

EU STEAMTEACH Austria Proposal

The EU STEAMTEACH project *proposes a programme of STEAM Professional Development for in- and pre-service teachers*, working within the existing teacher-training infrastructure producing Cross-cultural Course programmes for teachers, which can seamlessly be rolled out to all training centres and implemented by teachers in their schools. The three stages of the project are:

- State of the art on STEAM teacher training: toward a transcultural professional development framework (PDF)
- Designing and implementing a Cross-cultural Course programme for preparing professional trainers, in-service teachers and pre-service teachers on STEAM
- Teachers implementing STEAMTeach in their classrooms with their students

The STEAMTEACH AUSTRIA team is based in Linz and thus has at its disposal expertise both in STEAM and of course GeoGebra. As the first step towards the framework, we have interviewed five expert teacher trainers and have a top level STEAMAUSTRIA draft framework. In summary, the five key features are:

- Teachers to work in multidisciplinary, supportive, collaborative groups/network within school and outside.
- Project and Problem based approach including teachers' "second subject" (all Austrian teachers are trained in/are expert in two subjects).
- Project and Problem based approach supported by appropriate scaffolding and best practice, proven "plug-and-play" modules and games which can be easily inserted into an integrated STEAM approach
- Mix of physical and on-line working synchronously and asynchronously
- Focus on affective factor for students and teachers (learning that relates to the learner's interests, attitudes, and motivations) and gamification

We now propose a workshop in which we invite institutions, teacher trainers and their teachers to come along, either physical or online, with STEAM ideas that they would like to develop. The workshop would typically consist of four parts depending on time available: 2-8 hours

- What is an Integrated STEAM Approach? Presentation and discussion based around the first draft framework Presentation of individual ideas, challenges and discussion
- Professional Development Framework worked examples inc curricular context
- STEAM collaborative teachers group project(s) – teacher trainers with teachers in small groups to: develop their ideas, identify any support requirements of Linz, define delivery mechanism working within the existing organisation's teacher-training infrastructure
- Presentations & Next Steps (from TTS and teachers): two minute presentation by participants on Idea, support requirements, delivery into the classroom, assessment/grading, collaboration/networking arrangements and next steps



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