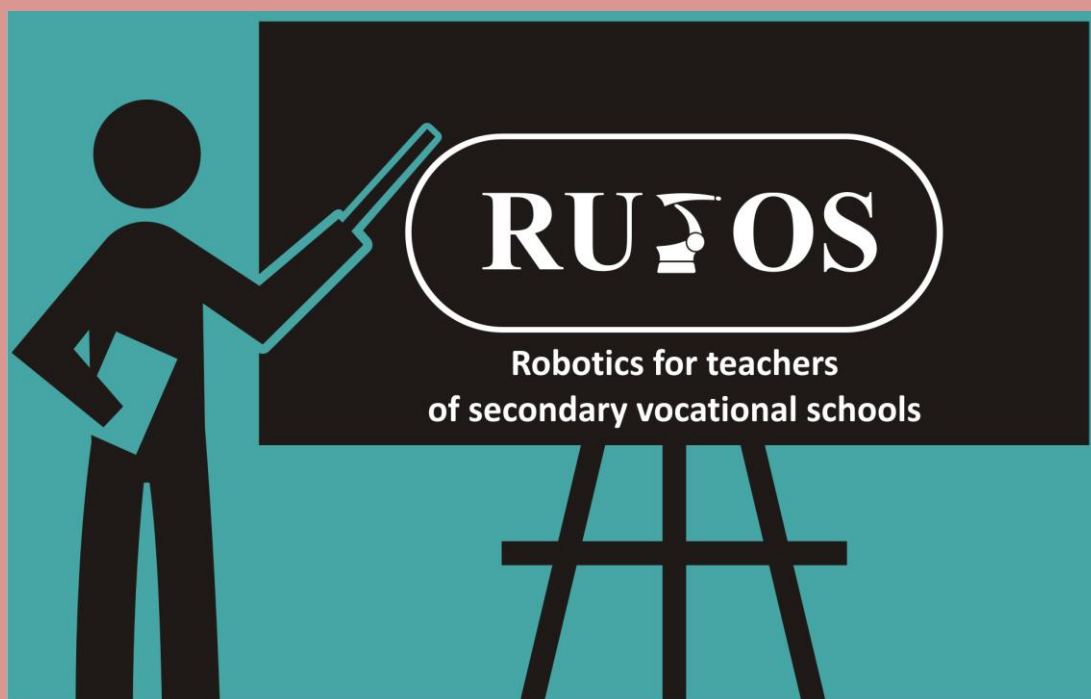




Erasmus+

NEWSLETTER nr. 1



ROBOTICS FOR TEACHERS OF SECONDARY VOCATIONAL SCHOOLS

2015-1-SK01-KA202-008970

Erasmus + program
Program EU for education, training, youth and sports

Project partners



Technical university of Košice, Slovakia
Project coordinator
<http://www.sjf.tuke.sk/kr>



Cluster for Automation Technologies and Robotics
AT+R, Slovakia
<http://www.clusteratr.sk/>



Industrial Research Institute for Automation and Measurements, PIAP, Poland
<http://www.piap.pl/>



University Politehnica of Bucharest, Romania
<http://www.upb.ro/>



Common school of J. Henisch, Bardejov, Slovensko
<http://www.ssjh.sk/>



MANEX company, Ltd., Košice, Slovakia
<http://www.manex.sk/>



Lublin University of Technology, Poland
<http://www.pollub.pl/>

About the Project

The project focuses on education of teachers at secondary vocational schools in the field of robotics, at innovative, high-quality and updated information from robotics. Innovation of project is at creation of study materials for teachers of technical subjects at secondary schools that are created at basis of basic and also at latest knowledge from robotics. Teachers of secondary vocational schools subsequently transformed obtained materials and knowledge into the curriculum subjects respectively as part of related subjects or dual education or ring circuits for robotics competitions. Planned innovative educational materials, ICT and virtual laboratory platform are conceived as an interactive source of knowledge to enable interaction between students and teachers. Engage of specific groups and types of organizations (to strengthen participation of people with special needs in the program.

The main objective of project is creating of study materials for teachers of technical subjects at secondary vocational schools. They should be part of education and training for all students at secondary vocational schools.

Results of project will be:

- ICT learning platform where based on e-learning and will be dealt with current information from industrial and service robotics. The platform will be built for ease of use and intuitiveness with multilingual content for all three countries included into project as well as its overall functionality and usability,
- Virtual laboratory designed as an interactive source of knowledge, allowing interaction between students and teachers. It will consist from 3D virtual models of robotic and automated equipment, with which it will be possible to work in virtual reality. Virtual laboratory will be used to verify practical knowledge gained from a training on ICT platform.

Project activities are intended to improve cooperation in the field of robotics education for teachers at secondary vocational schools as well as students and employers. Another aim of project is to improve cooperation and preparedness for successful graduates of secondary vocational schools and their integration into the workforce of companies.

Planned project outputs and results

Project outputs and its activities are designed from 3 planned intellectual results:

O1) Analysis of requirements of engineering companies for newly recruited employees - graduates of secondary vocational schools,

O2) Set of training materials for training of secondary school teachers in the field of robotics

-Industrial robotics - basic terms and definition including parameters, programming, safety of robotic systems, visual and camera systems for robots, robotic end effectors, sensorial equipment for industrial robots.

-Service robotics - basic terms and definition including parameters, programming, wheeled service robots, tracked service robots, robotic end effectors, walking service robots, flying, swimming, climbing service robots, sensor equipment for service robots, multi-agent and swam systems, development trends in service robotics area

O3) Educational-training ICT platform for the training of secondary school teachers in the field of robotics.

Impact

From project implementation will increase level of education in the field of robotics, which is key for modern automated production. The project will create educational materials which should be part of training and education of all students in secondary vocational schools.

Impact to the target group "Secondary vocational school teachers":

Secondary school teachers will benefit from a project by acquiring latest information and knowledge in the field the industrial and service robotics amend both its own education in this highly attractive, innovative and in great demand field. This will enhance their job, respectively. allow them possibility career progression and better into the labor market.

Impact to the target group "Manufacturing companies":

In longer term of project will have benefits also manufacturing companies that will hire new employees from ranks graduates of secondary vocational schools, because new graduates will have most recent, high quality and innovative knowledge and skills in the field of deployment, management, programming and maintenance of robotic systems.

Impact to the target group "Secondary vocational school students":

Even though project is focused primarily at education of secondary vocational school teachers in the field of robotics, benefit from it will also have students of secondary vocational schools, as a vocational education from robotics at high level, which will provide them latest information from the field of deployment, programming and management of robots and so allowing them at labor market a competitive advantage and possibility of better enforcement.

General impact to the target groups:

- providing opportunities for individuals to develop their full potential and enhance its competitive advantage at labor market,
- ensuring successful implementation for target groups on labor market in that country,
- implementation of lifelong learning and career planning.
- supporting Of target groups by searching a better placement on labor market,
- improving attractiveness and quality of study programs and vocational training programs.

Dissemination activities

Dissemination activities of project include regular updates on project website, where are given current information about events, activities and project meetings. Part of website is except basic project information also final version of processed reports from individual outputs.

Dissemination of project also consists in promoting at secondary vocational schools, in Regional TV at Bardejov, high school magazines and at professional meetings with companies. Dissemination of project results takes place every year in June at conference OPTIROB, and in November at conference ICMERA in Romania, where are prepared articles that were created During solving project outputs.

These academic activities enable the realization of discussions and the implementation of some new directions and methods acceptable for project.

Further information about project at web site:
<http://rusos.sjf.tuke.sk/index.html>

M1 - Kick-off partnership meeting, Košice, Slovakia

The Kick-off partnership meeting was 11.11.2015 in Kosice – and was attended by all partners except VETEC German partner, which has withdrawn from project – totally was attended 14 participants. At this meeting were given general information about project, project time plan, project goals, project financing, description of outputs. The part of meeting was also presentation of project partners - PIAP Warsaw, MANEX Kosice, Politechnika Lubelska, TUKE, Cluster AT+R, SŠJH Bardejov, where each partner presented their responsibilities.

Coordinator of project were presented detailed information about each project outputs and also was presented Gant chart. In cooperation with all partners was preparing action plan that includes tasks and activities of all partners for a further period of project. There are determined objectives, deadlines and activities for intellectual outputs. Finally was agreed a distribution of roles between partners according to the responsibilities and was agreed date of next meeting.



M2 - Second partnership meeting, Kazimierz Dolny, Poland

Second meeting of partnership was realized at 20.05.2016 in Kazimierz Dolny, Poland – there was attended by all partners - total of 15 participants. At the beginning of the meeting was controlled an action plan performance and tasks from initial kick-off meeting. At the meeting was also presented a new partner - University Politehnica of Bucharest, which entered into a project at 01.04.2016. Furthermore, project outputs was also discussed: O1 - Analysis of requirements for target groups, O2 - Set of training materials for training of secondary vocational school teachers in the field of robotics and O3 - Educational-training ICT platform for the training of secondary vocational school teachers in the field of robotics. Other responsibilities has been divided between partners and was agreed date of next meeting in Bucharest, Romania. Also was discussed issues about realization of dissemination seminar, which should be realized at October 2016, Slovakia.

