested during the pilots
- Pilot phases
  - Phase 1 (June 2019 February 2020)
    - 5 testing contexts
    - Diagnosis phase
    - 4 Challenges
    - Kits to address these challenges
    - Carry out the pilot
    - Measure results
      - Experimental vs control group
      - Time, Grades, People involved, CT and STEAM acquisition





### **CBL** Phases







### Two type of challenges in our context

- "Nano Challenges are shorter in length, focus on a particular content area or skill, have tight boundaries and are more teacher directed. The Learners typically start with the Challenge without identifying a Big Idea or Essential Question. The process includes the Investigation and Act phases, but at a significantly lower level of intensity and often stop short of implementation with an external audience. Typically Nano Challenges are used as scaffolding leading to more significant Challenges or during longer Challenges to address specific concepts"
- "Mini Challenges widen the boundaries and provide Learners with an increased level of choice and responsibility. An increase in duration (2- 4 weeks) allows the Learners to start with a Big Idea and work through the entire framework. The research depth and the reach of their Solutions increases and the focus can be content specific or multidisciplinary. Taking a "show me what you can do" perspective, Mini Challenges are good for intense learning experiences that stretch the Learners and prepare them for longer Challenges"





### This means...

- Definition of diagnosis tool
- Definition of the type of Challenge to carry out
- Definition of the possible kits to apply
  - Open?
  - Focused in solving the challenges
  - Mixed?
- Describe both kits and challenges
- Planning and implementation the action





# This gets more complex in Pilot2

- Same activities than in Pilot 1
- Same students' groups are involved in the challenges
- Students can choose the instruments, methods and tools from other socioeconomic contexts present in RoboSTEAM environment
- Analyzing how PD&R kits work in a different socioeconomical context
- Evaluation
  - Challenges' granularity





- Summary of the work in progress
- Dissemination Plan
- O2. A4 and Piloting
- Managerial issues
- Karlsruhe meeting dates
- Questions





- Summary of the work in progress
- Dissemination Plan
- O2. A4 and Piloting
- Managerial issues
- Karlsruhe meeting dates
- Questions





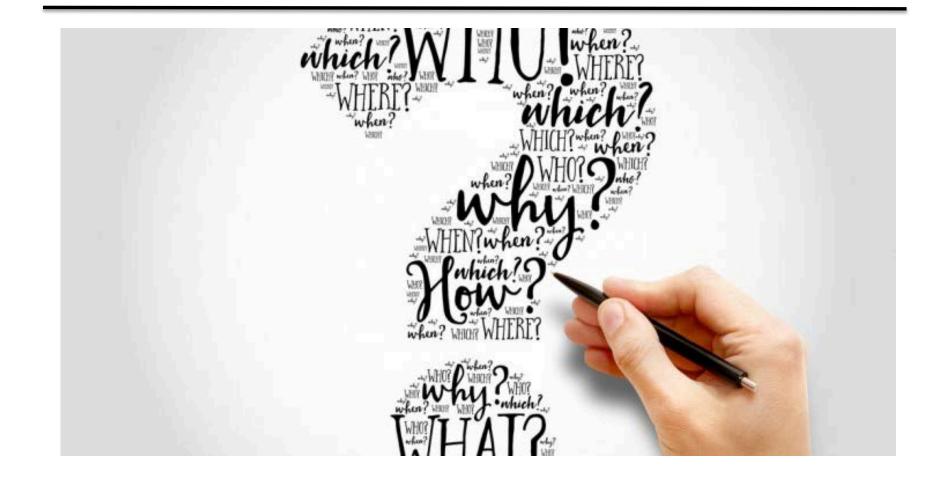
# Karlsruhe Meeting

- Problem with dates
- Not enough space in the guest house





### Questions



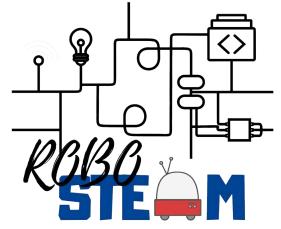






Co-funded by the Erasmus+ Programme of the European Union





# **RoboSTEAM Project** 2018-1-ES01-KA201-050939

Camino Fernández Llamas Miguel Ángel Conde González Francisco J. Rodríguez-Sedano Universidad de León May 31<sup>st</sup>, 2019