

Report on the spaceEU TTI Project

The spaceEU project (<https://www.space-eu.org/>) was a new milestone for the European Schoolnet that was set up to promote space education around Europe and especially in schools, fostering a young, creative and inclusive Space Community.

Malta was given the opportunity to join this project and the Education Department asked for a proposal on behalf of SfCE (as a Teacher Training Institute in January 2018 on the work set off through the organisation of the World Space Week (WSW) Malta Event locally since January 2017) to be sent. This proposal showed that SfCE Physics Department was implementing successfully the aims of the project in bringing space education to teachers and schools. Besides, it went further, instilling a broader outreach to the public in general. Hence, the Physics department at SfCE became a Teacher Training Institute (TTI) in this project that ran till November 2020.

The participation of our country came about in different stages as follows:

1. Teacher Training on 'Scientix and STE(A)M Careers' in November 2018 by the Physics Department. This project showed how Scientix resources could be used in the classroom and reminded teachers on different training available through this platform. The latter include webinars, MOOCs, conferences, weekend trainings, etc... Representatives from (i) Transport Malta explained STEM career opportunities locally (ii) the Faculty of Science explained the updated undergraduate courses available in Physics. The training was followed by a tour to the Faculty of Science labs where teachers met local Physics researchers.
<https://timesofmalta.com/articles/view/Teachers-visit-laboratories-at-Faculty-of-Science.672346>
2. World Space Week Event (2017 to date) that offers initiatives that are innovative in space education and link to
 - Esplora Interactive Science Centre that offers Planetarium shows at a special rate to schools during WSW Event in the first two weeks of October.
 - the American Embassy that enabled live communication with NASA (November 2018) to students at the Verdala International School. Students spoke to the astroengineer Dr Rosa Alvaros - Warren who encouraged uptake of STEM careers and described her typical day.
 - the Institute of Space Science and Astronomy (ISSA) that offered space researchers to speak to schools on the theme of space as well as hosted students in 'Pop Science at University' and described the role of super computers and telescopes in their research.

- Malta Council for Science and Technology (MCST) responsible for the space education program locally with the European Space Agency (ESA) that enabled the workshop of the coding of the AstroPi in WSW 2019.
 - Faculty of Science at the University of Malta that enabled schools to visit for the World Space Week Schools' Exhibition in WSW 2019.
 - Euromedia Forum and other interested astronomy enthusiasts and professionals that enabled collaboration for the WSW Event each year in October 2018 and 2019.
3. STEM@UoM Project with the University of Malta that offers opportunities both for teachers (internships during the summer) as well as primary and secondary students visiting the Faculty of Science and engage in hands-on tasks and discussions. (May 2018 – to date)
 4. The teacher training course offered to state schools through involvement by the Faculty of Education, University of Malta (January -March 2020). The course was entitled 'Understanding STEM' and was a whole school training enabling a cross-curricular approach to STEM careers, through this session involving spaceEU card game.
 5. The running of the AstroPi codes on the International Space Station (ISS) in June 2020 through the workshop held in WSW Malta Event 2019. The certificates issued by ESA were sent to all students whose successful code was run on the ISS in May 2020.

Throughout the project, and during the pandemic months (March – November 2020), online meetings were held with the European Schoolnet to enable awareness of what different countries were doing in this project, among them Malta.

In the final event of the project, on November 9th, 2020 Malta was chosen alongside another 5 countries to present the work done throughout. It was a challenging project that I am pleased to say was done successfully and Malta stood out in Europe through the work done by the above events held for teachers and schools locally in space education.

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