IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Interactive Presentations - IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (IP)

Author: Mrs. Alessandra Vernile
EURISY, France

Ms. Annalisa Donati
EURISY, France
Ms. Elisa Filippi
Italy

GIS4SCHOOLS – PAVING THE WAY FOR THE SCHOOL OF TOMORROW: LEVERAGING ON SPACE TECHNOLOGY TO STIMULATE STEAM LEARNING AND TEACHING

Abstract

Meeting the demand for STEAM skills in the job market is considered a priority in the European Union. The concerns related to the supply of STEAM skills rely on the educational offers from secondary schools and the propensity of pupils to follow a scientific course of study at the university level. Across Europe, every country is responsible for the definition and development of its methodological approach to enhance the teaching and learning of STEAM subjects.

Because of its inspirational power, space can play a relevant role in attracting the young generation towards STEAM disciplines. Multiple projects have been developed at the European level to facilitate the familiarisation of pupils with STEAM topics by using space in combination with crucial challenges, such as climate change. An example of a project with such an objective is the Erasmus+ "GIS4Schools". The project aims to improve STEAM learning paths in secondary schools, by promoting an innovative approach to the teaching of scientific subjects, while introducing the teaching of GIS and EO applied to the topic of climate change. The project, with its activities and outputs, also aspires to become a game-changer in the definition of new shared curricula focused on the acquisition of skills related to STEAM subjects.

This paper is conceived as a follow-up of last year's introduction to the GIS4Schools project to the global audience of the IAC. Leveraging in-depth interviews with the schools involved in the project and the data collected through the Digital Diaries, the paper will provide an analysis of the skills acquired by the pupils in the first half of GIS4Schools. In particular, the analysis will help to understand if the GIS4Schools products, as the Training Handbook and the use cases developed by each school, can constitute an autonomous teaching module to be integrated into existing teaching curricula. By retracing the latest developments of the GIS4Schools project, the paper will present the project as a case study for the development of future initiatives on the topic.