

November 2017  
Newsletter

## SciFUN's 5th Newsletter

### CARDET and INNOVADE piloted the SciFUN toolkit and developed Cyprus' case study

The Cyprus team, CARDET and INNOVADE, has conducted two face-to-face (on the 18<sup>th</sup> October and 3<sup>rd</sup> November 2017) and one online teacher training sessions within the framework of the pilot implementation sessions of the SciFUN project. During the trainings, teachers had the opportunity to get an overview of the SciFUN project, find out about the main research findings, discuss about effective ways of teaching science education with the use of Web 2.0 tools, experiment with digital tools themselves (Kahoot, Formative, Edmodo, Linoit), register on the online platform, review the sources provided, participate in forums, study the sample cross-curricular units and develop one with their groups.

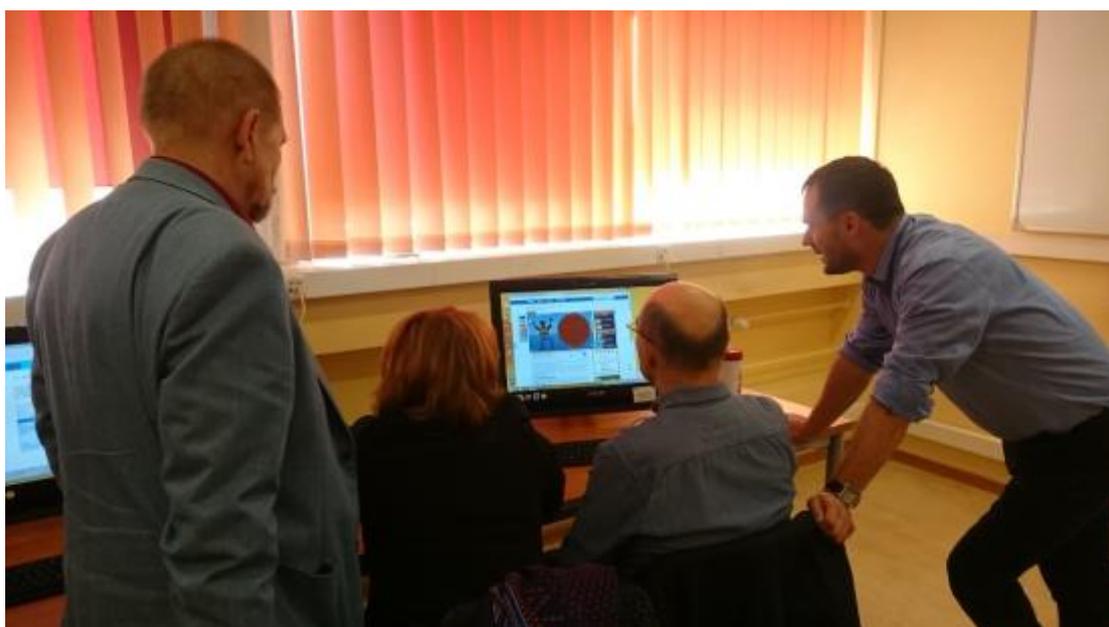


In general, all teachers agreed that the toolkit constitutes a useful guide to assist them teach science more effectively. They particularly liked the use of Edmodo, Kahoot and Linoit within the classroom, since they believe that they will offer them the chance to make lessons more fun for students. The sample cross-curricular units caught the attention of teachers and a lively discussion was held regarding the way to implement them, however it was also mentioned that teachers face a lot of challenges towards implementing interactive lessons (such as the lack of the school equipment, necessary infrastructure, time and skills necessary to use the digital tools in the classroom). The teachers also referred to the students' interest and the fact that the current curriculum faces a difficulty to meet them.

Following the testing of the curricula, the training material developed and the toolkit itself, CARDET and INNOVADE revised all the materials before finalizing them. The feedback acquired from teachers will be used to develop a better version of the curriculum and design an improved version of future tools. The case studies will form the last chapter of the SciFUN toolkit.

### SciFUN project Case Study, based on the Teacher training in Poland (ULO)

Piloting of the SciFUN Project gathered 15 teachers, who participated in training organized on the Faculty of Physics and Applied Informatics, University of Lodz. They designed their own activities, inspired by the cross-curricular units available in the Toolkit, developed by all Project Partners and available on-line. Wide range of teachers' specialisation caused interesting mix of ideas during design phase. One of the most interesting examples, next to more obvious ideas, such as joining math and physics or chemistry with biology, was connection of biology, physics and logistics. The project analysed the delivery chain of grocery goods, paying attention to the conditions (such as temperature), time of delivery (involving some distance and speed calculation) and also nutritious value of the meals prepared by restaurant from delivered ingredients (calories, vitamins, carbohydrates, fats, etc.). The pupils were amazed that real scenarios of everyday processes are so interesting and full of science and fun. As the teachers are also postgraduate students on University of Lodz, they started to implement lessons designed during SciFUN training, in school, but will also continue using and testing them at school, but also analysing them during future university seminars. This way SciFUN project will reach far beyond the Project duration horizon.



### Piloting the toolkit and case study in Romania (UPIT+GIE)

During the piloting in Romania, based on the SciFUN Toolkit and e-learning modules, teachers designed their own lesson plans and implemented them in classroom with their pupils. Such an example was the case of a lady teaching Technological Education, who choose to interconnect Biology and Technology and created a lesson based on photosynthesis - similarities between nature and technology. The title was “Manufacture of metal products” and the objectives were to make pupils to:

- understand the relationship between technology and the environment;
- develop creative skills, availability for innovation and inventiveness;
- cultivate a responsible behavior and attitude towards the environment;
- use new information and communication technologies;
- know the professional areas with technological specificity, for better knowing their socio-professional options.

The pupils were interested to study various phenomena occurring in nature that maintain a natural balance. They were keen to find out what happens when disturbing factors that break this balance occur and how to protect nature. They were also delighted to work in a team, cooperate and learned to trust each other. Photo 1 below shows a result of one of the pupils’ works. Photo 2 shows the graduation moment for the participants in the piloting in Romania.



### Piloting the toolkit and dissemination of the project in Ireland (LMETB)

SciFUN Project has been presented in Ireland at several different events the largest being the celebrating of 50 years of Erasmus Projects held in both Navan and Dundalk shopping centres both of which have over 1,000 visitors each day. The dissemination event and teacher workshops took place in November. At these events, LMETB delivered oral presentations of the project's goals, objectives, research results and intellectual outputs, and then had discussion and feedback on the sessions from the participants.

The Participants said the website was very easy to access and the instruction to do so were step by step which meant the process was relatively easy to follow. The content was very user friendly and it would be very beneficial to any teacher as it is very self-explanatory. The colors are attractive and would appeal to students. Overall the teachers could see themselves using the toolkit and would recommend it to others.



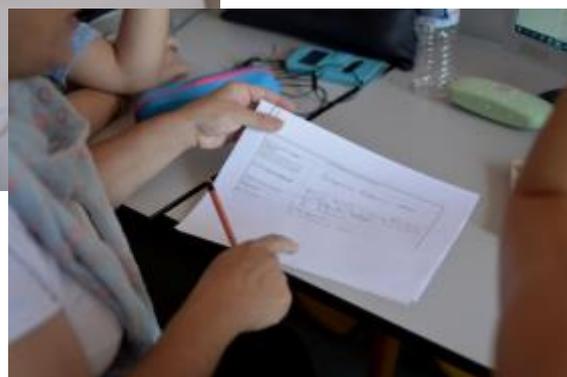
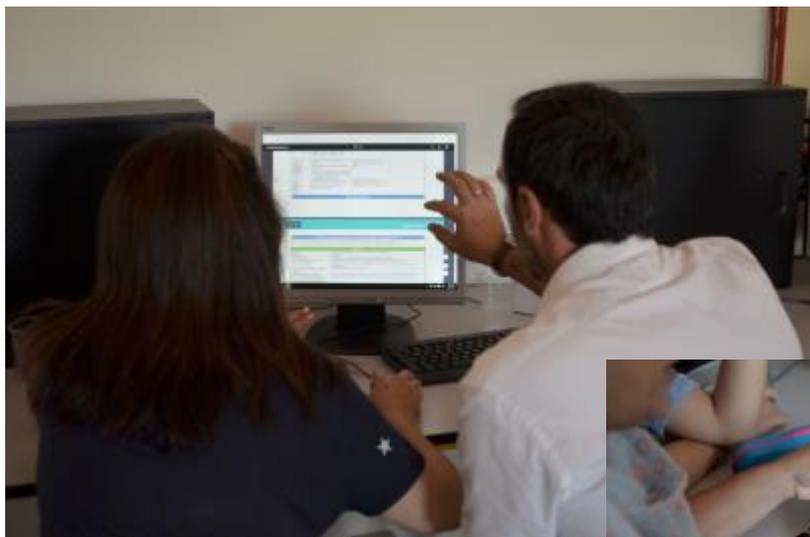
### Piloting the SciFUN toolkit and developed case study in Greece

The University of the Peloponnese, has conducted two face-to-face teacher trainings (on the 8th and 11 of September 2017) and one online teacher training session for the pilot implementation sessions of the SciFUN project.

The teachers got familiarized with the SciFUN toolkit through presentations and group-work activities developed for the training. In all activities there was an in depth discussion between trainers and trainees. At the end of the training there was a long discussion on the possible uses of the Toolkit in the classroom.

All educators liked learning the theoretical aspects of science education like the state of the art research on science education and these findings sparked interesting conversations comparing the research results and the experience in the Greek classrooms.

The teachers were excited to use various digital tools they could find in the toolkit. During the workshops most of them seemed to enjoy and worked particularly well with Kahoot. They particularly enjoyed working in groups with other teachers in order to create their own cross-curricular units.



The teachers stated:

*"I think the discussion parts worked really well in all the modules and I particularly liked collaborating with other colleagues in order to create one cross-curricular unit. I wish we had more time to try all the digital tools found in the SciFUN toolkit" E.P.*

*"I find it is very important that the project focuses on motivating students concerning science education" M.E.*

*"I would suggest that the educators can select and use the tools suggested in such a way as to confront the alternative ideas of the students on the subjects to be taught. This way the students will have more chances to use the knowledge obtained in the classroom to interpret other phenomena that occur in their everyday lives. The goal is to transfer and apply what they have learned in new situations of everyday life". E.P.*