

### Next-Lab

Next Generation Stakeholders and Next Level Ecosystem for Collaborative Science Education with Online Labs



Next-Lab focuses on introducing inquiry-based science education (IBSE) in schools and continues the mission of the project Go-Lab, promoting innovative and interactive teaching methods in primary and secondary schools.

Next-Lab provides a varied portfolio of advanced online learning tools in science topics, which contains hundreds of virtual and remote science laboratories, inquiry learning applications and Inquiry Learning Spaces. Furthermore, there is an authoring tool for teachers they can use to create own cross-curriculum learning scenarios and share them with their students.

Using Next-Lab, students benefit from the rich, challenging learning experiences, shaping their science and technology knowledge together with social competencies. The innovative tools of Next-Lab guide students through the research process, helping them to acquire in-depth understanding of scientific topics as well as 21st century collaboration and reflection skills.

<http://project.golabz.eu/project>

### The Go-Lab Portal

The Go-Lab Portal offers science teachers an opportunity to create highly interactive and personalised inquiry learning experiences for their students. The Go-Lab Portal offers a unique and broad set of remote and virtual laboratories that form the starting point for Inquiry Learning Spaces (ILSs). In an ILS, an online lab is combined with multimedia material and inquiry learning apps, which are dedicated tools to support inquiry learning processes (such as designing an experiment). The structure of an ILS follows an inquiry learning cycle with dedicated inquiry phases. The Go-Lab Authoring Platform ([www.graasp.eu](http://www.graasp.eu)) offers full facilities to create in a very straightforward and easy way personalised ILSs from an online lab or to re-use and adapt ILSs that were created before by other teachers.

<http://www.golabz.eu/>



# Next-Lab:

## Next Generation Stakeholders and Next Level Ecosystem for Collaborative Science Education with Online Labs Summer School 2017



GO-LAB

### Programme

July 9<sup>th</sup> – July 14<sup>th</sup>, 2017  
Marathon, Attica, Greece



The NextLab Summer School 2017 is supported by the NextLab - Next Generation Stakeholders and Next Level Ecosystem for Collaborative Science Education with Online Labs project, that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731685.

ORGANIZED BY



ELLINOGERMANIKI AGOGI



	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
	9 July 2017	10 July 2017	11 July 2017	12 July 2017	13 July 2017	14 July 2017
<b>09:00 to 13:00</b>	<p>Participants' arrival &amp; registration</p>	<p><b>Inquiry Base Science Education An Introduction</b> Ton De Jong <i>University of Twente</i></p> <p><b>The Go-Lab Scenarios Brief Introduction</b> Matthias Heintz <i>University of Leicester</i></p> <p><b>Cognitive Load Theory</b> Ton De Jong <i>University of Twente</i></p>	<p><b>21st Century Skills I Go-Lab Apps</b> Jens Koslowsky <i>Ellinogermaniki Agogi</i></p> <p><b>Workshop Time to Prepare your ILS</b></p> <p><b>21st Century Skills II Awareness, Reflection, Assessment</b> María Jesús Rodríguez-Triana <i>EPFL</i></p>	<p><b>Spreading the Word on Inquiry How to Introduce Inquiry</b> Rosa Doran <i>NUCLIO</i></p> <p><b>Innovative learning approaches: The Big Ideas of Sciences</b> Eleftheria Tsourlidaki <i>Ellinogermaniki Agogi</i></p> <p><b>Workshop Time to Prepare your ILS</b></p>	<p><b>Flipping the Classroom using Go-Lab</b> Jens Koslowsky <i>Ellinogermaniki Agogi</i></p> <p><b>Workshop Time to Prepare your ILS</b></p>	<p><b>How to become an effective Multiplier</b> Anastasiya Boiko <i>EUN</i></p> <p><b>The Go-Lab Scenarios Reflection</b></p>
<b>15:00 to 17:00</b>	<p><b>15:00-17:00 Registration &amp; Opening Presentation of the Programme</b></p> <p>Meet &amp; Greet</p>	<p><b>What's new in Go-Lab?</b> María Jesús Rodríguez-Triana <i>EPFL</i></p> <p>&amp; Jens Koslowsky <i>Ellinogermaniki Agogi</i></p>	<p><b>Workshop Time to Prepare your ILS</b></p> <p><b>The Go-Lab Learning Analytic Apps Reflection</b></p>	<p><b>Visit to the Acropolis Museum and the Acropolis</b></p> <p><b>Dinner</b></p>	<p><b>Presentations of ILS &amp; Discussion</b></p>	<p><b>Participants' departures</b></p>
	<p><b>18:00-20:00 Key Notes</b></p> <p><b>CERN Outreach Opportunities for Teachers and Students</b> Sascha Schmelting, <i>CERN</i></p> <p><b>Students at the Centre of Classroom Innovation</b> Rosa Doran, <i>NUCLIO</i></p> <p><b>Open Schools for Open Societies</b> Sofoklis Sotiriou, <i>EA</i></p>	<p><b>Visit at Cape Sounio, Sanctuary of Poseidon Dinner</b></p>			<p><b>20:00h Farewell Dinner</b></p>	

**Visit to Cape Sounio, Sanctuary of Poseidon**  
(July 10<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 12<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 12<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.