

## EduScrum in Action: A PBL journey towards sustainable solutions - Part I

Jorge Mendonça, Lurdes Babo, Carla Pinto







## **Outline**

- What is EduScrum?
- The EduScrum framework
- Applications
  - Linear Algebra
  - Calculus
  - Statistics

















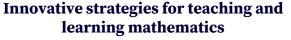






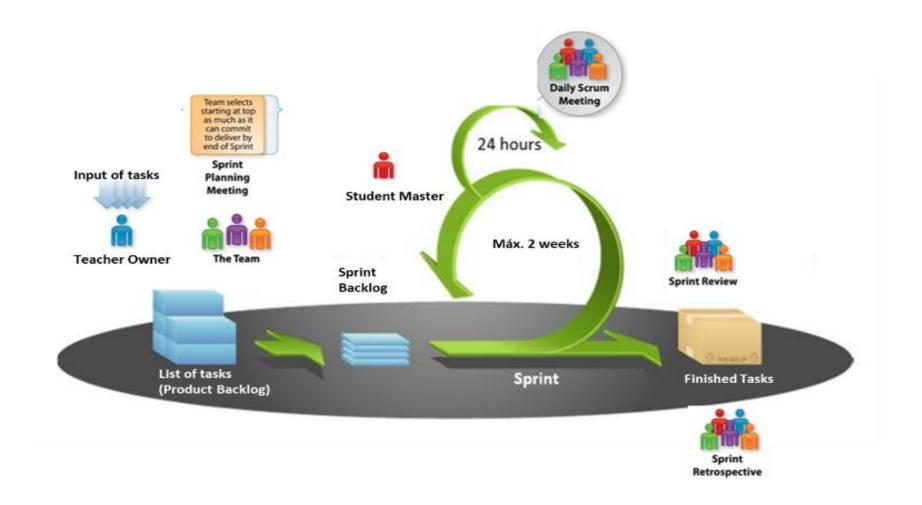






University of La Laguna Tenerife 11th-15th March 24









### Drive-Math ERASMUS project







Pinto, C. M., Mendonça, J., & Nicola, S. (2022). DrIVE-MATH Project: Case Study from the Polytechnic of Porto, PT. *Open Education Studies*, *4*(1), 1-20.





Course	Academic Year	Classes	Tasks
Linear Algebra	17/18	Practical	Exercises
Calculus	17/18 ; 18/19	Practical	Exercises
Computational Mathematics	18/19; 20/21; 21/22	Laboratory	Exercises (Excel environment)
Statistical Models	20/21 ; 21/22; 22/23	Practical	Case studies





#### Work group

- The group is constituted in the first practical class of the semester
- The group consists of 4/5 students
- The teacher provides each group with a record sheet
- Each group work consists on a resolution of a set of exercises provided to students (via Moodle).





#### Work steps

**Step 1**. The teacher provides 3(4) exercises to solve during the class.

**Step 2**. Two students solve the first one and the remaining students solve the 2nd exercise.

**Step 3**. The students who have solved the 1st(2nd) exercise will verify the solution of the exercise 2nd(1st).

**Step 4**. Repeat the steps 2 and 3 until all exercises proposed by the teacher are done.





#### **Steps Evaluation**

The teacher fill the appending table marking 1/0 (right/wrong answer) (The teacher selects one or more groups to reply to questions)

**Step 1** - The teacher selects one group

Step 2 - The teacher ask each one of the group members questions

**Step 3** - If the solution is wrong the group has one more time to solve and present the solution to the teacher

**Step 4** - If the solution is right but the student doesn't know the correct answer, the group must solve another exercise.





#### **WORK GROUP\_**

Number	Name	Signature

#### **SCRUM table Student**

Task	Student solves	Done	Student verifies	Done	Teacher Review





Mini-PBL project					
<u>Teacher</u> data <u>sheet</u> : <u>Teaching</u> Guide					
Title	Global Green Challenge: Analyzing CO2 Emissions				
SDG attended					





