CHOICE

Increasing young people’s motivation to choose STEM careers through an Innovative Cross-disciplinary STE(A)M approach to education

Project ref. 612849
Overall objective of the project

CHOICE aims to develop and test an innovative approach to STE(A)M education supporting the reform of school curricula. The project shall boost young people’s interest on STEM subjects and careers, contributing to reduce skill gaps in the labour market.

Priority 4 – Promoting innovative and cross-disciplinary approaches to STE(A)M teaching in education
Where we are?
Completed:

✓ **WP2 - State of the Art Analysis** of existing initiatives, best practices, and approaches on STE(A)M education

Next steps:

• **WP3 - Development and testing of innovative OERs and MOOC** through collaborative practices of students, teachers as well as business/university representatives for the promotion of a STE(A)M approach to teaching STEM subjects
WP2 - State of the Art Analysis

➢ National reports on local and regional initiatives, best practices, students’ attitudes and teachers’ approaches to STEM education- https://www.euchoice.eu/resources

➢ State of the Art study- https://d836acf4-f09b-4b78-9de2-b13f46b0b860.filesusr.com/ugd/6c0a6f_088c756fa05040d0a4b87a0e7d3b885d.pdf

➢ Reflective practice case-study compendium- https://d836acf4-f09b-4b78-9de2-b13f46b0b860.filesusr.com/ugd/6c0a6f_088c756fa05040d0a4b87a0e7d3b885d.pdf

➢ Framework for reforming STEM curricula - available soon
WP3- Reforming curricula through innovative co-creation of OERs and testing of the MOOC

- A3.1 Establishment of the Creative Leadership Teams
- A3.2 International training on co-production of educational resources
- A3.3 Organisation and delivery of co-participative Design & development workshops
- A3.4 Development of the MOOC on STE(A)M education
- A3.5 Local trainings on the use of STE(A)M approaches in STEM education
- A3.6 MOOC piloting with education institution representatives and students
- A3.7 Field visits to leading companies and University faculties in the field of STEM with the role models
Possible synergies: Framework components

Objectives:

➢ Identifying areas of improvement within the current state of STEM curricula

➢ Proposing a set of methodologies to support STE(A)M approaches in the classroom
Areas of improvement are:
- Need to facilitate teacher training
- Equip schools with the necessary ICT instruments and material
- Need to help teachers create a classroom setting that promotes students’ interest in STEM concepts

Methodologies:
➢ Focus on hands-on methodologies (survey results: 60-70% of students find scientific subjects easier than theoretical ones)
➢ show a variety of career paths...
➢ ... and diverse role models
Possible synergies: MOOC

Blended-learning approach:
1) *Face-to-face learning sessions*: lessons and assignments to be carried out in the classroom with the facilitation of the teachers
2) *Remote learning sessions*: lessons and assignments to be self-administered by the students as homework

Content:
- Introductory part on **STE(A)M approaches in teaching**
- 5 modules based on the developed OERs
- **Video material** recorded on co-productive practices used in the Design & development workshops
- **Questionnaires for assessment**
- **Community** section to facilitate communication between students, teachers and businesses on national as well as international level
Possible synergies: Communication & dissemination activities

- Exploitation, sustainability and mainstreaming plan
- Social media awareness-raising campaign (designed “by youth, for youth”)
- CHOICE@SCHOOL Open days arranged in each partner school
- Final international conference in Brussels
Cooperation and synergies at national and EU level

- 18 local high schools
- University of Palermo (Departments: Agricultural, Food, Forest Sciences; Physics and Chemistry; Health Promotion, Mother and Child Care, Internal Medicine and Medical Specialties)
- Polytechnic University of Turin
- Local companies in the STEM field
- Local authorities (Municipality of Palermo; COT - Counselling - Career Service Centre)
- Scientix and European Schoolnet
- SteamOnEdu project
- STE(A)M IT project
Thank you for your attention!

www.euchoice.eu
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