The "Aerospace in Class" project, funded by the Airbus Foundation, aims to integrate STEM resources from the Airbus Foundation Discovery Space in classes for 8- to 12-year-old students. 11 teachers are working with European Schoolnet to develop the Learning Scenarios that will integrate the Airbus Foundation Discovery Space resources and were trained during the 37th Science Project Workshop in the Future Classroom Lab in Brussels on 21-22 February 2020. The learning scenarios will be ready by September 2020 to be tested by a wider pool of teachers and the online MOOC for the EUN Academy is planned for the beginning of 2021.

//March 2020//

Short news

The Go-Lab Initiative, funded from the successful Go-Lab project (2012-2016) and its follow-up Next-Lab (2017-2019) aims to facilitate the use of innovative learning technologies in STEM education, by: offering a sharing and authoring platform to access remote and virtual labs (https://www.golabz.eu). European Schoolnet supported up to the end of Next-Lab in December 2019 the training and dissemination on the platform, which now has over 30k teachers registered impacting around 90k students.

SpaceEU is a Horizon 2020-funded project that will implement an exciting Space Outreach and Education programme to motivate and encourage young people to choose space-related careers. On 24 February, the "Our Fragile Planet" online course open for registration, destined to empower teachers to teach space-and astronomy-related topics to their students. Participants will learn how to strengthen social responsibility in relation to climate change as well as how to raise awareness about different space careers.

This month’s focus: Validation Pilots

A validation pilot is a brief and limited version of a planned research. The goal of a pilot is to refine the materials created and procedures followed. Pilots usually include: the creation of new materials (e.g. learning scenarios) to integrate a new topic or technology in classrooms, the testing of said materials, and the improvement of the materials based on the feedback received. The testing and feedback are carried out through questionnaires, reports and focus groups, depending on the size of the pilot, and involve teachers and students. While validation pilots offer important insights into the use of created materials and impact in education, the results cannot in be usually generalised to education in general, due to the limitations in the sampling of teachers and students. The mainstreaming of the materials created and validated is then done through professional development courses online, or face to face, and competitions, with the possibility of additional materials being created through these means based on the “pilot” materials.

We provide here four pilots recently carried out or under way by the Science Education Department:

The 3Rs project, funded by the European Commission’s Joint Research Centre under a European Parliament initiative, focused on building learning activities for secondary schools to introduce the principles of the 3Rs - the Replacement, Reduction and Refinement of animal use for scientific purposes. Twelve pilot teachers from across Europe designed six learning scenarios to help students develop their critical thinking and science literacy skills, by exploring topics such as ethics in science, how the European Union is protecting the welfare of laboratory animals, how to improve the welfare of all animals, and what high-tech non-animal tools are available as alternatives. The learning scenarios were validated by 23 teachers and over 500 students, and the final versions were the basis of the MOOC on the EUN Academy "The Three Rs and Animal Use in Science" which reached almost 700 participants and over 8,000 students.

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The Science Education Department at European Schoolnet aims to encourage more students to follow Science, Technology, Engineering and Mathematics (STEM) studies and go into STEM careers, and more importantly, ensure all students understand the key role STEM has in our lives.

To achieve this, we support our Ministries of Education by working with teachers, industry partners and other STEM education stakeholders, offering professional development opportunities, carrying out validation pilots, curriculum analysis and dissemination of good practices.

We are currently involved in over 15 projects and in each monthly focus we will highlight a service/area we work on.
The new pilot study on **nature-based solutions** and educational innovation of DG Research and Innovation, has recently started and is being coordinated by PPMI, with the support of European Schoolnet. The 37th Science Project Workshop also held the co-creation workshop for this pilot, where a group of proactive teachers from primary and secondary education (both STEM and non-STEM), started the design of the 15 learning scenarios to integrate the topic of nature-based solutions in different subjects. The limited pilot testing will take place in September - October, with the final learning scenarios published by the end of 2020.

The **STE(A)M IT** project, funded under the KA3 programme of the European Commission, organized its first co-creation workshop on 28-29 February 2020 (online!). Here, Ministries of Education, STEM education experts, industry representatives and guests from similar projects like CHOICE and STEAMonEdu, as well as the Lead STE(A)M IT pilot teachers, discussed the plans for the first conceptual framework of reference for integrated STE(A)M education. The STE(A)M IT Pilot teachers (11 teachers plus 22 support teachers) have now started working on the 11 Integrated STEM Learning Scenarios. The scenarios will be tested in September, October, and MOOCs for primary and secondary school teachers featuring these scenarios are planned for the end of October 2020.

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**Our Teachers Map**

The teachers involved in our Pilot Projects are active in various countries. Hereinafter a map highlighting all of them!

- Aerospace in Class
- Nature-Based Solutions
- STE(A)M IT

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