RoboPisces: innovative educational ROBOtics strategies for PrImary SChool ExperienceS

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website: https://www.robopisces.eu

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What?

The RoboPisces project is a collaboration among Universities

- Università Politecnica delle Marche
- University College Dublin
- University of Latvia
- University of the Aegean

and Primary Schools

- Istituto Comprensivo "G.Solari"
- MRC St. Paul's Bay Primary
- Osnovna skola Titusa Brezovackog

to integrate Educational Robotics in the classrooms aiming at reinforcing students' school performance in STEAM and their digital competencies.

How?

Two short-term joint staff training events entitled "Educational Robotics to teach IoT and Marine Robotics at the primary school" and "Design of excellent Educational Robotics courses with Open Education Resources" provide teachers with the necessary knowledge and resources to work on the RoboFish toolkit and implement the RoboPisces Educational Curriculum in their schools.

Why?

The project develops a curriculum on educational robotics and marine environment which is implemented in the partner schools using "Basic kits" (first year) and Advanced kits (second year). The Advanced kit is a Fish Robot that students can build and program! Teamwork, imagination, technical skills, digital competencies and knowledge on STEAM must be fully exploited to achieve the goal!

GDPR

Our ethics and research integrity plan ensures that throughout the pilot the identity of each participant will remain confidential and all data collected from this research will be anonymous and/or de-identified.

Prior to signing up, all participants will be fully informed on how their privacy will be protected. The original documents and files will be stored by the project coordinator for 5 years. All student data held for the project on a database will be de-identified, encrypted for security and stored offline. Anonymized data may be requested up to three years after the end of the project.

Benefits

For the students

- enhanced engagement in STEAM subjects learning and enhanced awareness of science and technology themes;
- improved digital skills;
- development of computational thinking;
- reduced school failure;
- increased attractiveness of STEAM-related and blue careers, for boys and girls;
- increased environmental awareness about the ocean themes.

For the School Community

- reinforcement of the positive and proactive approaches towards innovative practices;
- integration of Educational Robotics and Open Educational Resources in primary education;
- matching skills requirement for the labour market (digital economy and blue economy);
- increased awareness of the need to teach all students digital skills, in order to make them able to operate safely and efficiently in a modern work environment;
- preparedness of schools and teachers to adapt educational practice to an ever-changing multicultural school population;
- extended knowledge on the impact of educational robotics approaches.

For School Leaders and Teachers

- reinforcement of the teachers' teaching and technical skills
- improvement of the quality of the teaching methods to ensure technology enhanced learning process;
- raising awareness of education best practices based on robotics approaches, including the European Educational Inclusion Best Practices;
- exchange of good science educational practices at EU level;
- improvement of the teaching performance through friendly competition and good practices shared with the other partner schools.

Contact

All project intellectual outputs and research findings will be publicly available at the project website: https://www.robopisces.eu

For further information, please contact the RoboPisces Consortium at:

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