



2nd STE(A)M IT co-creation workshop  
Friday, 2 October 2020

# 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*



*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

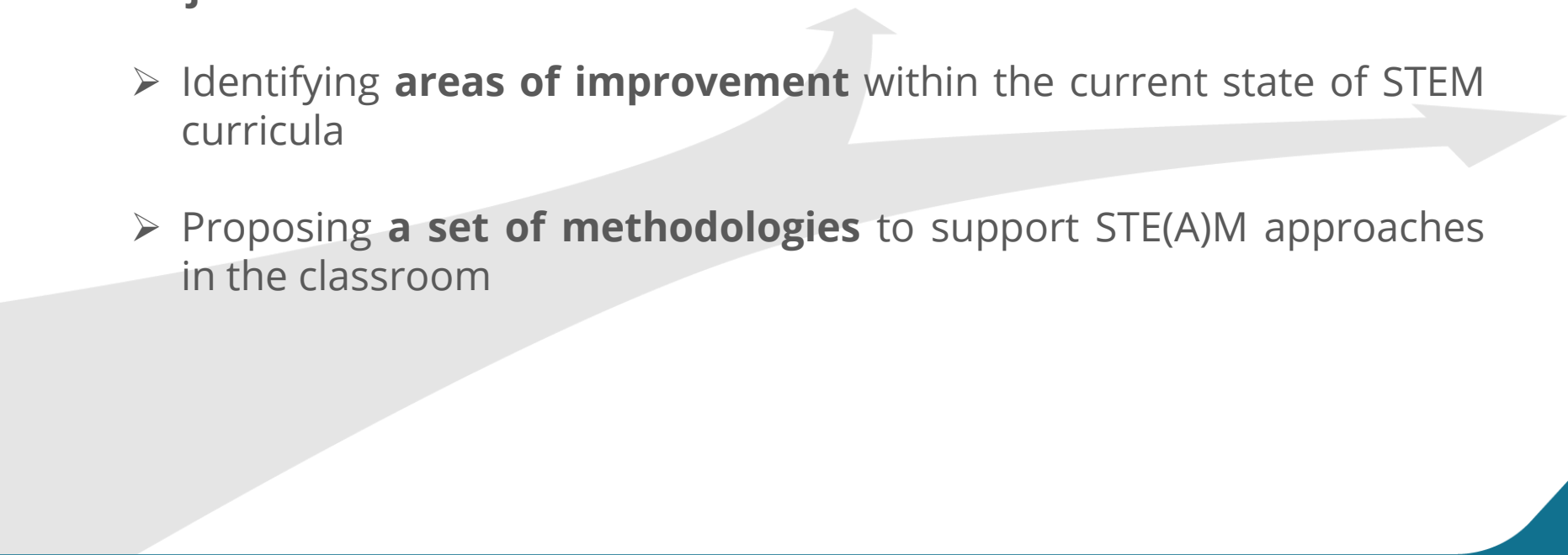
- National reports on local and regional initiatives, best practices, students' attitudes and teachers' approaches to STEM education- <https://www.euchoice.eu/resources>
- State of the Art study- [https://d836acf4-f09b-4b78-9de2-b13f46b0b860.filesusr.com/ugd/6c0a6f\\_088c756fa05040d0a4b87a0e7d3b885d.pdf](https://d836acf4-f09b-4b78-9de2-b13f46b0b860.filesusr.com/ugd/6c0a6f_088c756fa05040d0a4b87a0e7d3b885d.pdf)
- Reflective practice case-study compendium- [https://d836acf4-f09b-4b78-9de2-b13f46b0b860.filesusr.com/ugd/6c0a6f\\_088c756fa05040d0a4b87a0e7d3b885d.pdf](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
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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

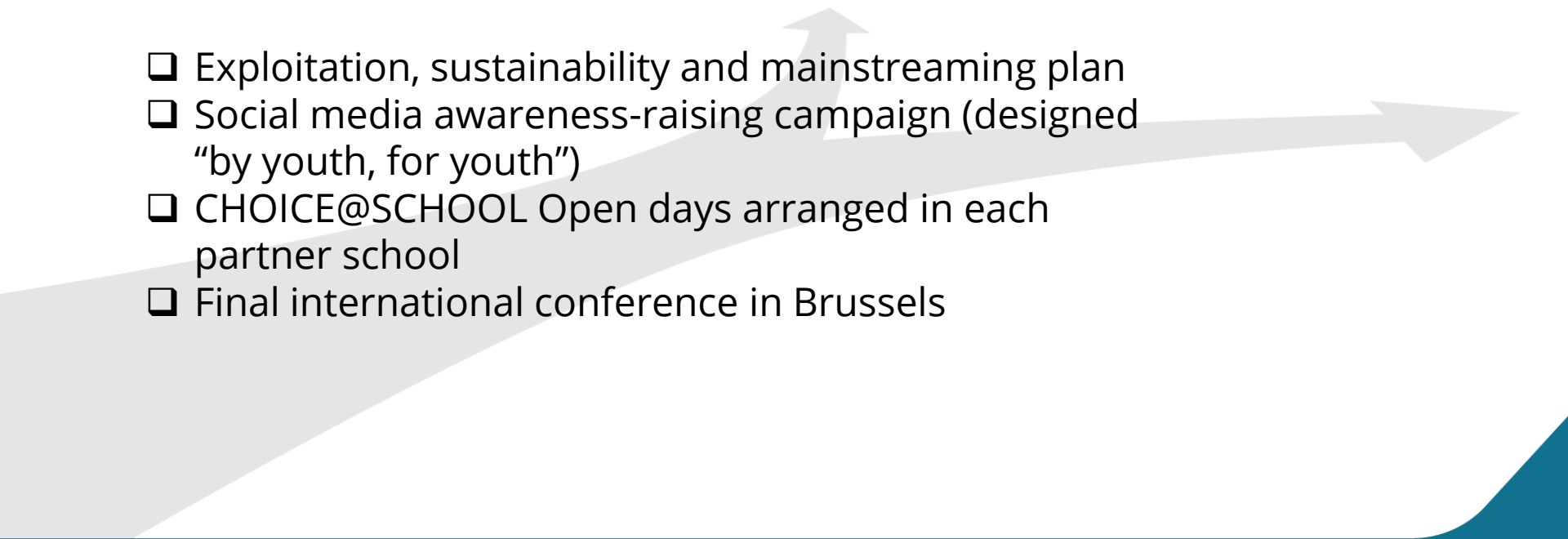
### Blended-learning approach:

- 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
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# 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!**

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