Welcome to the forth issue of the Xplora newsletter!

Xplora and Deutsches Museum are organising a Dynamic Geometry event, taking place on 14 March 2006 at the Deutsches Museum, Munich, Germany. The event will specifically focus on two famous Open Source programs: GeoGebra and GEONExT. Pupils and teachers could follow the event online and pose questions via the Xplora portal!

On the Xplora portal you can now run a web experiment on electronic diffraction. Related documentation for teachers and pupils is available online.

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

Dynamic Geometry- an online event by Xplora and Deutsches Museum
Xplora, the European gateway for science education, teamed up with Deutsches Museum, one of the world's largest museums of science and technology, to organise an online event on Dynamic Geometry. The event will take place at 10.30 am on 14 March 2006 at the Deutsches Museum in Munich. The event will be broadcast on xplora.org via video streaming and participants will be able to follow it online and ask questions.


To follow the presentation online and pose questions, please contact:
Karl Sarnow karl.sarnow@eun.org
Laura Massoli laura.massoli@eun.org

Xplora Four Seasons Project: an Italian translation available now!
During the last autumn, Xplora launched a collaborative science project – the four seasons project, in which 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.

An Italian association Accendiamo La Fantasia (ALF), which is involved in ICT and educational projects for primary and secondary school, has kindly provided an Italian translation of the four seasons project!

Read more about the four seasons project:
Visit the Italian version of the four seasons project:  
http://www.alfitalia.it/duexplora/explora_03.asp

More about ALF:  
http://www.xplora.org/ww/en/pub/xplora/content_partners.htm

Call for contributions: science teachers' material on Xplora  
We would like to invite science teachers to get involved with Xplora, as the portal is not only a resource of information but a community to be developed together. We hope that Xplora is so inspiring, that teachers would like to contribute actively with their content or ideas. They can provide reports about projects and experiments which they have run in their classroom: the name of the teachers and the schools involved will be mentioned and published on the Xplora portal.

Teachers can also ask for support: the Xplora team will be happy to help them in realising science projects they have in mind.

To read more about how to contribute and get in contact:  
http://www.xplora.org/ww/en/pub/xplora/about/teacher_group/science_teachers_and_the_xplora.htm

MEGALAB

The electron diffraction web experiment: run it online on the Xplora portal  
An electron beam is fired at graphite foil. The diffraction pattern is observed on a screen. The result is a digital image, which is easy to analyze using free software. Every student can get their own data set.

You can take part to this web experiment on the Xplora portal. You just need to register to the portal and then login to the Desktop and choose "Web experiments - Electronic Diffraction".
You will be able to:  
- Reserve a timeslot for your web experiment  
- Conduct your Web experiment  
- Input a Web Experiment result.

To read more about this web experiment and to download additional documentation for teachers and pupils (in English and German):  

To know more about what a web experiment is:  

To register to the portal and run online the web experiment:  
Biology activity: Pupils observe animals and plants
In this database project, pupils do simple observation of animals or plants. Information about the animal and date and location go into the database. Images can be uploaded. The activity is suitable for pupils from 10 years up. The website and the documentation are in German.

Physics activity: Students determine the local constant of gravity
Students measure gravity in the physics lab by one of three common methods. The results are fed into a database. Values can be used for GIS-purposes. The activity is suitable for students from 17 to 18 years. Documentation is in English.

More about these two projects:

More about database projects:

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:

Recently the following items were added:
-“SciencePoles”: the SciencePoles website, run by the International Polar Foundation, provides an overview of polar science and research findings as well as recent and forthcoming developments across a range of scientific disciplines.
http://www.sciencepoles.org/

-“tMundo”: it is a multilingual online game to practice geographical names of countries, capitals and nationality adjectives in five languages: English, Spanish, French, German and Italian.
http://www.tmundo.com/

-“BEEP, the BioEthics Education Project”: this website offers information and teaching resources for secondary school science teachers and their students. Its purpose is to highlight the moral, ethical, social, economic, environmental and technological implications and applications of biology.
http://www.beep.ac.uk/content/130.0.html
- “Sorting and using Materials”: In this activity from the BBC Science Clips, children test a range of items to see whether they are waterproof and whether will bend. The activity is suitable for children from 5 to 6 years.
http://www.bbc.co.uk/schools/scienceclips/ages/5_6/sorting_using_mate.shtml

- “Learning Circuits”: it is an online resource, created by students from Staffordshire University, which allows users to create their own character before tackling quizzes and activities on circuits, electricity, conductors and insulators. For pupils from 7 to 11 years.
http://www.learningcircuits.co.uk/

Highlight: Lesson plans for primary teachers
Do you need some ideas for your lessons? The British Educational Communications and Technology Agency (Becta) offers weekly activities to download for free so that you can prepare new and exciting lessons using ICT. The activities presented cover a variety of subjects: from English and literacy to maths and science.

Visit the Xplora science education library at:

PRACTICE

The Linnaean way to identify and learn about biology
Carl Linnaeus or Carl von Linné, often called the "Father of Taxonomy" was in the second decade of the 18th century a pupil of Växjö Gymnasium, in Sweden. His system of classification and naming of biological organisms, such as animals and plants in groups, according to their similarities and differences is still in wide use, with a few modifications. This Swedish project helps pupils to follow in Linnaeus' footsteps. Hans Willstedt, teacher at Växjö Gymnasium tells us more:

Earth in Space: astronomy activities
Young students are very interested in astronomical matters, but sometimes it's difficult for them to grasp the essential ideas. To improve this situation some teaching activities have been developed within the ISSUE project – Integrating Subject Science Understanding in Europe. Bernat Martínez Sebastià, a science and ICT teachers trainer at CEFIRE (Centre for Professional Development, Innovation and Teaching Resources), Spain, who is taking part to the project, tells us more about it and its science education activities.
WorldWideMaps – Connecting minds
Alfredo Tifi and Antonietta Lombardi, teachers and trainers in concept mapping, introduce us to WWMAPS, an open community, especially addressed to teachers who are interested to feature concept mapping in their pedagogy. The first aim of the community is to popularize concept mapping, a tool to encourage meaningful learning, as was conceived by Joseph Novak. The incentive to drive teachers to concept mapping is given by the availability of technological tools and the opportunity to allow distant students to construct knowledge models, interacting in a common workspace.


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: So... Science! Social Dimension of Science, Diversity and Gender Issues
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 Città della Scienza, Naples, Italy aims to experiment with innovative educational practices focused on the social dimension of science and its impact on everyday life, to confront the negative image of science in the public and particularly in young people and students.


Nucleus project: Science in School - a new European journal for science teachers
Nucleus is a European cluster of projects to improve science education in Europe. As part of this project, on 28 March 2006, EIROforum will be launching Science in School, a new European journal to help teachers to make their science lessons exciting and inspiring. Science in School will address science teaching not only across Europe, but also across disciplines: highlighting the best in teaching and cutting-edge research, drawing on the overlap between subjects and the potential for interdisciplinary work.


European science education projects: have a look around

GISAS - Geographical Information Systems Applications for Schools
GISAS is a research and development project focusing on the incorporation of Geographic Information Systems (GIS) technologies into secondary school, for geography and environmental education.
TRAMS - Training and Mentoring of Science Shops: a tool-kit for Community Based Research

The TRAMS project intends to encourage the development of new science shops through the provision of training and mentoring support. Besides that, TRAMS will support the professional development of existing science shops and similar organisations through the sharing of training materials and the experiences from daily practices to update professional development.

More about other science education projects:

AWARDS

Green Week 2006 School Competition: European pupils apply their creativity to highlight biodiversity

This year’s Green Week will focus on biodiversity. The annual environmental conference and exhibition will take place in Brussels between 30 May and 2 June 2006. Part of the event is the annual Green Week School Competition, which encourages young people from all EU Member States, candidate and EFTA countries to learn about environmental issues and express themselves artistically.

FOOD 4U Campaign and video spot competition

In the second edition of the FOOD 4U Campaign for becoming aware of the importance of a healthy and correct diet, a competition, for making a video spot, has been announced for the school year 2005 – 2006. The initiative is promoted by the Italian Ministry for Agriculture and Forestry Policies and is addressed to students and teachers of secondary schools from 15 European Countries.

Young Reporters for the Environment: teachers and pupils in a field project
Young Reporters for the Environment (YRE) is a programme designed to promote environmental education within secondary schools. At the moment, 400 schools from 17 countries participate in the project. The network functions as a press agency specialised in producing and delivering articles and photos about the environment. Within the project, an YRE Awards is organized.

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

Read more about awards and prizes:

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**Events**

**National Science Week in England**
10-19 March 2006
Different events in England

The science week is an opportunity for people of all ages to take part in science, engineering and technology activities.
http://www.the-ba.net/the-ba/Events/NationalScienceWeek/

**Week of Scientific and Technological Culture in Italy**
13-19 March 2006
Different events in Italy

You can have a look at the list of meetings, lectures and exhibitions all around Italy on the occasion of the 16th Scientific Culture and Technology Week.
http://roma.cilea.it/plinio/

**Science Forum: The Teaching and Understanding of Science**
23 March 2006
The Open University, Milton Keynes – London, UK

The lecture will address several issues which have a social, economic, scientific or environmental dimension, such as power generation, GM foods, gene therapy, climate change and many others. Education, public understanding of science, and the role of the media are important, and this science forum will consider these issues.

**CERN Programme for Physics High School Teachers**
2-22 July 2006
CERN, Geneva, Switzerland
Deadline for applications: 31 March 2006
The programme consists of a 3-week residential activity, taking place every year since 1998 at CERN during the month of July. The programme is open to Physics High School Teachers from all CERN member and observer States, as well as from other countries subject to funding availability.

Read more:

More about science education events:


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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