



Xplora Newsletter No. 10 February 2007

Welcome to the tenth issue of the Xplora newsletter!

Here is your point of contact to seek further information on Xplora and its activities as well as getting insight into innovative practical science approaches and projects.

In this issue, you can find the latest news on science education, upcoming events and you will find out about interesting digital learning resources.

Would you like to be featured in our newsletter or send us a contribution?
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XPLORA AT A GLANCE

eCOURSES TO BE AVAILABLE SOON

Xplora aims to help math and science teachers to give a boost to their lessons and make them more exciting.

- The wealth of educational material, gathered in the database of resources and in the other sections of the portal, also implies to reflect on **teacher training**. While still a great part of teacher training is given in real workshops and teacher training events, one of the outcomes of the PENCIL project is the development of a Learning Management System (LMS), enabling teachers to access virtual courses in service.

- Xplora will also provide soon **electronic lessons** aimed to be run in the classroom and which can be imported by the teacher into his LMS. In addition to the course content, Xplora will offer the technology to use an LMS even in restricted environments, where school system administrators might not be able or willing to install the LMS software. The technical basis of Xplora's LMS is Moodle, a well-known and high-rated Open Source LMS. This feature will allow schools to install an LMS and use Xplora's courses without any cost.

SURVEY: XPLORA NEEDS YOUR FEEDBACK

To continue improving the Xplora portal, we are launching a survey where you can give your feedback and comments about the site.

You also have the opportunity to let us know your willingness for cooperation.

As an active teacher in science education, this is your chance to get more involved in Xplora and make your voice heard.

<http://www.xplora.org/ww/en/pub/xplora/news/latestnews/survey.htm>

LIBRARY

WALTER FENDT'S JAVA APPLETS

Eleni Kyriaki teaches Science and Informatics in Brussels, Belgium, at the Greek Gymnasium/Lyceum and the European School III. She discovered the Fendt's simulations Java Applets while surfing on the Internet seven years ago and gives you more information about them.

http://www.xplora.org/ww/en/pub/xplora/library/software/walter_fendts.htm

GCOMPRIS: EDUCATIONAL SOFTWARE

GCompris is a free educational software suite comprising of numerous activities for children aged 2 to 10. Linda Giannini and Carlo Nati presented this software in a nursery school in Latina, Italy. We asked them to tell us more about this programme.

<http://www.xplora.org/ww/en/pub/xplora/library/software/gcompris.htm>

UMBRELLO UML MODELLER

Umbrello UML Modeller is a Unified Modelling Language diagram programme available natively for Unix. It is part of the KDE Desktop Environment but works well with other desktops and programming environments. Stavros Nikou, who is an informatics teacher in secondary public schools and teaches programming, databases, internet and multimedia in vocational school in Greece, describes this software.

<http://www.xplora.org/ww/en/pub/xplora/library/software/umbrello.htm>

HANDS-ON GUIDE FOR SCIENCE COMMUNICATORS RELEASED

Are you looking for tips and advice to communicate about science?

Lars Lindberg Christensen, an experienced science communicator from the Hubble European Space Agency Information Centre, has just released a new book aimed to change attitudes towards science communication in Europe. "One of the main tasks of science communication is to publicise the presence of the natural sciences in all aspects of society and our daily lives" highlights the author in his hands-on-guide.

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

SCIENCE EDUCATION RESOURCES

Recently the following items were added:

- **"Water Experiments"**: this webpage describes several water experiments including Floating Marbles, Displacement, Floating Needle, How Many Quarters, Swimming Paper Fish, Making an Egg Float, Molecular Action.

<http://www.conwaycorp.com/water/services/experiments.html>

- **"MATH-TEACHER Educational Software"**: this software makes the teaching and learning of math as easy as math can get! Mathematics builds progressively from concept to concept. It helps students understand each concept before moving on to the next.

<http://www.mathkalusa.com/index.html>

- **"Businessballs"**: These free management and training templates, resources, tools and articles are available for you to download and use for your own personal development. They can be used for educational purposes.

<http://www.businessballs.com/freeonlineresources.htm>

- **“European Pupils Magazine”**: this website is about the history of science and technology.

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

- **“Eduforge”**: Eduforge is an open access environment designed for the sharing of ideas, research outcomes, open content and open source software for education.

<http://eduforge.org/>

Search for other science resources at:

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

Visit the Xplora science education library at:

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

PRACTICE

INTERFERENCE OF TWO CIRCULAR OR SPHERICAL WAVES - A LESSON PLAN

Eleni Kyriaki teaches Science and ICT in Belgium. In the article below, she shares with you a lesson plan entitled: “Interference of two Circular or Spherical Waves”. It is intended to be a useful source of information and inspiration for a target group of secondary level students (aged from 16 to 17).

<http://www.xplora.org/ww/en/pub/xplora/practice/examples/interference.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: agathe.djelalian@eun.org

ABOUT XPLORA PARTNERS

SCIENCE ON STAGE 2

The "Science on Stage 2" festival will be held at the Europole Congress Centre in Grenoble, France from 2 to 6 April 2007. Offering science teachers from all over Europe an opportunity to exchange successful and innovative teaching ideas and materials, this festival will showcase the very best of today's science education. Around 500 science teachers from some 27 countries are expected to take part in this unique European event.

http://www.xplora.org/ww/en/pub/xplora/events/calendar/science_on_stage_2.htm

HANDS-ON & BRAINS-ON SURVEY

During the last decades, science centres and museums have been leading the way with hands-on learning and teaching in Europe. The multidisciplinary contents of modern science centre exhibitions are large and unique forming a reliable learning source. In the Hands-On & Brains-On project, a network of eight institutions (science centres and museums) is now developing educational programmes for primary schools in co-operation with school authorities, teacher education institutes and schools.

Science teachers of primary schools are invited to participate in the project and contribute to its validation. Take part in the "Start-up/ Mid-Time or End-Time Survey" and tell us your expectations or your practical experiences about the project.

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

EUROPEAN SCIENCE EDUCATION PROJECTS: HAVE A LOOK AROUND

RELEASE OF THE FINAL GRID WEBSITE

GRID (Growing Interest in the Development of Teaching Science) is a project funded by the European Commission within the Socrates Programme. It aims to create a network for the exchange of good practice in the field of science teaching in Europe. Its final portal has been released and it allows internet users to find typical initiatives selected as good practice in science education, to serve as role models and inspiration for science teachers across Europe.

http://www.xplora.org/ww/en/pub/xplora/library/highlights/grid_project.htm

NEW EU COMMISSION BOOK INVESTIGATES HOW TO IMPROVE SCIENCE COMMUNICATION

The European Commission has recently published a book which offers a useful insight into the current debate on the various aspects of communication about science. Edited by Michel Claessens, "Communicating European Research 2005" offers a series of 40 articles written by speakers who presented their findings at the "Communicating European Research 2005" event held in Brussels on 14-15 November 2005.

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

AWARDS AND NEWS

REPORT ON INTERNET AS RESOURCE FOR SCIENCE

More and more people rely on the internet as their primary source for news and information about science and 87% of online users have at one time used the internet to carry out research on a scientific topic or concept. Those findings come from a national survey conducted in the United States by the Pew Internet & American Life Project in collaboration with the Exploratorium, a science museum and science-education centre in San Francisco, California.

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

PLAN YOUR SATURN OBSERVING NIGHT

Are you looking for a unique opportunity to introduce your pupils to planetary observation? Are you interested in exploring Saturn with them?

Participate in the first worldwide "Saturn Observing Night" on or near 10 February 2007. Organised by the Saturn Observation Campaign (SOC), this night is part of a series of Saturn observing events held around the world.

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

INTERNATIONAL STOCKHOLM JUNIOR WATER PRIZE

The International Stockholm Junior Water Prize competition aims to encourage young people's interest in issues concerning water and the environment. The national and international competitions are open to pre-university young people between 15-20 years of age.

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

"CATCH A STAR" AND WIN AN ASTRONOMICAL COMPETITION!

"Catch a Star!" is the name of an international competition organised by ESO - the European Organisation for Astronomical Research in the Southern Hemisphere - and the European Association for Astronomy Education. Primary or secondary school pupils from all over the world are invited to take part in this contest which returns for its fifth year in 2007.

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

EVENTS

- CERN RESIDENTIAL PROGRAMME FOR HIGH SCHOOL PHYSICS TEACHERS

1-21 July 2007

Geneva, Switzerland

Since 1998, CERN, the European Laboratory for Particle Physics, has been organising a yearly 3-week summer residential programme for high school physics teachers throughout the world. For its tenth edition, the programme will take place at CERN in Geneva, Switzerland from 1-21 July 2007. It will be an opportunity for physics teachers to meet, network, and update their knowledge of particle physics, its associated technologies and related subjects. It also aims at providing teachers with the newest trends and directions of research in the area of physics.

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

- COMPUTER EDUCATION SOCIETY OF IRELAND'S (CESI) ANNUAL CONFERENCE

16-17 February 2007

Dublin, Ireland

The Computer Education Society of Ireland's (CESI) Annual Conference takes place in Coláiste de hÍde, Tymon North, Tallaght, Dublin on 16 and 17 February 2007. The theme for this year's conference is "Connect, Create, Integrate". The conference keynote will be delivered by educational technologist and teacher Ewan McIntosh.

<http://cesi.ie/conference/>

- GENE TECHNOLOGY IN THE CLASS

19-23 February 2007

Berlin, Germany

The Lise-Meitner-Oberschule, a German Gymnasium, offers a seminar for the use of gene technology in the class. The seminar is the result of the Leonardo-da-Vinci project GENIAL (GENtechnik In Ausbildung und Lehre) and focuses on questions of the content and pedagogics of teaching gene technology in the classroom. Participants are teachers of biology in upper secondary classes as well as vocational schools.

<http://www.lehrer-online.de/dyn/9.asp?url=536711.htm>

- WORKSHOP ON THEORETICAL CHEMISTRY 2007: ELECTRONIC AND GEOMETRIC

20-23 February 2007

Salzburg, Austria

Experts present special topics in Theoretical Chemistry, basics as well as new developments and advanced techniques. The target group of the workshop are senior students, post-docs and senior scientists who want to practise life long learning.

<http://www.kfunigraz.ac.at/tchwww/sax/mariapfarr/>

- INTERNATIONAL SYMPOSIUM - POLAR ENVIRONMENT AND CLIMATE: THE CHALLENGE

5-6 March 2007

Brussels, Belgium

By bringing together key polar scientists at the start of both the International Polar Year and the Seventh Framework Programme, this symposium organised by the Directorate General Research will provide a unique occasion to review the European research activities in the Polar Regions. Future polar research challenges in relation to climate change, natural, health, and socio economic impacts, research infrastructures and public outreach/awareness building will be identified. Emphasis will be put on the discussion of polar research needs in the framework of European research policies.

<http://cordis.europa.eu/sustdev/environment/ev20061023.htm>

- THE ULTIMATE SCIENCE SHOW DISCUSSION

9-11 March 2007

Vantaa, Finland

Heureka, the Finnish Science Centre is organising a Roundtable session on science shows and demonstrations. At this session participants are encouraged to bring their own shows, which will be performed for a live audience and subsequently discussed among experts. The first day of the meeting will be devoted to principles of show sales, exchange and intellectual rights.

Contact Ms. Lea Tuuli, Director of Communication: ea.tuuli@heureka.fi

- LE PRINTEMPS DES SCIENCES

19-25 March 2007

Belgium

The "Printemps des Sciences", an annual event hold at spring time in Belgium, brings together academics and the general public for a huge meeting

related to sciences. It aims to inform, raise interest in scientific careers among young people, and stimulate research activities outreach by different universities from the French-speaking community in Belgium. The 2007 edition of this festival dedicated to "Extreme Sciences" will run from 19-25 March 2007.

http://www.xplora.org/ww/en/pub/xplora/events/calendar/printemps_des_sciences_2007.htm

- NANOTECH: NORTHERN EUROPE'S LARGEST NANOTECHNOLOGY EVENT

26-29 March 2007
Helsinki, Finland

The Nanotech Northern Europe 2007 Exhibition is the key venue for meeting the buyers of nanotechnology instrumentation and for finding your partner for nanotechnology research and development. The key themes of NTNE2007 are application driven, focusing on: - Electronics and photonics solutions - Nanomaterials - Diagnostics and biomaterials - Nanotechnology instruments and tools. NTNE 2007 Congress is expected to bring together 500-600 participants from over 25 countries.

<http://www.nanotech.net/>

- ICTA 2007

12-14 April 2007
Hammamet, Tunisia

The first International conference on ICT & Accessibility is organised by the Research Unit of Technologies of Information and Communication (UTIC), Higher School of Sciences and Techniques of the University of Tunis.

www.esstt.rnu.tn/utic/tica2007

- 2007 GIFT WORKSHOP: GEOSCIENCES IN THE CITY

16-19 April 2007
Vienna, Austria

The 5th edition of the GIFT (Geosciences Information for Teachers) Workshop will be held in Vienna, Austria, from 16-19 April 2007 during the General Assembly of the European Geosciences Union. It is a unique opportunity for teachers to meet scientists from all over the world. The workshop will be organised around the general theme "Geosciences in the City", a new emerging topic in Earth Sciences, and a timely one, considering that the number of people living in cities now outnumbers that of people living in the country.

http://www.xplora.org/ww/en/pub/xplora/events/calendar/gift_workshop_2007.htm

- MATHEMATICS 2007

26-29 April 2007
London, UK

Mathematics 2007 is a major one-day conference on topical issues in mathematics and its applications. This conference follows on from the highly

successful conference held in Manchester in 2004. The aim of the conference is to bring together people with an interest in mathematics and its applications to consider current issues in the subject. Conference topics will cover mathematics education at school and at higher levels, research areas in mathematics, and industrial applications of mathematics.

<http://www.ima.org.uk/Conferences/maths2007.htm>

CALL FOR PARTNERS

SEEKING PARTNERS - "FOUR SEASONS"

Are you interested in joining other European Schools and gaining scientific experience? Take part in the "Four seasons" collaborative project which brings together science and culture. For the scientific part, students are invited to note the exact time and compass direction of the sunset, on special astronomic dates - the equinoxes and/or the solstices. Sharing measurements with other schools will help your group to make interesting scientific conclusions and compare results and traditions. To bring in cultural traditions, students will present and discuss their local cultural traditions relating to these dates through texts, online discussions, pictures and photographs.

Interested?

Send an e-mail to Luciana Avancini Lombardi: luciana@alfitalia.it

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/www/en/pub/xplora/about/the_xplora_gateway.htm.

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

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