

Xplora Newsletter

Welcome to the fifth issue of the Xplora newsletter!

Xplora, within the Pencil Project, is organising a science teacher conference at CERN, Geneva, taking place from 15 to 18 June 2006. Read more about this event!

Xplora has also started a new collaboration with TryScience.org - a partnership between IBM, the New York Hall of Science (NYHOS), the Association of Science-Technology Centres (ASTC) and many science centres and new science activities and games are now available visiting the Xplora portal.

On the Xplora you can also read about a new web experiment – the Millikan oil drop experiment - which we will develop, together with the University of Kaiserslautern and thanks to a grant received from the Agilent Foundation.

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

laura.massoli@eun.org

All the best,

Laura Massoli
Xplora Web Editor

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XPLORA AT A GLANCE

Xplora Science teachers Conference - an event within the PENCIL project

Xplora, within the Pencil Project, is organising a science teacher conference at CERN, Geneva. The conference, taking place from 15 to 18 June 2006, will focus on open source and ICT in science education, science teaching approaches, the role of science centres in education and more. In the science framework of CERN, several science centres from all around Europe and science/ICT organisations will present their activities for enhancing and promoting science at schools.

Workshops with practical activities for science teachers will be also organised. Science teachers from all around Europe are welcome!

Xplora will select some teachers, covering their costs and give them the opportunity of taking part in the conference for free. If you are interested, just send your CV, underling your science projects and activities at school.

If you will not be selected, you can also take part: Xplora will make the participation fee as low as possible for each science teacher.

There will be also exhibition opportunities for companies and organisations. Don't miss this European science event! The final agenda will be available soon at www.xplora.org

For more information about the conference, contact Karl Sarnow (karl.sarnow@eun.org) and Laura Massoli (laura.massoli@eun.org).

Agilent supports Xplora for web experiments

Agilent Technologies Foundation has made possible the development of an exciting new web experiment, the Millikan oil drop experiment. The foundation has provided a grant to Xplora, the European Science Education Gateway carried by European Schoolnet - EUN, to develop the Millikan web experiment.

http://www.xplora.org/ww/en/pub/xplora/news/latestnews/xplora_wins_grant_for_web_expe.htm

More about web experiments:

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

The new Xplora teacher group: let's work together!

At the beginning of March 2006, the new Xplora teacher group met in Brussels to discuss about new science activities and projects. Xplora has a group of 12 teachers, from all around Europe, who support our work, provide science material, resources, content for the portal and give us feedback on the design and development of the portal's tools and services.

http://www.xplora.org/ww/en/pub/xplora/about/teacher_group/xplora_teachers_group.htm

MEGALAB

Light pollution: students can monitor it

Light pollution is the illumination of the night sky caused by artificial light sources on the ground (streetlights, billboards, etc.). The difference in perception of the night sky in the countryside and in large cities comes from the ambient light. This database project allows a global comparison of local light pollution by simply watching the stars in a clear night.

http://www.xplora.org/ww/en/pub/xplora/megalab/database_projects/examples.htm

More about database projects:

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

Who has more rooms?

Kids are measuring their classrooms and they compare sizes. This collaborative project, proposed by ASPIRE - the Alabama Supercomputing Program to Inspire computational Research in Education, is a very simple but motivating way to make pupils think about areas and allow them to calculate sizes. The participating classes exchange photos and measures. Suitable for pupils aged from 12 to 14 years.

http://www.aspire.cs.uah.edu/aspire/summer/manuals/level1_manual/measurement.doc

More about collaborative projects:

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

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:

-“**FearOfPhysics.com**”: it is a website for explaining physics. It has a visual physic section, a physic dictionary, a homework help section and a ask an expert service

<http://www.fearofphysics.com/>

-“**Film for Learning**”: this is a NESTA funded project that encourages students and teachers to make short movies to explain science stuff to their peers!

<http://www.filmsforlearning.org>

-“**Ozzy Ozone**”: OzzyOzone, defender of our planet, promotes the UNEP ozone education programme.

<http://www.ozzyozone.org/>

-“**Switch Zoo**”: children can mix animals together to make their own new creatures. They can read animal facts, name their new animals and write stories about them. It’s a great activity to get kids thinking about diversity, adaptation, and species specialization.

<http://www.switchzoo.com>

-“**BioTopics**”: this website gives access to interactive resource material, to support the study of biology at secondary level.

<http://www.biotopics.co.uk/>

TryScience.org: science hands-on activities and games

Xplora is now featuring some of the Tryscience.org science activities. You can learn about ultrasound, try a chemical experiment, or even play the grid adventure game.

http://www.xplora.org/ww/en/pub/xplora/library/activities/tryscience_org__science_hands_.htm

International Polar Foundation activities

EducaPoles is an educational site run by the International Polar Foundation (IPF) to sensitize young people to the importance of the Polar Regions and of climate change. The site offers several animations and games on different topics linked to the Polar Regions, the way our planet's climate functions, climate change and energy. Try some activities at:

http://www.xplora.org/ww/en/pub/xplora/library/activities/international_polar_foundation.htm

More about TryScience.org and IPF, new Xplora content partners
http://www.xplora.org/ww/en/pub/xplora/content_partners.htm

Theme Dossiers: Fractals

This dossier focuses on fractals – it includes top tips for using software to create fractals and more. This dossier has been put together by Karl Sarnow.
<http://www.xplora.org/ww/en/pub/xplora/library/themedossiers/fractals.htm>

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

PRACTICE

Teacher-Scientist Partnerships for Global Change Education

CarboSchools is an initiative which promotes partnerships between global change scientists, secondary school teachers and their students in order to raise young people's awareness on the local and global consequences of climate change, to encourage them to discover the scientific research and to act locally to reduce emissions of greenhouse gases. Philippe Saugier, who works in this project, tells us more:

http://www.xplora.org/ww/en/pub/xplora/practice/examples/teacher_scientist_partnerships.htm

Crop circles Challenge: playing with maths as a game

Three Xplora teachers - Palmira Ronchi from Italy, Ivan De Winne from Belgium and Dimitris Kastaniotis from Greece present the “Crop circles challenge”, a project, which aims at experimenting new methodologies and technologies to study maths.

http://www.xplora.org/ww/en/pub/xplora/practice/examples/crop_circles_challenge_playin.htm

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

ABOUT XPLORA PARTNERS

PENCIL project: Ludomathematics

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 “Ludomathematics”, managed by Ciencia Viva, Lisboa, Portugal intends to stimulate the use of games, gadgets and hands-on activities as aids for teaching mathematics in schools.

http://www.xplora.org/ww/en/pub/xplora/nucleus_home/pencil/ciencia_viva.htm

More about PENCIL

http://www.xplora.org/ww/en/pub/xplora/nucleus_home/pencil.htm

Nucleus project: Science in Film events

Nucleus is a European cluster of projects to improve science education in Europe. One of these projects "Cinema and Science" (CISCI), coordinated by the Vienna University of Technology, combines the two most popular media among youngsters, namely movies and the Internet, aiming to raise the attractiveness of science. In the summer term 2006 several "Science in Film" events will be organised in Vienna:

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

More about CISCI

http://www.xplora.org/ww/en/pub/xplora/nucleus_home/cisci.htm

Nucleus project: Science in School journal –launched!

The first issue of the Science in School journal, published by EIROforum and supported by the European Union within the Nucleus initiative, is now available to read and download at www.scienceinschool.org.

Science in School addresses science teaching across Europe and also across disciplines. It covers not only biology, physics and chemistry, but also maths and earth sciences, highlighting the best in teaching and cutting-edge research, and focusing on interdisciplinary work.

http://www.xplora.org/ww/en/pub/xplora/news/latestnews/science_in_school.htm

More about Nucleus

http://www.xplora.org/ww/en/pub/xplora/nucleus_home.htm

EUROPEAN SCIENCE EDUCATION PROJECTS: HAVE A LOOK AROUND

Meeting of Minds: European Citizens' Deliberation on Brain Science

"Meeting of Minds" is a trans-European project designed to inform the public about current and future research in brain science, and for them to assess this progress to associated ethical, social and legal implications.

http://www.xplora.org/ww/en/pub/xplora/eu_projects_new/eu_projects/meeting_of_minds_european_cit.htm

eMapps.com: games and mobile technology in learning

The eMapps.com project will investigate the use, by school children, of mobile technologies, such as handheld PCs, PDAs and smartphones in teaching and learning.

http://www.xplora.org/ww/en/pub/xplora/eu_projects_new/eu_projects/emapps_com.htm

The CONNECT context 2006

CONNECT is an IST project which aims to design the classroom of tomorrow

by using advanced technologies, in order to connect formal and informal learning environments. The consortium is now launching the CONNECT context 2006, inviting physics teachers to use of the CONNECT web-based tools to create pathways and Augmented Reality scenarios for the AirFoil, an exhibit demonstrating why airplanes fly. The authors of the 10 best pathways and scenarios will be invited, in June, at CERN, Geneva, to participate in the Science Teachers Conference organized by Xplora and Pencil.

http://www.xplora.org/ww/en/pub/xplora/news/latestnews/connect_2006_contest.htm

More about CONNECT

http://www.xplora.org/ww/en/pub/xplora/eu_projects_new/eu_projects/connect.htm

More about other science education projects:

http://www.xplora.org/ww/en/pub/xplora/eu_projects_new/eu_projects.htm

AWARDS AND NEWS

A new award from the Royal Society of Chemistry

The Royal Society of Chemistry is launching a new award - backed by Bill Bryson and his publishers - open to school and college students throughout the UK. The RSC Bill Bryson Prize is aimed at encouraging clear science communication.

http://www.xplora.org/ww/en/pub/xplora/events/awards_and_prizes/get_creative_about_the_climate.htm

Global Junior Challenge Award 2006 is open for entries

This global award is 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 practices in the use of new technologies in education and training of youngsters.

http://www.xplora.org/ww/en/pub/xplora/events/awards_and_prizes/global_junior_challenge_award.htm

Read more about awards and prizes:

http://www.xplora.org/ww/en/pub/xplora/events/awards_and_prizes.htm

European Vascular Genomics Network (EVGN): focus on education

EVGN, a Network of Excellence funded by the European Union, has dedicated a specific section of its website to secondary schools and teachers and to people who are non-experts but interested in cardiovascular diseases or simply want to know more about the "science of the heart". To them, EVGN offers the possibility of following and even directly participating in the scientific research.

http://www.xplora.org/ww/en/pub/xplora/news/latestnews/european_vascular_genomics_net.htm

Events

International Workshop for secondary school science teachers

11-13 May 2006
Heidelberg, Germany

The European Molecular Biology Organization organizes its 5th International Workshop "From school to University" for secondary school science teachers.
<http://www.embo.org/scisoc/education.html>

Euroschool Course "Ultrasonography in Emergencies"

25-26 May
Oradea, Romania

The University of Oradea organizes this international meeting, concerning the ultrasound research and its application in medicine.
<http://www.eco2006oradea.ro/>

Communicating Science and Technology

6-9 June 2006
Tromsø, Finland

The conference focuses on the question of declining recruitment to the natural sciences, mathematics and technology.
<http://uit.no/cst>

eSTREAM Open European Conference on Streaming Technology in Education

14-16 June 2006
Patras, Greece

The aim of the conference is to bring together experts, educational staff, teachers, researchers, companies and educational decision makers from all over Europe for an exchange experiences and the sharing of the state-of-the-art practice of the educational use of streaming media technology in Europe.
<http://estreamconference.schule.at>

Astronomy Summer School in Spain – Call for participation

3-7 July 2006
Alicante, Spain
Deadline for application: 20 May 2006

The 10th edition of this summer school will offer the opportunity to teachers to improve their knowledge about astronomy topics. For the first time, thanks

also to the support of the Xplora portal, the school will be opened to teachers from all Europe.

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

Euroscience Open Forum 2006

15-19 July 2006

Munich

Euroscience Open Forum - ESOF2006 is the second pan-European General Science Meeting and it will present an interdisciplinary programme based on seven science themes, from the natural sciences to the social sciences and the humanities

http://www.xplora.org/ww/en/pub/xplora/events/calendar/euroscience_open_forum_2006.htm

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.htm>

About this newsletter

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

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