

JOIN THE OPEN EDUCATIONAL RESOURCES COMMUNITY

Open Discovery Space

A socially-powered and multilingual open learning infrastructure to boost the adoption of eLearning resources



Open Discovery Space (<http://www.opendiscoveryspace.eu>) aims to serve as an accelerator of the sharing, adoption, usage, and re-purposing of the already rich existing educational content base. It will demonstrate ways to involve school communities in innovative teaching and learning practices through the effective use of eLearning resources. Moreover, it will promote community building between numerous schools of Europe and empower them to use, share and exploit unique resources from a wealth of educational repositories, within meaningful educational activities. In addition, it will demonstrate the potential of eLearning resources to meet the educational needs of these communities, supported by European Web portal: a community-oriented social platform where teachers, pupils and parents will be able to discover, acquire, discuss and adapt eLearning resources on their topics of interest. Finally, it will assess the impact and document the whole process into a roadmap that will include guidelines for the design and implementation of effective resource-based educational activities that could act as a reference to be adopted by stakeholders in school education.

Go-Lab

Global Online Science Labs for Inquiry Learning at School

The Go-Lab project will offer a wide federation of existing virtual and remote online laboratories and databases with the aim to make them available and easily accessible for teachers and students throughout Europe. The service provided will aim to assist in modernizing current science teaching practices and provide more challenging, authentic and higher-order learning experiences for students. The Go-Lab tools will offer the opportunity to teachers to design online interactive experimentations for their students to engage in by accessing and controlling real instruments or using simulated solutions of their choice within pedagogically structured and scaffolded learning spaces that are extended with social communication facilities. Teachers and students will also be able to participate in a pan-European educational community aiming to promote scientific culture in society, and help young people to acquire a better understanding of the role of science in society. The project will implement large scale pilots in 15 countries across Europe in order to introduce the use of on-line labs and their integration in science teaching activities while engaging student in to extended joyful episodes of learning.



Odysseus

A European scientific contest



The Odysseus (<http://www.odysseus-contest.eu>) contest aims at engaging and inspiring students around Europe in the "New Frontier", by organising a European Scientific Contest on Space exploration themes. Young students between 14 and 18 years old are given the opportunity to create their own science project combining creativity, intelligence and innovation. The contest aspires to bestow ongoing science educational activities with a pan-European perspective, providing the opportunity for young pupils to compete with their peers from different European countries. The winning teams will be granted with a trip to the Netherlands in April 2013 where they will have the opportunity to visit the SPACE EXPO and present their project during the Odysseus Award Ceremony. There they will also have a chance to visit ESA's technical centre ESTEC (European Space Research and Technology Centre).

Pathway

The Pathway to Inquiry Based Science Teaching

The "PATHWAY" project aspires to set the pathway towards a more widely uptake of inquiry-based science education, following the recommendations of the EU Rocard report "Science Education Now: A renewed Pedagogy for the Future of Europe". Towards this end it provides teachers with: a standard-based approach to teaching science by inquiry that outlines instructional models that can help them organise their instruction effectively; a number of best practices in inquiry-based science education, which they can use and adapt to their needs; a large number of training activities that can support them in implementing the inquiry instructional models and best practices in their science classrooms; and a community of practitioners of inquiry, who can help them sustain and further develop the new practices.



Discover the Cosmos:
From Telescopes to Accelerators
Enhancing Science Education by Exploring
Science's Past, Present, and Futures

Summer School Programme
July 1st – 6th, 2012
Panormo, Crete, Greece

<http://dtc.ea.gr>



The summer school is organized in the framework of the COMENIUS-GRUNDTVIG In-Service Training Programme and is supported by the DISCOVER THE COSMOS project which is financed by the European Commission within the Seventh Framework Programme (Capacities - Research Infrastructures).



Organized by the Physics Department of the University of Crete and Ellinogermaniki Agogi



09:00-11:00

17:00-19:00

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
1 July 2012	2 July 2012	3 July 2012	4 July 2012	5 July 2012	6 July 2012
<p>09:00-11:00</p> <p>Introduction to Inquiry Based Science Education Dr. Fani Stylianidou <i>Ellinogermaniki Agogi</i></p> <p>Computational Thinking as Inquiry: Technology In the Service of Science Dr. Robert Panoff <i>Shodor & NCSI</i></p> <p>The Inspiring Nature of Inquiry: Natural Europe as Mediator of Innovative and Effective Learning Vassiliki Markaki <i>Ellinogermaniki Agogi</i></p> <p>Gamification and RealLife Prof. Sara de Freitas <i>Coventry University and Serious Games Institute</i></p>	<p>09:00-11:00</p> <p>Introductory Session (Matala)</p> <p>Large e-Infrastructures and e-Science applications Dr. Angelos Lazoudis <i>Ellinogermaniki Agogi</i></p>	<p>09:00-11:00</p> <p>Workshop 1 (Matala)</p> <p>A hands-on introduction to Cosmology principles Serafeim Spanos <i>Hellenic Astronomy and Space Society</i></p> <p>Dr. Angelos Lazoudis <i>Ellinogermaniki Agogi</i></p>	<p>09:00-11:00</p> <p>Visit to Natural History Museum of Crete and the "Dinos of Patagonia" exhibition</p>	<p>09:00-11:00</p> <p>Workshop 3 (Matala)</p> <p>Crashing Galaxies in a classroom with the UniSchoolLabS toolkit Eleftheria Tsourlidaki <i>Ellinogermaniki Agogi</i></p>	<p>09:00-11:00</p> <p>Participants' Presentations</p>
<p>17:00 - 19:00</p> <p>Opening Session (Knossos A)</p> <p>Chair Prof. George Neofotistos <i>University of Crete</i></p> <p>Introduction to Inquiry Based Science Education Dr. Fani Stylianidou <i>Ellinogermaniki Agogi</i></p> <p>Computational Thinking as Inquiry: Technology In the Service of Science Dr. Robert Panoff <i>Shodor & NCSI</i></p> <p>The Inspiring Nature of Inquiry: Natural Europe as Mediator of Innovative and Effective Learning Vassiliki Markaki <i>Ellinogermaniki Agogi</i></p> <p>Gamification and RealLife Prof. Sara de Freitas <i>Coventry University and Serious Games Institute</i></p>	<p>11:15 - 13:00</p> <p>Interactive Session with all participants (Ariadni)</p> <p>Science Café Practices and Science Education SciCafé Network</p>	<p>11:15 - 12:15</p> <p>Plenary Session (Knossos A)</p> <p>SimAULA: Teachers' Professional Development in Virtual Worlds Eva Vázquez de Prada <i>Indra Software Labs</i></p> <p>Dr. Roumiana Peytcheva - Forsyth <i>University Of Sofia "St. Kliment Ohridski"</i></p>	<p>11:15 - 13:00</p> <p>Workshop 2 (Matala)</p> <p>Hunting the Higgs particle with HYPATIA data analysis tool Prof. Christine Kourkoumelis <i>National Kapodistrian University of Athens</i></p> <p>Stelios Vourakis <i>National Kapodistrian University of Athens</i></p>	<p>11:15 - 13:00</p> <p>Plenary Session (Knossos A)</p> <p>Open Discovery Space: Listening to Teachers' Voice and Designing the Future of eLearning Resources with Social Data Hendrik Drachler <i>Open University of Netherlands</i></p> <p>Kati Clements <i>University of Jyväskylä</i></p>	<p>12:15 - 13:00</p> <p>Plenary Session (Knossos A)</p> <p>Scientix: The Community for Science Education in Europe Gina Mihai <i>European Schoolnet</i></p>
<p>17:00 - 19:00</p> <p>Introductory Session (Matala)</p> <p>The Discover the Cosmos portal: educational material enriched with metadata Dr. Angelos Lazoudis <i>Ellinogermaniki Agogi</i></p>	<p>15:00 - 18:00</p> <p>Plenary Session (Knossos A)</p> <p>Discover the COSMOS: From Telescopes to Accelerators Eleftheria Tsourlidaki <i>Ellinogermaniki Agogi</i></p> <p>Dr. Rosa Doran <i>NUCLIO</i></p> <p>Prof. Christine Kourkoumelis <i>National Kapodistrian University of Athens</i></p>	<p>15:00 - 18:00</p> <p>Workshop 4</p> <p>Finalization of Participants' Discover the Cosmos educational scenarios</p>			

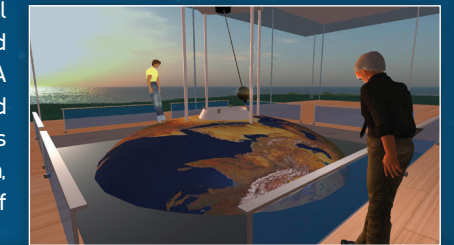
Science Café Practices and Science Education (July 2nd, 11:15 - 13:00)



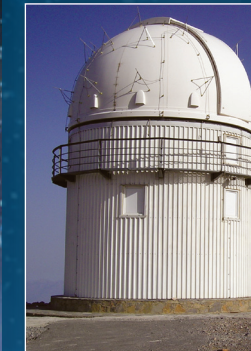
Science cafés are informal events of various formats, which all share a common feature: they are relaxed social gatherings focused on promoting the public understanding of science. In the framework of the SciCafé 2012 Conference and Events, organized by SciCafé - Europe's Network of Science Cafés (<http://www.scicafe.eu>), summer school participants can explore the science café concept and share relevant views and experiences with researchers and practitioners from diverse fields and contexts. Participants will have the chance to participate in lively discussions on the opportunities and challenges linked to science café practices in science education, on the one hand, and science communication in science museums and centres, on the other.

SimAULA: Teachers' Professional Development in Virtual Worlds (July 3rd, 11:15 - 12:15)

The unique qualities of 3D virtual worlds offer opportunities for rich sensory immersive experiences, including experiential learning activities in 'authentic' contexts. Such activities may range from simulations, modeling of complex scenarios and data visualization to role-plays and collaboration that cannot be experienced through other internet platforms. SimAULA (<http://simaulaproject.eu/>) is a completely user-generated environment offering relatively easy-to-use building and scripting tools that everyone can become familiar with. This makes it an ideal platform for engaging teachers and students in creating their own learning experiences and environments in unprecedented ways. In the framework of this session, participants of the summer school will have the chance to familiarize themselves with SimAULA platform and some of the ways this environment can be used and, in some cases, has been used for educational and wider learning purposes.



Visit to the Skinakas Observatory (July 3rd)



The Skinakas Observatory is located on mountain Ida in central Crete at an altitude of 1750m, 57km by road from the Iberostar Creta Panorama Hotel. Before arriving at the observatory, we will make a stop for dinner at the traditional village of Anogia which is well known for its significant role in recent Cretan history. Participants will have the opportunity to learn about the Skinakas telescope and use it in order to make observations. Besides scientific research, Skinakas is also used for education in astronomy and is the main observatory of the DISCOVERY SPACE Network (<http://www.discoveryspace.net>).

Programme:

18:15	Departure from Iberostar Creta Panorama Hotel
20:00 - 22:00	Arrival at Anogia village - Dinner
22:30 - 00:30	Arrival at Skinakas Observatory Presentation of the Observatory by Prof. Ioannis Papamastorakis - Observations
00:30 - 02:00	Departure from Skinakas Observatory - Arrival at Iberostar Creta Panorama Hotel

Visit to Natural History Museum of Crete and the "Dinos of Patagonia" exhibition (July 4th)

During the visit to the Natural History Museum of Crete (<http://www.nhmc.uoc.gr/en>) a do-it-yourself method for interacting with museum collections and online exhibit catalogues will be presented. Participants will be involved in playful learning smartphone-based activities to comprehend the links between actual museum exhibits and virtual/online information. This way, they will also have the opportunity to present their own thoughts and ideas by adding social tags to characterize exhibit-related digital educational content, and to play interactive quiz games. Our trip to the museum will finish with a visit to the 'Dinos of Patagonia' exhibition, displaying big and small carnivore dinosaurs, Cretaceous birds that could not fly, dinosaurs that would learn to fly, models for people with visual problems and many more amazing exhibits. Finally, visitors will be given the opportunity to engage in inspiring activities in "Dinopedia" through interactive electronic games and 3D displays, painting areas, virtual excavation, photo-studio, and much more. This activity is organized by the Natural History Museum of Crete and Ellinogermaniki Agogi.

