

COMENIUS 2.1

Project TERECoP

Teacher Education on Robotics-Enhanced Constructivist Pedagogical Methods

Rationale and Objectives:

This project, inspired by the theory of constructivism and constructionism (Piaget, Papert), will focus on the constructionist use of educational technology as a learning tool. It aims at the development of teacher training courses that will enable the future or in-service teachers to integrate the use of computer-based robotic activities in their teaching repertoire as a constructivist learning tool that can support pupil/student knowledge construction, learning by doing, learning through active exploration and can increase pupil motivation in science and technology.

Target groups:

Secondary school teachers, teacher trainers and education authorities

Grant Agreement number: 128959-CP-1-2006-1-GR-COMENIUS-C21 2006 – 2518 / 001 – 001 SO2

Main activities:

- To select and organize a repertoire of appropriate computer-based robotic activities and produce a set of critical examples that can be used in a constructivist way by teachers at secondary school level in the areas of science and technology
- To develop and implement training courses for teachers choosing appropriate activities and strategies designed to help and encourage them to adopt these new pedagogical methods
- To evaluate the courses and report experiences from the implementation of the courses in the 6 different European countries that participate in the project.
- To create a community of practice between educators and teachers for a continuous and sustainable professional development in using computer-based robotic tools through the integration of e-learning tools and the development of a repository web site to make all the developed materials easily accessible for teachers and trainers.
- To disseminate the results of the project to the broader educational community

Expected outputs:

- A methodology for designing computer-based robotic activities supporting constructivist learning
- Teacher training course curriculum and learning materials
- teacher education courses
- a community of practice between trainers and teachers
- an International Workshop, publications, papers, presentations in conferences

Grant Agreement number: 128959-CP-1-2006-1-GR-COMENIUS-C21 2006 – 2518 / 001 – 001 SO2

Total budget: 332419

		Own contribution	Staff (days, day, total)		
ASPETE	School of Pedagogical and Technological Education, Patras, GR	21101	398	125	38500
IUFM	College of education, Marseille, FR	15263	172	243	41796
DEI	Department of Information Engineering – University of Padova, IT	7103	136	119	16184
UP-RO	UNIVERSITY OF PITEȘTI, RO	6977	172	54	9288
IT+R	IT+Robotics srl, Vicenza, IT	6964	136	115	15640
TMR	Town Museum of Rovereto, IT	8596	136	115	15640
CUNI	Charles University Prague, Faculty of Education, CZ	6266	172	75	12900
UPNA	Public University of Navarre, ES	10835	172	142	24424



Grant Agreement number: 128959-CP-1-2006-1-GR-COMENIUS-C21 2006 – 2518 / 001 – 001 SO2

Direct costs:

- Travel
- Lego Mindstorms kit + Robolab software 8 kits per course

Other:

- Photocopies of training materials (manuals, handouts for trainings) - 6 courses x 15 trainees per course: $6 \times 15 \times 50 = 4500$

CUNI involvement:

- meeting in Month 12 hosted by CUNI with Coordinator and one representative from each institution
- 3 teacher training final courses - month 18-19: ASPETE, CUNI, UPNA organize new courses using the revised curriculum and learning materials (in national language) and combining again the face to face course with an e-class community
- Dissemination - Contacting other e-communities (by CUNI)

