Stories of Tomorrow Newsletter 02 – April 2018

Stories of Tomorrow is a European project (30-month) funded by the Horizon 2020 program which started in January 2017. Its goal is to develop educational practices in schools that combine science and arts, through the implementation of digital stories. www.storiesoftomorrow.eu

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STORIES of TOMORROW

Highlight: Stories 2nd Consortium meeting

Stories consortium

The 2nd consortium meeting of the Stories project took place in Toulouse from 5th-7th of March 2018. The project's progress were discussed with a focus on the situation in the pilot schools and the new features developed for the Stories platform.

News from the schools

French students were asked what they think of the Stories project. Here is their answer.

"It's great!
It is a lot of fun because we get to do science, arts and computer science altogether! It is not often that we get to do all this.

In science class, we just learnt how to recycle water on Earth and in the Space Station. It will be useful to write episode n°3 about the travel in space.

We discover the job of being an astronaut and we can imagine ourselves in space. It will help us if we get to be selected to go to Mars some day.

When we paint Martian storms, sunrise and sunset on Mars, when we build our Martian landscape, when we draw all our pictures, we have a great time, it is better than doing grammar or mathematics.

Concerning the Stories platform, we enjoy making animations and linking sounds to images. We are getting better at computer science.

We are proud to know that other countries are doing the same work as us and that it is an international project.

Thanks to this project, we will go on a school trip to learn more about astronomy. We hope to be able to see Mars through the telescope. And maybe astronauts will use our ideas?

Less great part.
Internet connection problems and the long uploading time on the platform bother us. We waist time and can not finish our episodes.

Bugs are occurring more and more often. We still cannot see the pictures that we upload, instead a grey circle appears, it is annoying.

We are a bit sad that Thomas Pesquet or any other astronaut did not come to meet us."

Teacher's portrait

Antonio Silva is an ICT teacher at Agrupamento de Escolas Póvoa de Santa Iria, one of the Portuguese schools implementing the Stories of Tomorrow Project in the first phase of the project.

"In Portugal, 2017 sees the beginning of a new nation-wide programme designed to allow primary and secondary schools more flexibility and autonomy in the implementation of their curricula. The programme is being trialled in 25% of state schools and is intended to encourage collaboration between subjects allowing better organisation of the time spent on the same topics across different subjects. The programme is implemented between History and Geography, as well as Biology, Physics and Chemistry.

The Stories of Tomorrow project fits very well with this new programme, allowing the conditions and scope to implement Project Based Learning within the STEM subjects.

Our school has allocated dedicated administrative hours to implement the programme ("The National Plan for Educational Success") which forms part of my role this school year. Being able to invest in a methodology that allows us to bridge different disciplines means we can include Robotics and Information Technology in the implementation of the Stories of Tomorrow's Mars project - especially with the project's strong digital focus.

As well as running the school's ICT classes, I'm responsible for administering the Robotics Club where we use Educational Electronics Kits that are ideal for practical, investigative classes whilst providing real scientific experiences. Educational robotics, if well conducted, will strengthen a student's intellectual growth through experimentation, construction, reconstruction, observation and analysis.

Students, in their attempts to solve problems using their creations and the programs that control them, can interact and experience different concepts in the field of sciences (Physics, Mechanics, Mathematics, Computing, etc.). Working in an educational robotic setting, the student-built prototypes become a cultural artefact that students use to explore and express their own ideas. The use of a 3D printer helps with building items to achieve the goals of the projects.

Mars is a major theme of discussion in the classes and Club where we use Project Based Learning and Inquiry methodologies. Our discussions have convinced us that the first settlers of the red planet will necessarily have to be equipped with many of the skills that we strive to develop in the Club sessions. Those that will be elected to face this challenge must have a substantial knowledge of Science, Robotics and 3D printing, among other subjects.
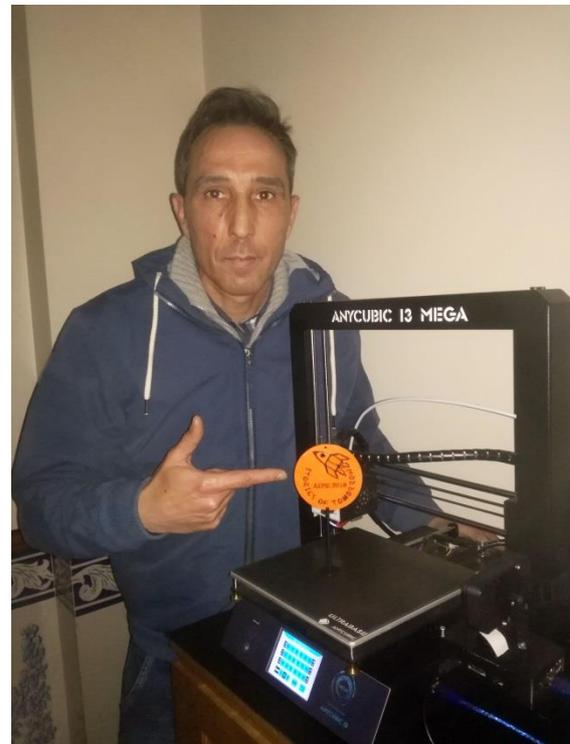
Antonio Silva, ICT teacher, Portugal

The creation of stories in a digital format is a good basis for the development of interdisciplinary collaboration, which we have seen particularly in ICT, Portuguese and Mathematics. For instance, we used the Scratch programming environment to study the areas of geometric figures; we reviewed what was already known by the students, but instead of mechanically going through the same formulae, and with the Mars project in

mind, we gave them another set of skills - using computers and programming - that came in handy for the creation of their stories and achieving the goal of Deeper Learning.

We are currently preparing an exhibition that will include project activities and share the developments of the Robotics Club. It will detail some aspects of the students work and highlight the many areas of overlap with the Stories of Tomorrow project. It will also include a game with Mars missions that we are producing.

Find out more about our activities at http://aepsi.antoniosilva.com.pt/ (Portuguese)"

Inspiring location: Cité de l'espace

Cité de l'espace is one of the biggest science centres in Europe, located in the heart of the European space capital – Toulouse, France. Its facilities include: permanent and temporary exhibitions (2.500m2), 3D imax, 2 Planetariums, 2ha of Gardens displaying real size objects like rockets and satellites. Cité de l'espace welcomes 320.000 visitors every year including 50.000 students.

Cité de l'espace, Toulouse

Info Mars: Using wind energy on Mars ?

Could we use wind energy on Mars? We asked the scientist François Forget (LMD-CNRS). Here is what he told us: "The possible use of wind turbine on Mars has been carefully

studied. The air density is 50 to 100 times lower than on Earth, thus wind turbine would not function well on Mars. Most of the time, it is more profitable to use solar panels. But, the use of wind energy is anyway considered to keep a robot "alive" in the Polar Regions during the long lasting polar nights."

News from Stories – Online news - Facebook

The first episodes of the stories are completed on the platform.
After answering questionnaires to enable the project evaluation, learning about Mars characteristics and working on hands-on experiments, the student started working on the platform. By small groups, they can work on the cover page of their book and create episodes. In the first episode they present the challenges they will face for their Martian mission, like where to land, where to place the Martian base … On the picture below, you can see a screen shot of a double page of a book. A map of Mars is in the background and a question mark is moving form places to places (which is not visible on this screen shot).


Stories book example, episode 1

Coming soon on the platform
In the upcoming features of the Stories Platform, the ability of the students to create their own colonies on Mars is included.

Students select the area to build and place their 3D objects to the desired positions, on or under the Mars surface or even inside caves. The students are asked to give some information of these 3D objects that are evaluated according to experts rule in order to assess the sustainability of the colony built.
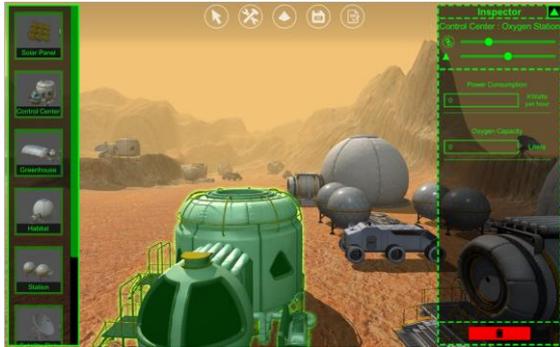

Stories platform: Martian colony

Students will be also able to add Augmented Reality to their stories. They can create AR markers and connect them with 3D objects giving life to their stories. With the camera of a mobile phone or tablet viewers are able to see 3D objects, text, video, sound and images "escaping" the stories' pages.

Stories platform: Augmented Reality

Jira

Stories is using JIRA for bug reporting. The tool has proved very helpful for the communication of the pilot users and the technical team. With JIRA, identified issues, are reported including: descriptions, severity level, screenshots, version and more. Issues can represent anything from a software bug or a project task, to a request for improvement. Captured bugs can also be prioritized based on the importance and urgency of the issue and the team's workload capacity.
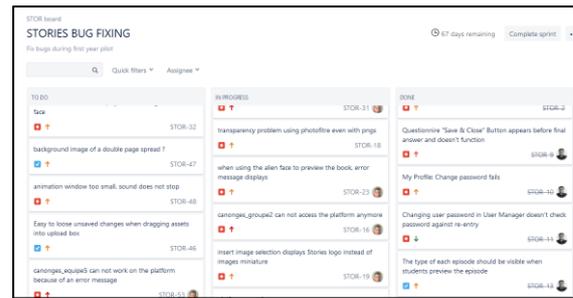
Jira software: Stories bug fixing.

Speaking of Stories

The Stories platform was presented in a *workshop session at Etwinning Conference* (Athens-Greece, September 2017). The aim of the workshop was to introduce teachers in the use of storytelling tools combined with advances augmentations to design projects related to space exploration.

Members from Ellinogermaniki Agogi had the chance to present the Stories project to the *board of the MINT-EC network* (Berlin-Germany, September 2017), and to show the Stories platform to more than 200 people in the *MINT-EC Headmaster meeting* and in a *meeting for citizen science* to an audience of about 30 people from all over Europe (Kaiserslautern/Berlin-Germany, November 2017).

Presentation of Stories in conferences

The partner WRO-Hellas has been disseminating the Stories project in Greece through publications, webinars, seminars and summer schools in the framework of the *Panhellenic Contest of Educational Robotics*.

In March 2018, members of NUCLIO could give a detailed presentation of the project to the Japanese teachers followed by hands-on training with the platform (Wakayama, Japan). They had a formal *meeting with high representative of NAOJ* (National Astronomic Observatory of Japan) and another with several *officials from the Education Dept. of JAXA*, for a short presentation of STORIES and an evaluation of a possible future collaboration (MI taka/Tokyo, Japan).

Upcoming Events

Stories Summer School 2018
The second Stories of Tomorrow Summer School will be held from 1st to 7th July in Attica, Greece. More information on the [dedicated website](#).

Stories of Tomorrow summer school 2018