

Stories of Tomorrow in Portugal: the first year

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Abstract

Portugal is one of the countries involved in the implementation of the Stories of Tomorrow project [1]. After the completion of the first school year, in which the many facets of the project have been tested, it is time to look back, evaluate what went well and what should be improved, and take the opportunity to learn the lessons this year has taught us. We look forward to the next year of implementation with renewed enthusiasm and certainty that the project will achieve its goals and demonstrate the power of new methodologies and technologies to help learning in our schools.

1. Introduction

The Stories of Tomorrow project started in 2017, and will run up to the end of the 2018-19 school year in Europe. It involves the creation by young students (10 to 12 year olds) of digital books narrating stories about the conquest of Mars. Schools in several European countries were chosen to run the project in the first year, a pilot phase where it was clear from the start that many hurdles would be met. Finding ways to overcome those obstacles in Portuguese schools has given the NUCLIO team involved in the project a much better understanding of the way things happen in schools, and what can be done to make the implementation of the project a smooth and fun activity for all involved, from school principals to the students, the major reason for its existence.

2. Context

In Portugal, any kind of project that is intended to run through the whole school year faces a major problem right at the start: many teachers change schools from year to year, and spend their first weeks of work trying to get acquainted with a new school and a new environment, finding it hard to concentrate in

activities that are seen as being out of the normal schooling work. When implementing a technology (computer) based project such as this one, the quality and access conditions of the computer park in each school can also give rise to issues that require much ingenuity to overcome.

There were four Portuguese schools picked for the first year implementation. All had classes in the 5th grade, which in Portugal is the first year in which the students are introduced to multiple disciplines and teachers. One of them was in Lisbon, two were to the west, in Cascais and Carcavelos, and one to the north, in Póvoa de Santa Iria, though all were within a 30 km radius. The number of classes varied – two of the schools had all 5th grade classes involved in the project, the other two did not take that approach. The number of students per group also varied, from just two elements to six, depending on the size of class and the opinion of the teachers. In all, though, there were close to 100 groups involved in the project, each trying to produce a digital book with their story.

3. Activities

Information about Mars was provided to the teachers, so they could help the students along the creation of their stories. This came in the shape of four booklets produced by the project, covering the diverse settings that should be present in the stories. Some teachers (the school coordinators) were present at the first Summer School, in Greece, to learn about the platform and participate in some activities that could be done with the students at the school.

There were a number of talks about Mars that took place at the schools, as well as hands-on activities about the Solar System and planets that happened at a NUCLIO location. The time devoted by the different classes to the project was not uniform, and so some classes benefited more from this type of activities. The teachers most deeply involved in the project and

its activities were those of Science, Portuguese, Mathematics and Visual and Technological Education. Other than producing a story with some degree of continuity and internal coherence, the students were encouraged to produce drawings, search for images, do their own research and include in the digital books assets of diverse nature - images, videos, sounds, animations (Figure 1).



Figure 1: Working in the digital book.

4. Discussion

There were a number of difficulties in the running the project during this first school year of implementation; they should be viewed as normal when dealing with such an elaborate project, which involves technology and science. Also, they can best be viewed as opportunities to learn a few lessons that will lead to a better experience for all.

Many details of the relations with the schools need to be improved. Some of these are the allocation of time and its management through the school year, and the interplay of teachers from different disciplines to achieve a full interdisciplinary nature in this endeavour. But it is also felt that teachers involved in the project need much more information – not only on the peculiarities of the platform used for the creation of the digital books, but also on the subject matters of the stories that their students will create, namely space and Mars. With this in view, we created an accredited course that they can take (and gain points for professional advancement) and thus become much more at ease with the questions that their students will raise.

For the students, we intend to offer regular opportunities to participate in hands-on activities with scientific content, and provide channels for them to get in touch with experts on diverse aspects of space exploration. They will also have access to some sort of printed information on the topics that they will have to deal with in the creation of stories.

5. Conclusions

The project Stories of Tomorrow is in the middle of its implementation period. In Portugal, the first year brought to light a number of issues that required a lot of thought and effort to overcome. Though in the end we had to be satisfied with what was achieved, we feel that the lessons learned provide the basis for a much improved implementation in the second year.

With some changes in organization issues, and a closer monitoring of the development of activities in schools to provide help when needed, the experience for those involved – teachers and students – will gain a much better quality, and provide quality data to help demonstrate the validity of the principles on which the project was built – the use of storytelling and a technologically advanced platform to achieve Deeper Learning in young students.

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References

- [1] Saraiva, J., and the Stories of Tomorrow team: Stories of Tomorrow: schoolkids and the conquest of Mars, EPSC Abstracts Vol. 11, EPSC 2017-459-1, 2017.