

## CREATIONS

Developing an engaging science classroom



How can young people's interest in science be increased? 16 partners from ten European countries want to break new ground. In CREATIONS, a project funded by the European Union, they develop creative approaches based on art for an engaging science classroom. The partners are planning a variety of events with theatre, photography, exhibitions in which young people can experience an active and playful role within science and research. CREATIONS will establish a pan-European network of scientists, teachers, artists and students. The project was launched in October 2015 and runs for three years. CREATIONS aims to improve the skills of young people in STEM (science, technology, engineering, mathematics) and to pool talent to scientific careers by:

- giving students and teachers opportunities to experiment with many different places, activities, personal identities, and people
- simulating the work of the scientist and researcher in the classroom
- promoting a better understanding of how science works
- enhancing students' science related career aspirations
- encouraging and empowering science teachers to affect change
- implementing and promoting inquiry-based science teaching and learning
- learning and (self)creating in emotionally rich learning environments
- disseminating and exploiting the results

<http://creations-project.eu/>

## Inspiring Science Education

Providing access to inspirational digital resources and learning opportunities



The mission of the Inspiring Science Education 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.

As a project team we are aiming for large-scale take-up of these opportunities amongst European science teachers. Pilot activities will take place in 5000 primary and secondary schools in 15 European countries. During these pilots, teachers will be accessing interactive simulations, educational games and eScience applications and integrating them with extra-curricular activities, such as field trips to science centres and discovery parks, and virtual visits to research centres. Teachers will also have the possibility to access remote and online labs, and relevant scenarios for their use in the school classroom. Students will be inspired to use eTools and digital resources to learn Science, Technology, Engineering and Maths (STEM-related subjects) in a practical, competitive and exciting way.

<http://portal.opendiscovery.space.eu/ise>

# CREATIONS Summer School

## Developing an Engaging Science Classroom

July 3<sup>rd</sup> – 8<sup>th</sup>, 2016  
Attica, Greece



Erasmus+ Horizon 2020



The summer school is organized in the framework of the Erasmus+ Programme and is supported by the CREATIONS project which is financed by the European Commission under: H2020-EU.5., H2020-EU.5.a., Project reference: 665917



Organized by  
ELLINOGERMANIKI AGOGI

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	
	3 July 2016	4 July 2016	5 July 2016	6 July 2016	7 July 2016	8 July 2016	
<b>09:00 to 13:00</b>	<p>Participants' Arrivals and Registration</p>	<p><b>The background [The aim of the Summer School]</b> Menelaos Sotiriou NKUA</p> <p><b>The CREATIONS Framework</b> Menelaos Sotiriou NKUA Zacharoula Smyrniou NKUA</p> <p>Participants present their experience so far concerning the relation between Science and Creativity</p> <p>Presentation of Creative approaches to teach and communicate science</p>	<p><b>Workshop: How to manage a large scale Learning Activity involving Art and Science</b> Menelaos Sotiriou NKUA</p> <p><b>CERN Virtual Visit</b> Angelos Alexopoulos CERN</p> <p>Hunting the Ghost Particles Preparation (Group Work)</p>	<p><b>Workshop: How to compose/ use music in your Learning Activity</b> Petros Stergiopoulos Ellinogermaniki Agogi</p> <p><b>How to Write a Science Opera</b> Oded Ben Horin Hogskolen Stord Haugesund</p> <p>Hunting the Ghost Particles Preparation (Group Work)</p>	<p><b>Workshop: Exploring teenagers' perception about RRI values -The use of participatory workshops in PERFORM project</b> Helena González, Ricardo Moure, Javier Santaolalla, The Big Van Theory</p> <p><b>Workshop: Science and Dance</b> Spyros Kouvaras, Choreographer</p> <p>Hunting the Ghost Particles Preparation (Group Work)</p>	<p><b>Introduction to the CREATIONS communities</b></p> <p><b>Impressions and Suggestions</b></p>	
<b>15:00 to 17:00</b>	<p>(18:00 - 20:00) Introduction to the summer school Developing an Engaging Science Classroom</p>	<p><b>Hunting the Ghost Particles</b> Sofoklis Sotiriou Petros Stergiopoulos Ellinogermaniki Agogi Menelaos Sotiriou NKUA</p> <p><b>Visit at Cape Sounio, Sanctuary of Poseidon</b></p>	<p><b>Hunting the Ghost Particles Preparation (Group Work)</b></p> <p><b>How a scientist can perform his research</b> Spiros Kitsinelis NKUA</p>	<p><b>Visit to the Acropolis Museum and the Acropolis</b></p> <p><b>Dinner</b></p>	<p><b>Exploring EU funding opportunities: guidelines for submitting an Erasmus+ KA1 &amp; KA2 proposal</b> Sofoklis Sotiriou Ellinogermaniki Agogi</p> <p><b>Science meets Arts: (18:00 - 19:45)</b> Hunting the Ghost Particles (Theatre Performance) Scientific monologues: Big Van, scientist on the road</p> <p><b>Farewell Dinner</b></p>	<p><b>Participants' departures</b></p>	

**Visit to Cape Sounio, Sanctuary of Poseidon**  
(July 4<sup>th</sup>, 18:00 – 23:00)



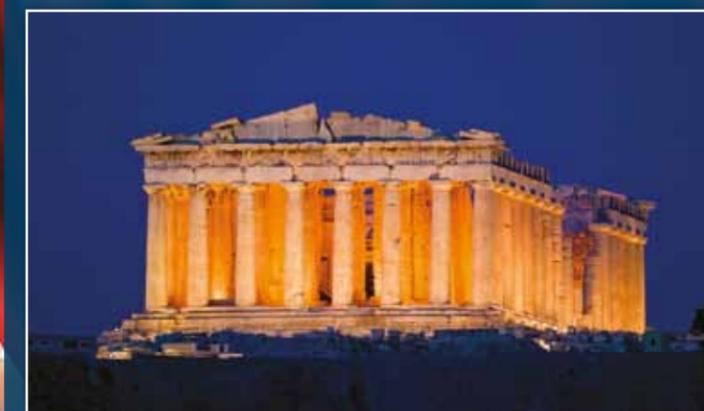
Cape Sounio is a promontory located 69 kilometres from Athens, at the southernmost tip of the Attica peninsula. According to legend, Cape Sounion is the spot where Aegeus, king of Athens, leapt to his death off the cliff, thus giving his name to the Aegean Sea. The sanctuary of Poseidon, one of the most 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 6<sup>th</sup>, 16:00 – 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 21<sup>st</sup> century. Permanent exhibitions: The Gallery of the Slopes of the Acropolis, The Archaic Gallery, The Parthenon Gallery, Propylaea-Athena Nike-Erechtheion, from 5<sup>th</sup> century BC to 5<sup>th</sup> century AC.

**Visit to the Acropolis of Athens**  
(July 6<sup>th</sup>, 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 Propylaea, the Erechtheion and the temple of Athena Nike.