SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
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ISCI.ONE - INTERACTIVE SCIENCE FOR SPACE EDUCATION

Abstract

The number of young people that decide to take up STEM-related (Science, Technology, Engineering and Mathematics) studies and careers is decreasing globally. In Europe it has been estimated that 1.5 million new STEM-related jobs will be created by 2020. It is therefore imperative to attract more young students by combining new education methodologies with recent technologies.

The iSci.one project started as an educational platform to promote STEM academic disciplines using space as a context. There are many applications and experiments using real space technologies and missions that can be used to inspire, and attract new students towards STEM fields. The iSci.one platform brings together a wealth of online tools to help improve the learning process for both, teachers and students. The platform includes the possibility to use videos to explain difficult concepts, a set of interactive experiments and a forum to allow direct interaction among others. Some courses have already been developed and many more will follow, together with educational kits, files to perform experiments at home and further instructions to develop lessons. Based on the experience gathered through several teacher and student workshops, an increasing demand for this kind of platform has been identified.

The feedback received and lessons learned from online courses, webinars and workshops will allow a continuous improvement tailoring the functionalities of the platform to teachers and students. This paper will review the rationale behind this initiative, highlighting the potential of the platform, and its further development to promote STEM-related studies. Finally, it will describe what has been achieved so far and the roadmap to establish a broader and more powerful platform.