

## **Xplora Newsletter**

Welcome to the second issue of the Xplora newsletter!

We'd like to invite you to have a look at our science education world.

In October, Xplora held an exciting event for schools. Find out more and watch the video!

Also in this issue, we are launching an interactive calendar tool and inviting you to join our online expert discussions. You can read news, resources, information about science and we are launching some new sections, one dedicated to the Xplora partners, one to European science education projects and another to awards and competition related to science education.

If you would like to be featured in our newsletter, or send us a contribution - just get in touch:

[laura.massoli@eun.org](mailto:laura.massoli@eun.org)

All the best,  
Laura Massoli  
Xplora Web Editor

### **Xplora at a glance**

#### **Xplora Event for Schools**

Xplora was officially launched for schools, on 13 October 2005, at the Technopolis Science Centre in Mechelen, Belgium. The focus of the event was forensic science. A number of activities were featured: a Mysterix film offering some science experiments with schools, a conference for the local public, an online game and the launch of the CERN webcast website "Beyond Einstein".

The event was webcast from the Xplora site. You can download the video of the launch and read more about the event and the activities:

[http://www.xplora.org/ww/en/pub/xplora/events/calendar/xplora\\_website\\_launch.htm](http://www.xplora.org/ww/en/pub/xplora/events/calendar/xplora_website_launch.htm)

#### **Call for participation: expert discussions**

Xplora is happy to invite primary and secondary schools to pose questions online. Many topics are foreseen, from fractals to chocolate. The discussions are aimed at teachers as well as at students. If you want to take part and share your opinions with others, first you have to choose the topic and then register your interest.

Take a look at the topics:

[http://www.xplora.org/ww/en/pub/xplora/events/online\\_chats/chat\\_topics.htm](http://www.xplora.org/ww/en/pub/xplora/events/online_chats/chat_topics.htm)

### **Xplora portal Survey**

The Xplora team would like to make the website more usable and attractive for our visitors. Help us to improve our portal and please fill in the survey at: <http://www.zoomerang.com/recipient/survey-intro.zgi?p=WEB224MZ7QZK2C>

### **Call for science teachers**

Xplora is looking for science teachers, who help to make Xplora exciting, by contributing content, experiments, resources and more.

If you have created material for using ICT in the classroom, science projects using the internet or other fascinating science activities, please send an application to Karl Sarnow (karl.sarnow@eun.org). The application should include a short CV and a link to your work if it is available online.

### **Become a member of Xplora**

Xplora, the European gateway to science education, invites you to join its educational community of more than 1500 members. Members can share science education resources, take part in thematic chats and forums, and create private communities.

You can register here:

<http://www.xplora.org/ww/en/pub/xplora/community/register.cfm>

### **Xplora Calendar: a new interactive tool**

We have just launched this tool! You can use it to easily feature your events. They will be available for all Xplora visitors to view. Please remember they should be related to science education and science communication.

Visit: [http://www.xplora.org/ww/en/pub/xplora/events/calendar\\_of\\_events.cfm](http://www.xplora.org/ww/en/pub/xplora/events/calendar_of_events.cfm)

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## **Megalab**

### **Biology activity for pupils – observing butterflies**

Pupils make simple observations of the occurrence of butterflies and feed the observations (including species, location and date/time information), into a database. Documentation is in English. It is suitable for children from 9 years up, depending on the activity.

### **Secondary school environmental project**

Students go to a place and measure some properties of air, water or soil. Then they entered their data in a ready to use existing database. Schools need to register before using the database. The project description is in Arabic, Dutch, English, French, German, Russian and Spanish. It is suitable for students from 13 to 19 years.

More about the two projects

[http://www.xplora.org/ww/en/pub/xplora/megalab/database\\_projects/examples.htm](http://www.xplora.org/ww/en/pub/xplora/megalab/database_projects/examples.htm)

About web experiments

Web experiments are an exciting marriage of Internet technology with practical science applications, which support science education.

Read more:

[http://www.xplora.org/ww/en/pub/xplora/megalab/web\\_experiments.htm](http://www.xplora.org/ww/en/pub/xplora/megalab/web_experiments.htm)

More practical science ideas at

<http://www.xplora.org/ww/en/pub/xplora/megalab.htm>

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## **Library**

### **Science education resources**

Are you looking for interactive activities, science websites, articles or educational databases for your lessons? Xplora offers you an online resources database for science teaching and learning, at:

<http://www.xplora.org/ww/en/pub/xplora/library/resources.cfm>

Recently the following items were added:

-“**Object lessons**”: a website providing learning resources, activities quizzes and interactive timelines. 3D images are supported by facts, figures and activities, to help the learner explore objects.

<http://www.objectlessons.org.uk/>

-“**Einstein's big idea**”: this website explores the stories behind  $E = mc^2$  and relates how Einstein came to his startling conclusion that mass and energy are two forms of the same thing. Many resources for teachers are available.

<http://www.pbs.org/wgbh/nova/einstein/>

-“**Vega Science Trust**”: is a not for profit organisation which broadcasts science programmes for free over the internet. It presents a number of resources for schools.

<http://www.vega.org.uk/schools/index.php>

-“**Climate Quiz, Mission BluePlanet**”: this website presents information and answers to over 500 questions, for three age groups between 7 and 17, on the subject of weather, climate, and energy saving (in German).

[www.mission-blue-planet.de](http://www.mission-blue-planet.de)

### **About Climate: Sustainable Footprint Quiz**

Do your pupils have what it takes to make the Earth a greener place? Then invite them to play the online quiz "My Footprint", brought to you by e-LinQ, and get to know more about the 'sustainable footprint', a way to measure how green your lifestyle is.

[http://www.xplora.org/ww/en/pub/xplora/library/activities/sustainable\\_footprint.htm](http://www.xplora.org/ww/en/pub/xplora/library/activities/sustainable_footprint.htm)

### **Science and tools: the Galileo Compass on the net**

The Institute and Museum of the History of Science in Florence offers an eLearning module called “The instruments of Science” to encourage a greater interest in scientific culture in history.

The first module is focused on the Galileo compass, an instrument which represents a formidable example of both mathematics and geometric knowledge. The resource is available in English and Italian:  
[http://www.xplora.org/ww/en/pub/xplora/news/latestnews/the\\_galileo\\_compass\\_on\\_the\\_net.htm](http://www.xplora.org/ww/en/pub/xplora/news/latestnews/the_galileo_compass_on_the_net.htm)

The Istituto e Museo di Storia della Scienza (IMSS) is one of the foremost international institutions in the History of Science. It is a partner in the Pencil Project and runs a Pencil Pilot project on “On-line access to history of science museums objects”.

Read more about the Pencil project:  
[http://www.xplora.org/ww/en/pub/xplora/nucleus\\_home/pencil.htm](http://www.xplora.org/ww/en/pub/xplora/nucleus_home/pencil.htm)

Read more about the Pilot project on “On-line access to history of science museums objects”:  
[http://www.xplora.org/ww/en/pub/xplora/nucleus\\_home/pencil/imss.htm](http://www.xplora.org/ww/en/pub/xplora/nucleus_home/pencil/imss.htm)

### **Looking for free software: Xfig – a program for drawing**

Xfig is an easy to use vector drawing program with many features and easy to use. Karl Sarnow, pedagogical coordinator of Xplora, explains more about how it can be used in science teaching.

[http://www.xplora.org/ww/en/pub/xplora/library/software/xfig\\_free\\_program\\_for\\_drawin.htm](http://www.xplora.org/ww/en/pub/xplora/library/software/xfig_free_program_for_drawin.htm)

### **European climate change exhibition on CD-ROM**

Global warming: what are the causes? How does it affect us? Can we prevent it? CLARITY - the first European climate change exhibition on CD-ROM - enables school classes, environmental groups and local authorities to display their own climate change exhibition.

17 exhibition posters can easily be printed at low cost in different sizes. They are supplemented by detailed background information, web links and climate related activities.

The exhibition (target group: 12-18 year-olds) is available in English, German (only posters), Italian, Slovenian and Spanish. Member-cities and -schools of Climate Alliance can order the exhibition free of charge: for non-members there is a small administrative fee of 10 Euro.

Contact: Climate Alliance of European Cities, phone: 0049-69-717139-0,  
[europe@climatealliance.org](mailto:europe@climatealliance.org)

Visit the science education library at:  
<http://www.xplora.org/ww/en/pub/xplora/library.htm>

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## **About Xplora Partners**

### **PENCIL project: Traffic and Climate Change**

PENCIL is a large scale European project to develop and test innovative methods for science teaching via many pilot projects. One of the pilot

projects, managed by the Deutsches Museum (Germany), will develop exhibition units on the topic "Traffic and environment", a school-program on traffic and pollution and a bilingual implementation for the Climate Website of the Deutsches Museum.

Further information on the pilot project:

[http://www.xplora.org/ww/en/pub/xplora/nucleus\\_home/pencil/deutches\\_museum.htm](http://www.xplora.org/ww/en/pub/xplora/nucleus_home/pencil/deutches_museum.htm)

### **Nucleus project: CISCI**

Nucleus is a European cluster of projects to improve science education in Europe. CISCI is one of these projects, and is combining the two most popular media among youngsters, movies and the Internet, aiming to raise the attractiveness of science. The idea of CISCI is to set up a free database with clips and scenes from films with scientific themes, analyzing their scientific content from the point of view of different scientific disciplines

CISCI is coordinated by the Vienna University of Technology and it is composed by a consortium of 11 partners from the new and old European countries as well as the USA.

Further information about CISCI:

[http://www.xplora.org/ww/en/pub/xplora/nucleus\\_home/cisci.htm](http://www.xplora.org/ww/en/pub/xplora/nucleus_home/cisci.htm)

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## **Practice**

### **Favourite resources for science teachers**

Carlo Nati, Italian art and design drawing teacher and teacher trainer, presents some of his favourite resources for teaching. He gives us some tips about a fractals website, a search engine for Italian museums and a repository of audio/video lessons about fundamental principles of orthographic projection.

Read more:

[http://www.xplora.org/ww/en/pub/xplora/practice/favourites/carlo\\_nati.htm](http://www.xplora.org/ww/en/pub/xplora/practice/favourites/carlo_nati.htm)

### **Teaching examples: Local Water Quality Studies with Geographical Information Systems**

Tino Johansson, from the Department of Geography at the University of Helsinki, Finland is the project manager of GISAS project (Geographical Information Systems Applications for Schools). He briefly explains the aims, activities and outputs of the project which involves many European schools.

Read more:

[http://www.xplora.org/ww/en/pub/xplora/practice/examples/enhancing\\_local\\_water\\_quality .htm](http://www.xplora.org/ww/en/pub/xplora/practice/examples/enhancing_local_water_quality.htm)

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Do you want to let us know about your teaching activities? Would you like to present your favourites? We will feature them on Xplora.

Contact: [laura.massoli@eun.org](mailto:laura.massoli@eun.org)

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### **European science education projects: have a look around**

#### **DeCiDe - Deliberative Citizens Debates in European Science Centres and Museums**

This science education project seeks to develop a way of conducting meetings in which members of the public can debate about six controversial life science issues: pre-implantation genetic testing; stem cell research; xeno-transplantation; new drugs for HIV; brain research and nanotechnology.

Read more:

[http://www.xplora.org/ww/en/pub/xplora/eu\\_projects\\_new/eu\\_projects/decide\\_\\_\\_deliberative\\_citizens.htm](http://www.xplora.org/ww/en/pub/xplora/eu_projects_new/eu_projects/decide___deliberative_citizens.htm)

#### **Unfold - Understanding New Frameworks of Learning Design**

This project is addressing the implementation and use of eLearning standards. The project aim is to promote and encourage the development and use of eLearning systems that implement a wide range of pedagogic approaches as represented by the IMS Learning Design specification.

Read more:

[http://www.xplora.org/ww/en/pub/xplora/eu\\_projects\\_new/eu\\_projects/unfold\\_\\_\\_understanding\\_new\\_fra.htm](http://www.xplora.org/ww/en/pub/xplora/eu_projects_new/eu_projects/unfold___understanding_new_fra.htm)

More about other science education projects:

[http://www.xplora.org/ww/en/pub/xplora/eu\\_projects\\_new/eu\\_projects.htm](http://www.xplora.org/ww/en/pub/xplora/eu_projects_new/eu_projects.htm)

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### **Awards**

### **The Mechanical Bang**

The theme, "The Mechanical Bang", has chosen as a tribute to the World Year of Physics, to put focus on mechanics and mechanical energy. Experimentarium, the Danish science centre, has launched its school competition for 2005. Experimentarium invites 9-10 year olds in 2005/2006 (grade 3-4 in Denmark) to let their imagination go and get playing, when we build Denmark's biggest fantasy machine only driven by mechanical energy from mousetraps. The best mechanical experiments will be exhibited at Experimentarium.

Read more about the competition:

[http://www.xplora.org/ww/en/pub/xplora/events/calendar/the\\_mechanical\\_bang.htm](http://www.xplora.org/ww/en/pub/xplora/events/calendar/the_mechanical_bang.htm)

The Experimentarium is Denmark's only Science Centre. It is member of Pencil and runs a Pencil Pilot project on "Xciters – Science from Youth to Youth"

The Experimentarium's pilot project:

[http://www.xplora.org/ww/en/pub/xplora/nucleus\\_home/pencil/experimentarium.htm](http://www.xplora.org/ww/en/pub/xplora/nucleus_home/pencil/experimentarium.htm)

### **Global Junior Challenge Award 2006**

This is a global award promoted by the Digital Youth Consortium, a non-profit organization founded by the Municipality of Rome and six major ICT companies. The award, dedicated to young people and schools, aims to identify and reward best practice in the use of new technologies in education and training of youngsters. The deadline for submission is 31 July 2006.

Read more:

[http://www.xplora.org/ww/en/pub/xplora/practice/awards\\_and\\_prizes/global\\_junior\\_challenge\\_award\\_.htm](http://www.xplora.org/ww/en/pub/xplora/practice/awards_and_prizes/global_junior_challenge_award_.htm)

More about awards and prizes:

[http://www.xplora.org/ww/en/pub/xplora/practice/awards\\_and\\_prizes.htm](http://www.xplora.org/ww/en/pub/xplora/practice/awards_and_prizes.htm)

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### **Events**

#### **ICT Conference for primary and secondary teachers**

29 November 2005

Cave Castle - UK

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The East Riding of Yorkshire Council is hosting a Primary/Secondary ICT Conference. Delegates will have the chance to meet, browse and discuss the latest ICT products with over 35 national and local exhibitors.

[http://www.xplora.org/ww/en/pub/xplora/events/calendar\\_of\\_events.cfm](http://www.xplora.org/ww/en/pub/xplora/events/calendar_of_events.cfm)

### **CERN webcast website “Beyond Einstein”**

1 December 2005 - Online

CERN, the European Organization for Nuclear Research, with ECSITE and the World Year of Physics International Steering Committee is organizing a live webcast about Einstein’s science in today’s research and daily life.

This unprecedented 12 hour long live webcast is a closing event of the World Year of Physics.

<http://beyond-einstein.web.cern.ch/beyond-einstein/>

### **Petnica Students Conference**

8 – 11 December 2005

Valjevo – Belgrad Yugoslavia

Petnica Science Center, the biggest and probably the oldest independent organization for extracurricular science education in South-Eastern Europe is organizing its annual student’s conference.

<http://www.psc.ac.yu/konferencija/>

### **Eminent Conference 2005**

8-9 December 2005

Paris – France

The French Ministry of Education hosts the European Schoolnet’s annual EMINENT conference, this year. Conference’s theme focuses on ensuring that schools exploit the opportunities offered by new technologies.

<http://eminent.eun.org>

More about science education events:

[http://www.xplora.org/ww/en/pub/xplora/events/calendar\\_of\\_events.cfm](http://www.xplora.org/ww/en/pub/xplora/events/calendar_of_events.cfm)

<http://www.xplora.org/ww/en/pub/xplora/events/calendar.htm>

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### **About this newsletter**

Please send all comments, criticisms and contributions to [science-news@eun.org](mailto:science-news@eun.org). For more information about Xplora, please visit <http://www.xplora.org/about.htm>.

The Xplora newsletter is published by European Schoolnet for the PENCIL project, which supports the Xplora science education gateway – full information about PENCIL is available at <http://www.xplora.org/pencil.htm>.

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