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"The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein." Project number: 2017-1-AT-KA201-035034 ELIC

ENGINEERING LITERACY -TEACHERS AS A MEDIUM FOR CHANGE

THE ELIC PROJECT

- Erasmus+ Strategic Partnership for School Education
- MOOC (massive open online course) for natural sciences teachers¹ to improve engineering literacy among secondary school pupils
- Project duration: O ctober 2017 September 2019

AIMS

ELIC aims to provide a didactical and content toolbox for teachers to increase engineering skills among secondary school pupils to enlarge their interest in technical occupations. A MOOC will equip natural sciences teachers with examples and experiments they can apply directly in class.

Located within the objectives of the EC Strategy 2020, ELIC addresses European-wide shortages of qualifed professionals and technical job-specifc skills. More specifcally ELIC deals with skill mismatches, which are causing a shortage of engineering professionals in Austria, the C zech Republic, G ermany and Italy.

MAIN OUTPUTS

The ELIC MOOC unites input from different perspectives, and will consist of 6 training modules to be developed and implemented for secondary school teachers of natural sciences.

The ELIC Transferability and Evaluation Handbook ensures that the MOOC and the materials created will be circumspectly implemented for other regions to create a sustainable impact.

MAIN OBJECTIVES

- ELIC seeks to improve and transfer technical skills of natural sciences teachers through the implementation of a MOOC
- ELIC intends to motivate pupils to engage with engineering - thereby their engineering literacy will improve intrinsically
- ELIC plans to impact the trainees' competences directly and it is assumed that 50% of teachers who complete the training will implement more technical science aspects immediately thereaf er
- ELIC aims to adapt secondary school education to the requirements of the modern labour market and lead to a change in thinking



implementation of a MOOC with natural sciences teachers, based on desk research, expert interviews and practical inputs from industry

skill transfer of gathered technical knowledge from teachers to secondary school pupils



TARG ET G ROUPS

- natural sciences TEAC HERS at secondary schools
- secondary school MANAGERS
- PUPILS of secondary schools
- REPRESENTATIVES of educational institutions
- school AUTHORITIES

 $^{^{\}circ}$ biology, chemistry, computer sciences, mathematics and physics (selected STEM subjects) STEM = science, technology, engineering and mathematics