



University of Athens

C.Kourkoumelis

EU funded projects on science communication, education and outreach The example of CREATIONS

The finished EU projects:

1) The Learning with ATLAS@CERN (2009-2011)

<http://www.learningwithatlas-portal.eu/>



UoA/IASA was the coordinator

2) The PATHWAY IBSE Project (2011-2013)

Focused on teachers

FP7-Science-in-Society-2010-1

<http://www.pathway-project.eu/>



CERN was a partner

3) Discover the_COSMOS (Sept 2011-Sept 2013)

Focused on teachers +Students

FP7 Coordination action



UoA/IASA was the coordinator

<http://portal.discoverthecosmos.eu/>



DISCOVER_the_COSMOS (DtC)

15 Partners across Europe+LBL
(CERN was a partner)

Focused on teachers +Students

Combined educational e-resources from Astronomy and HEP (TUD, LBL, CERN, UoB, UoA/IASA)

A portal where we have combined all the resources from former portals {COSMOS(Astronomy) and Learning with ATLAS @CERN (HEP)} was created

credits | contact

e-Infrastructures for an Engaging Science Classroom

Home Repository HEP Tool-Box Astronomy Tool-Box Learn More News Help

Discover the Cosmos News

[LHSee: an application for mobile phones and tablet PCs](#)

Welcome to the Discover the Cosmos portal

The "Discover the Cosmos" coordination action aims to demonstrate innovative ways to involve teachers and students in eScience through the use of existing e-infrastructures in order to spark young people's interest in science and in following scientific careers. It aims to support policy development by a) demonstrating effective community building between researchers, teachers and students and empowering the latter to use, share and exploit the collective power of unique scientific resources (research facilities, scientific instruments, advanced ICT tools, simulation and visualisation applications and scientific databases) in meaningful educational activities, that promote inquiry-based learning and appreciation of how science works, b) demonstrating effective integration of science education with e-infrastructures through a monitored-for-impact use of eScience activities, which will provide feedback for the take-up of such interventions at large scale in Europe and c) documenting the whole process through the development of a roadmap that will include guidelines for the design and implementation of effective educational and outreach activities that could act as a reference to be adapted for stakeholders in both scientific research outreach and science education policy.

My Discover the Cosmos

- [Submit Educational Content](#)
- [Submit Learning Mission](#)
- [Teachers' Blogs](#)
- [My account](#)
- [My Inbox](#)
- ▶ [Submit content](#)
- [Log out](#)

Who's online

There are currently *1 user* and *0 guests* online.

- christina

The finished EU projects:

Go-Lab (Nov.2012-Nov.2016, 20 partners)

**Built science laboratory based on IBSE
infrastructure for schools
“on line” labs (federation of labs)**

<http://www.go-lab-project.eu/>

- 143 on-line labs
- 132 Inquiry Learning Spaces
- 34 Apps

In all STEM curricula subjects in 10 languages

CERN was a partner



The finished EU projects:

**Inspiring Science Education
(April 2013+40mo, 31 partners)**

**Large pilots for schools ->to reach 5,000 schools
in 15 European countries**

<http://inspiring-science-education.org/>



- 120 Demonstrators (in all STEM curricula subjects)
- Harvested existing repositories with 278,000 educational resources (mainly ODS and DtC)

A Horizon 2020 European outreach project to Develop an Engaging Science Classroom

- 36 months (Oct 15->Oct 18), 1.8 ME, 16 partners
- Coordinator: University of Bayreuth
- Improve skills of youngsters in STEM subjects
- HEP partners are UoA/IASA, UoBirmingham,

Art@CMS, STFC

Some partners focus on combining science and art and boost
creativity in schools

ex. Global Science Opera, Cultural Collisions , science using theater

Any EU outreach project should include:

- 1) A pedagogical framework
- 2) Creation of educational resources/scenaria
- 3) Workshops for teachers->community support (three stage: before/during/final)
- 4) Pilots+Large scale Implementation
- 5) Dissemination and exploitation plan
- 6) **Ways of measurement the impact, assessment**



+ Νέα υπο-κοινότητα

Welcome to the CREATIONS community

Managed By:

Petros Stergiopoulos



CREATIONS Community hosts educational material and links to all the CREATIONS subcommunities supporting the CREATIONS Demonstrators

Created on: 30.05.2016

Last visited: 31.10.2017

Network of related communities



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 CREATIONS community portal creates a vital environment of *innovative approaches, activities and resources for teachers and students* towards Scientific Research. All tools hosted in this portal are based on *Art and focus on the development of effective links and synergies between schools and research infrastructures*. *Effective community building as an aspect of the project-implementation will lead to the development of a roadmap that will include guidelines for the design and implementation of innovative educational and outreach activities.*

Below you can see a dynamic presentations of the existing communities at this moment based on or supporting the CREATIONS demonstrators:

[Greek Student Parliament on Science](#)

[Learning Science Through Theater](#)

[CMS Virtual Visits](#)

[CERN's Beam Line for Schools Competition](#)

[Ο Διαγωνισμός του CERN: Μια Δέσμη για τα Σχολεία](#)

[Art@CMS](#)

[Cultural Collisions](#)

[The Magnetic Field and its Applications](#)

[Structure of the Atom](#)

List of educational scenaria
50 now->100 end of project

Some numbers for the first two years

- Community support
 - Teachers' workshops (visionary+practice/reflection) : 62
 - **Teachers trained:~900**
- Implementation
 - **Teachers ~1,400**
 - Local 850, national 450, international 100
 - **Students ~15,300**
 - Local 9100, national 9800, international 1400

Assessment

In CREATIONS the impact is evaluated with:

- “Pisa like” assessment questions at each phase of the demonstrator/scenario
 - Use indicators on the success of the event analysis
HYPATIA (# of Z’s found, # of Higgs found, e-pair/ μ -pair)
 - Pre and post creativity questionnaires (already collected **7500 questionnaires!!**)
-
- **CREATIONS has about one more year to go...**
 - **New projects should start soon!!**