

23rd Gymnasium - Athens

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RoboESL



Robotics-based learning interventions for preventing school failure and Early School Leaving

23rd Gymnasium Athens



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ROBOESL

Preliminary Work

- Meeting & Discussion with colleague teachers about RoboESL course
- First approach with students - WHAT is it about...?
- Various technical arrangements (classroom, lab preparation, time)
- Discover possible early school leaving students (grades, absences, behavior..)
- Student selection (7 people)
- Worksheets preparation

- ⦿ Short introduction of the course (General), questionnaires
- ⦿ Teams formation (3 teams of 2-2-3)
- ⦿ Introduction of Lego System (short demonstration)

The Robo-Rail

- ⦿ What will RoboRail has to do?

...ACTION

- ⦿ Robot construction

The Robo-Rail

- Robot Construction

 - * *Students built the Robots very fast!*

 - * *Further development (video recording & auto camera rotation)*

- Short demonstration of programming

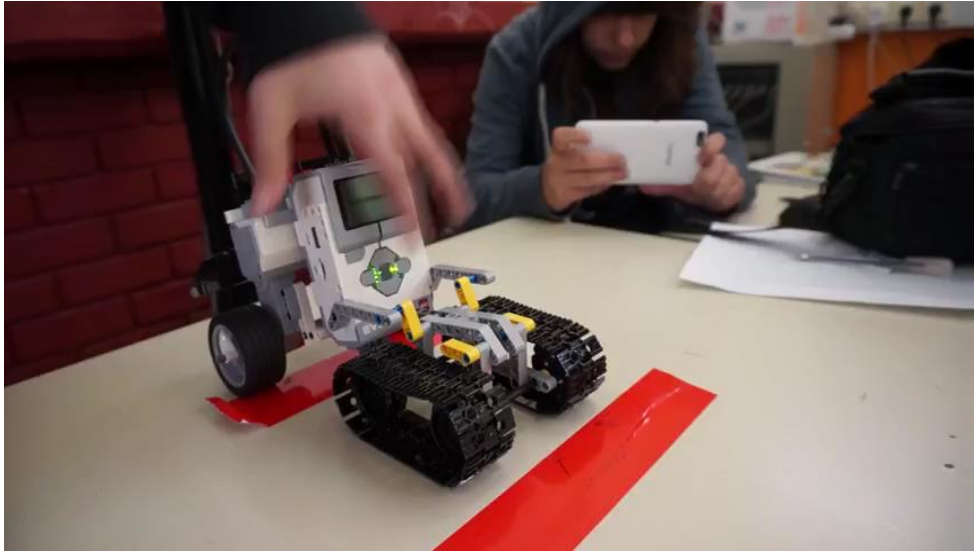
- Commands: MoveSteering, Wait

- Values experimentation

- Conclusion-Discussion

The Robo-Rail - Videos

Day One



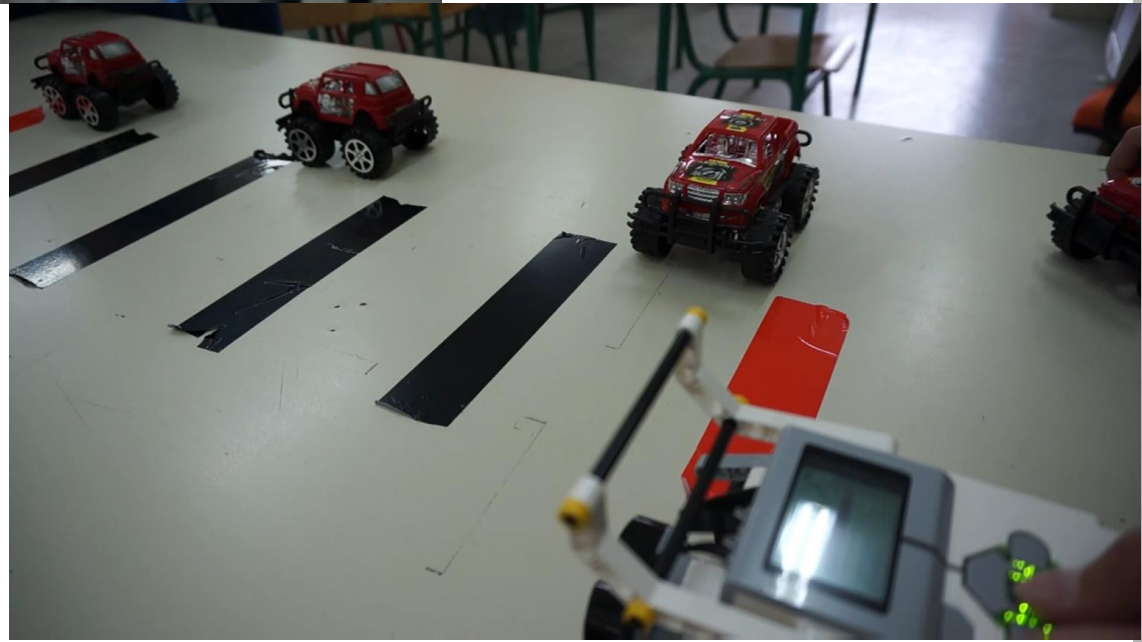
Go to Park

- Objective of Project?
- Demonstration: proximity sensor, turning.

...ACTION

- Robot Modifications
- Use of new Commands (ReadPort, MoveTank)
- Ways of Robot making a turn
- Values experimentation for a 90° turn
 - * ***Students found this challenging!***
 - * ***Extra time (steering ball was not in centre)***

Go to Park - Videos



Day Four

Athens Science Festival

- Maquette construction
- Exhibit students' Work !!



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