Join the Open Educational Resources Community

Inspiring Science Education

Providing access to inspirational digital resources and learning opportunities

Our mission in the Inspiring Science Education (http://www.inspiringscience.eu) is to provide digital resources and opportunities for teachers to help them make science education more attractive and relevant to students' lives. Through the Inspiring Science Education website and the activities organised by the partners, teachers can help students make their own scientific discoveries, witness and understand natural and scientific phenomena and access the latest, interactive tools and digital resources from within their classrooms. Inspirational science teachers are at the heart of successful science teaching – ask any scientific Nobel prize-winner who had the greatest influence on their decision to become a scientist and invariably the answer will be – my science teacher! So what is it that makes a science teacher truly inspirational? That's one of the conundrums we aim to unravel in the Inspiring Science Education project. That's why we will be setting up workshops and exchanges, communities of practice and learning opportunities for science teachers and teacher trainers aimed at helping them find ways to make their teaching of science more inspirational.

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.

Inspiring Science Education e-tools and approach

LEt's GO STEM workshop: simple machines, energy, power & movement

(Thursday 09:30 - 12:30)

LEt's GO STEM workshop is an innovative science classroom activity that enables students to research, collect data, understand how to store and transfer energy, understand concepts such as power, speed, friction and how machines work, follow scientific methodology, draw conclusions and propose solutions to real needs . Students can select the appropriate materials and designs, run tests and investigate safety &control systems or use instructions in two dimensions to construct three- dimensional originals by working cooperatively in a group. This workshop is divided in various units that deal with the following topics: **a**) simple machines **b**) power and movement **c**) energy d) electric motors e) special constructions

Augmented Reality (AR) in Education: the Science Center To Go system (SCeTGo)

(Thursday 12:30 - 13:00)

SCeTGo aims to bring into a school's classroom a comprehensive learning experience similar to the one found in science centres where visitors can experience science firsthand by actively manipulating intriguing experimental setups. Its miniature exhibits – by 'fitting into a pocket' and operating with ordinary hardware – enable learners to experiment whenever and wherever they please. By using AR, it enriches teachers' and students' optical view with relevant information and allows them to interact dynamically with the miniature exhibits to teach/learn by doing. As it uses common devices there are no real obstacles that a potential learner has to overcome in order to operate the system. Summer school participants will have the opportunity to see how the SCeTGo's five miniature exhibits support IBSE practices.

The summer school is organized in the framework of the Erasmus+ Programme and is supported by the Inspiring Science Education project which is financed by the European Commission within the ICT-PSP Programme.

Inspiring Science Education Summer School 2015

Programme

July 12th – July 17th, 2015

Marathon, Attica, Greece

Organized by Ellinogermaniki Agogi

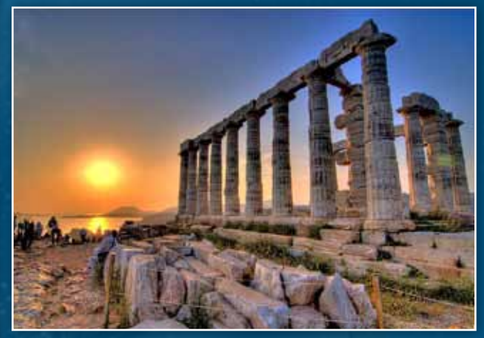
Programme

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
	12 July 2015	13 July 2015	14 July 2015	15 July 2015	16 July 2015	17 July 2015
09:30 to 12:30	Participants' Arrivals and Registration	The Inspiring Science Education Environment: building communities and creating educational resources *Angelos Lazoudis* *Ellinogermaniki Agogi*	Nobel Prize Physics in the classroom: work with HYPATIA data analysis tool and assess your students' problem solving skills CERN Virtual Visit *Christine Kourkoumelis* *National and Kapodistrian University of Athens*	The double slit experiment *Angelos Lazoudis* *Ellinogermaniki Agogi* Lasers & Bubbles *Nikos Nerantzis* *Physicist in Secondary Special Education* Cosmic Ligth during IYL 2015: from general relativity to light pollution. Cutting edge tools at your fingertips *Rosa Doran* *NUCLIO*	LEt's GO STEM workshop: simple machines, energy, power & movement *Ioannis Somalakidis* *WRO Hellas* **Short Introduction (12:30 - 13:00)** Augmented Reality in Education: the SCeTGo system *Angelos Lazoudis* *Ellinogermaniki Agogi*	Participants' Presentations, reflection and certificates **Closing Lecture (12:30 – 13:15)** Moving forward together: Inspiring Science Education hangouts and more *Rosa Doran* *NUCLIO*
15:00 to 17:00	**Opening Session (18:00 - 20:00)** Making the classroom attractive with online labs Prof. Ton De Jong University of Twente Developing teachers' communities Rosa Doran NUCLIO Inspiring Science Education *Prof. Franz Bogner* Univesity of Bayreuth	The Inspiring Science Education Repository and e-Tools *Eugenia Kypriotis* *Ellinogermaniki Agogi* The Foucault pendulum and Eratosthenes experiment demonstrators *Angelos Lazoudis* *Ellinogermaniki Agogi* **Visit at Cape Sounio, Sanctuary of Poseidon**	Meet the universe from the comfort of your classroom with robotic telescopes Live connection and observation with Faulkes telescope *Rosa Doran* *NUCLIO*	**Visit to the Acropolis Museum and the Acropolis** **Dinner**	Preparation of participants' educational scenarios **Farewell Dinner**	Participants' Departures

Inspiring Science Education Summer School

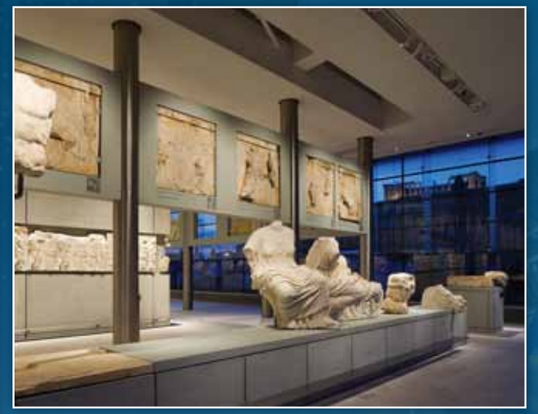
Events

Visit to Cape Sounio, Sanctuary of Poseidon
(July 13th, 18:00 – 23:00)



Cape Sounio is a promontory located 69 kilometres from Athens, at the southernmost tip of the Attica peninsula. According to legend, Cape Sounion is the spot where Aegeus, king of Athens, leapt to his death off the cliff, thus giving his name to the Aegean Sea. The sanctuary of Poseidon, one of the most important sanctuaries in Attica, is also located at Sounio. Archaeological finds on the site date from as early as 700 BC. Herodotus tells us that in the sixth century BC, the Athenians celebrated a quadrennial festival at Sounion, which involved Athens' leaders sailing to the cape in a sacred boat. The later temple at Sounion, whose columns still stand today, was probably constructed in 450-440 BC. over the ruins of a temple dating from the Archaic Period. Poseidon, the "God of the Sea" was considered to be a powerful god, second only to Zeus (Jupiter). The temple at Cape Sounion, was a venue where mariners, and also entire cities or states, could propitiate Poseidon, by making animal sacrifice, or leaving gifts.

Visit to the Acropolis Museum
(July 15th, 16:30 – 18:30)



The New Acropolis Museum under the Acropolis of Athens "came to life" when at 2000, the Organization for the Construction of the New Acropolis Museum announced an invitation to a new tender, which came to fruition with the awarding of the design tender to Bernard Tschumi with Michael Photiadis and their associates and the completion of construction in 2007. The Museum has a total area of 25,000 square meters, with exhibition space of over 14,000 square meters, ten times more than that of the old museum on the Hill of the Acropolis. The new Museum offers all the amenities expected in an international museum of the 21st century. Permanent exhibitions: The Gallery of the Slopes of the Acropolis, The Archaic Gallery, The Parthenon Gallery, Propylaia-Athena Nike-Erechtheion, from 5th century BC to 5th century AC.

Visit to the Acropolis of Athens
(July 15th, 19:00 – 20:30)

The greatest and finest sanctuary of ancient Athens, dedicated to the goddess Athena, dominates the centre of Athens from the rocky crag of the Acropolis. The most celebrated myths; religious festivals; earliest cults are all connected to this sacred precinct. These unique masterpieces of ancient architecture combine different orders and styles of Classical art in a most innovative manner and have influenced art and culture for many centuries. The Acropolis of the 5th century BC is the most accurate reflection of the splendour, power and wealth of Athens at its greatest peak, the Golden Age of Pericles. In the mid-fifth century BC, when the Acropolis became the seat of the Athenian League, Pericles initiated an ambitious building project which lasted the entire second half of the fifth century BC. The architects, Ictinos and Callicrates, began the erection of this unique monument at 447 BC and the building was substantially completed by 432 BC. The most important buildings visible on the Acropolis are the Parthenon, the Propylaia, the Erechtheion and the temple of Athena Nike.