

Re-thinking and Facilitating the Learning in the Future: the STEAME approach

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Abstract

As one of the key factors supporting the development of competences and skills in school students, especially in grades 6-12, as well as in Higher Education students, is the known interdisciplinary and multi-science project-based learning activity. At the Higher Education level it is leading to challenge-based-learning. In the last 20 years we have seen the development from STEM to STEAM and now to STEAME (Science, Technology, Engineering, Arts, Mathematics and Entrepreneurship) becoming the subject set that through project-based learning activity, is considered the kinetic energy for producing the creators and innovators of the future. The catalyst in making this a reality are the subject teachers, service teachers and schools and student teachers completing HE programmes leading to school teaching. These people, who we call STEAME teachers or future teachers need to develop related competence and skills.

The project STEAME Teacher Facilitators Academy (Ref. no: 101102619) developed a model through a network of regional STEAME Teacher Academies managed by the European Federation of STEAME Teacher Facilitators Academies, which can support the creation of the critical mass of professional STEAME teachers as a catalyst for changing the curriculum in future schools. The STEAME Teacher Facilitators Academies offers the training and support to service school teachers, while the student teachers in Higher Education can become certified through a mentoring programme. The mentoring programme will create a networking between school education and university education and possibly industry, working together as co-creators for the sustainable development between teacher education providers, impacting the quality of education in Europe. This is supporting the continuous professional development of teachers providing a micro-credential certification programme, already piloted in 2024 with the certification to 32 teachers.

Some results to be discussed in the presentation are:

1. STEAME Teacher Facilitators Competence Framework for teachers
2. STEAME Teacher Facilitators Learning Resources in support of the Framework
3. International Observatory for STEAME Teacher Facilitators – The Federation Platform
4. Mentoring and Certification Programme