Project title: The Finnish-Uruguayan partnership for fostering STEAM approach in teacher education

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STEAM refers to an integrated approach to teaching and learning that includes science, technology, engineering, arts and mathematics. It is gaining increasing attention worldwide as it is seen as essential to preparing students for the rapidly changing and technologically driven world of the 21st century. In addition to developing critical thinking, problem-solving and teamwork skills, STEAM education fosters creativity and innovation, which are essential for addressing sustainability and digital transformation. The adoption of the STEAM approach in pre-service and in-service teacher training and education in general is essential as it provides a foundation for lifelong learning, empowers students to become active learners and prepares them for the demands of the future workforce.

The Finnish-Uruguayan partnership aims at joint curriculum development and intensive training in the STEAM approach to teacher education at the University of Eastern Finland (UEF), the University of Jyväskylä (JYU) from Finland and the Faculty of Agricultural Sciences of the University of Uruguay (FCA-UDE) from Uruguay. In order to achieve its objectives, the project organises the following activities:

- 1. Curriculum development The partner universities will co-design, develop and pilot curricula for STEAM education in the context of teacher training. This includes sharing and designing curriculum materials, identifying learning objectives and developing the pedagogical skills of teacher trainers.
- 2. Joint intensive faculty training and development The project will provide STEAM-related training and professional development opportunities for faculty members from partner institutions through joint workshops and seminars, in both face-to-face and hybrid formats. The activities provide hands-on learning experiences for both teacher trainers and students, and increase their theoretical understanding of the STEAM approach and social and emotional learning, which is a necessary component of local adaptation of the new methodologies.

The expected outcomes are jointly developed curricula for STEAM studies, improved pedagogical skills of teacher trainers in STEAM, shared pedagogical resources for further Finnish-Uruguayan cooperation such as course descriptions, study materials and up-to-date references on STEAM research. The project will establish a Finnish-Uruguayan STEAM network of teacher trainers as a basis for further cooperation.

The project partners will collaborate to implement pilots, monitor the adaptation process, evaluate the process and results, and identify areas for improvement in order to assess the impact and effectiveness of the developed curricula and implemented STEAM education. Best practices from the project will be disseminated through project events, communication channels, seminars and relevant professional and academic publications.

