Welcome to the Xplora newsletter!

The spring brings along plenty of new science education projects and events in which teachers, educators and students are welcome to participate. The highlight is the first ever European e-Skills Week campaign, which will demonstrate the diversity of ICT-related jobs and the importance of ICT in our daily lives. The e-Skills Week activities are taking place in over 20 countries across Europe until the end of April. Read more about e-Skills and other science education initiatives in the Xplora newsletter!

Would you like to be featured in our newsletter or send us a contribution? Contact johanna.snellman@eun.org

Johanna Snellman
Xplora Web Editor

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XPLORA AT A GLANCE

CALL FOR CONTRIBUTIONS FOR THE NEXT NEWSLETTER
We would like to invite you to send us your contributions for the next issue of the newsletter! Send short reports with a link to additional information on news, events, awards, best practices, etc. relating to maths, science, technology and environmental education.
Please send your contributions to johanna.snellman@eun.org by 15 April 2010.

LIBRARY

FIND OUT ABOUT COOL IT CAREERS
To shake the geeky image of IT careers, the e-Skills Week website features podcasts, videos, profiles and games that show how studying ICT can take you to cool and exciting places. It also provides games and tests to upgrade your IT skills and discover which career path fits you best.
http://eskills-week.ec.europa.eu/web/guest/it-careers

IET FARADAY: FREE ONLINE RESOURCES FOR SCIENCE TEACHERS
The award-winning IET Faraday is a free online resource from the Institution of Engineering and Technology in the UK aimed at teachers of science, technology, engineering and maths (STEM). With a new theme every year, the website contains a wealth of resources, including teaching materials, specially made films and games which bring the real world of engineering to life. The 2010 theme is Urban Evolution.
http://faraday.theiet.org/

LEARNING WITH ATLAS @ CERN
The Learning with ATLAS @ CERN portal has put together educational materials and information to allow users to explore the ATLAS experiment at CERN in an intuitive way. These materials include near real-time data and interactive analysis tools, game-like 2D animations of physical processes, teaching resources, lesson plans and material for students.
http://www.ea.gr/ep/lacern/
LIVING IN SPACE: NEW EDUCATIONAL MATERIAL FROM THE EUROPEAN SPACE AGENCY
The European Space Agency (ESA) has published new educational material on the theme of living on the International Space Station (ISS). The material is related to a live in-flight call which was organised as part of educational activities related to the OasiISS mission of ESA astronaut Frank De Winne.

RECERCA EN ACCIÓ: FOLLOW SCIENTIFIC EXPEDITIONS ONLINE
Recerca en Acció is a non-profit initiative devoted to sharing and spreading interest in science and research among the public. In this context, the website is currently showing a follow-up of two scientific expeditions, one to Tierra del Fuego and one to the Galapagos Islands. By using information and communication technologies, the project aims to enhance people’s knowledge of biodiversity, the theory of evolution and the work of Darwin.

Search for other science resources at:

Visit the Xplora science education library at:

PRACTICE

PARTICIPATE IN THE NANOYOU PICTURE CONTEST!
Take part in the NANOYOU picture contest on “My intelligent environment”. Help us illustrate how nanotechnologies are becoming part of our lives. Take pictures of the nanotechnology applications you discover in your environment and upload them to the picture gallery.

PLANT CONSERVATION DAY ACTIVITIES FOR KIDS AND TEACHERS
To celebrate Plant Conservation Day on 18 May 2010, the BGCI (http://www.bgci.org/) have published a series of art and science resources and hands-on learning activities for kids, teachers and parents. The pollination game teaches children how plants pollinate, while the maths and science activity uses geometry to determine the height of a tree in a nearby park or garden. Find more resources at:
http://www.plantconservationday.org/

GET INVOLVED IN THE FUTURENERGIA MAGAZINE!
Would you like to be a journalist? Are you interested in energy? Then you would be perfect for the FuturEnergia editorial team! You will get the chance to practice your journalistic skills, exchange your views on energy with other European students – and win brilliant prizes.
ABOUT XPLORA PARTNERS

XPERIMANIA SCIENCE AMBASSADORS TO VISIT SCHOOLS IN SPAIN, ROMANIA, SLOVENIA, PORTUGAL AND THE UK
From February to April the Xperimania Science Ambassadors will be on the road to demonstrate the fun side of science to pupils around Europe. In February the ambassadors visited schools in Lorca, Spain, and Maramures, Romania, and showed their best science tricks to over 80 pupils in each school. http://www.xperimania.net/ww/en/pub/xperimania/news/news.htm

CHECK OUT THE NANOYOU VIDEO NARRATED BY STEPHEN FRY
Do you want to know more about nanoscience and nanotechnologies? Then watch the NANOYOU video and discover the secrets of the nanoworld. The video, narrated by Stephen Fry, is a perfect introduction to the strange new world of nanoscience. http://vimeo.com/9068558

EUROPEAN SCIENCE EDUCATION PROJECTS

UPCOMING PROJECTS: XPLORE HEALTH
Xplore Health is a European project coordinated by Barcelona Science Park that will build and promote an online portal on the latest health research. The portal will contain multimedia tools to allow the public to get involved, and will be linked to activities in science centres, museums and schools that will promote public engagement with health research and its wider ethical, legal and social aspects. Project partners are Barcelona Science Park, Ecsite, European Schoolnet, Centre of the Cell and Ubach Munné y Asociados. The project launched in January 2010 and runs until June 2012. For further information, please contact maite.debry@eun.org.

THE FIRST EVER EUROPEAN E-SKILLS WEEK IS TAKING PLACE THIS SPRING
To show the diversity of careers in the IT sector and the importance of IT in our lives, the European Commission joined forces with European Schoolnet, DIGITALEUROPE and over 200 national stakeholders to organise the first ever European e-Skills Week. The culmination of the campaign was the e-Skills Week, which took place from 1 to 5 March 2010, but the e-Skills activities will continue until late spring in countries across Europe. http://eskills-week.ec.europa.eu

SPICE STARTS: CREATING A SCIENCE PEDAGOGY INNOVATION CENTRE FOR EUROPE
The primary objective of the SPICE project is to collect, analyse, validate and share innovative pedagogical practice, particularly that which is based on inquiry-based learning, whilst enhancing pupils’ interest in the sciences. SPICE will support this objective by singling out best practice teaching approaches in maths, science and technology, and sharing them throughout Europe. The best practice criteria will provide guidelines to guarantee the innovation and quality of new projects. SPICE receives funding under the European Commission’s Lifelong Learning Programme (DG Education and Culture). For further information, please contact agueda.gras@eun.org.

NEW CONCEPTS FOR ENHANCED TECHNOLOGY EDUCATION
At the final conference of the European UPDATE project, a new holistic approach to technology education for children and young people was on the agenda. Project partners and interested guests from the fields of education, science and the economy were invited to Madrid from 23 to 24 November 2009 to discuss the results of the UPDATE research and to present new learning concepts. Issues raised focussed on enhancing
technology curricula, encouraging girls in technology and improving in-service and pre-service training for teachers. A variety of publications – research results, handbooks and best practices for teachers – is also available at http://update.jyu.fi.

**ONE YEAR DOWN, ONE TO GO: ITEMS IS IN FULL SWING**
The two-year project ITEMS (Improving Teacher Education in Maths and Science) has now reached the half-way mark and the courses and workshops organised for teachers are in full swing. The first international training course, “Teaching geometry online”, took place during November 2009 and was a great success, with teachers from across Europe taking part.
http://itemspro.net/

**COMING UP: SCIENTIX – THE COMMUNITY FOR SCIENCE EDUCATION IN EUROPE**
The purpose of Scientix, a new project carried out by EUN on behalf of the European Commission (DG Research), is to set up and manage a user-friendly web-based information platform – the Community for Science Education in Europe. Scientix is aimed at the European Union and the member countries of the Seventh Framework Programme to facilitate regular dissemination and sharing of progress, know-how, and best practices in the field of science education. The philosophy of the platform can be summarised by the following keywords: search, find and engage. Scientix will collect teaching materials from hundreds of European projects and will make them available in all European languages for teachers upon request.
http://scientix.eu

**CIENCIA VIVA LAUNCHED FOR SCIENCE TEACHERS IN SPAIN**
CIENCIA VIVA is a new science education programme supported by the Spanish Department of Education. The programme is aimed at primary and secondary school teachers, and organises scientific workshops, lectures and exhibitions.
http://catedu.es/ciencia

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**AWARDS AND NEWS**

**2010 – INTERNATIONAL YEAR OF BIODIVERSITY**
The United Nations declared 2010 to be the International Year of Biodiversity. It is a celebration of life on earth and of the value of biodiversity for our lives. Throughout the year countless initiatives will be organised to disseminate information, promote the protection of biodiversity and encourage organizations, institutions, companies and individuals to take action to reduce the constant loss of biological diversity worldwide. The events and materials range from campaigns, exhibitions, biodiversity games and workshops to special biodiversity happenings.
http://www.cbd.int/2010/

**MICROGRANTS NOW AVAILABLE FOR LOCAL DIALOGUE ACTIVITIES**
Ecsite, the European network of science centres and museums (www.ecsite.eu) is offering 15 subsidies (up to €2,500 each) to promote local, city-based collaborative initiatives that encourage dialogue on, and engagement with, science. Applications can be submitted by local administrations, science centres and museums, associations, NGOs, institutions and individuals. The subsidies are part of the FUND project – a European-funded initiative to encourage collaborations and networks at city level to promote dialogue and activities focusing on science. The closing date for applications is 15 March 2010.
http://www.ecsite.eu/?p=7238
STILL TOO FEW WOMEN IN SCIENCE IN EUROPE
Women represent only 30% of European researchers and just 18% of full professors, according to the “She Figures 2009”, a survey on Statistics and Indicators on Gender Equality in Science published by the European Commission.

TE@CH.US PROJECT – HELPING TEACHERS INTEGRATE WEB 2.0 INTO THE CLASSROOM
The newly launched Te@ch.us project sets out to develop an online community aimed at helping teachers to learn about web 2.0 and give them the knowledge and skills to integrate it into their classroom teaching. Recent studies show that while some teachers do make innovative use of web 2.0 in the classroom, this is quite rare and usually takes the form of isolated initiatives driven by individual, motivated teachers.
http://www.europeanschoolnet.org/web/guest/release/-/asset_publisher/0Tqh/content/20655?redirect=%2Fweb%2Fquest%2Fabout%2Frelease

ACER PRESENTS ITS EDUCATIONAL NETBOOK PROJECT
Acer, the second biggest PC brand in the world, has given the green light to its education project, which is aimed at introducing schools to a new kind of interaction between teachers and students through the use of netbooks. In partnership with European Schoolnet, Acer will start by launching pilot projects in six European countries.
http://www.europeanschoolnet.org/web/guest/release/-/asset_publisher/0Tqh/content/20033

EVENTS

SCIENCE AND ENGINEERING WEEK: EARTH
12-21 March 2010
UK

This ten-day programme of science, engineering and technology events and activities across the UK is aimed at people of all ages. In addition, the website provides free resources, such as activity packs, quizzes, how-to guides and more.
http://www.britishscienceassociation.org/web/nsew

COMMUNICATING ASTRONOMY WITH THE PUBLIC 2010 (CAP2010) CONFERENCE
15-19 March 2010
Cape Town, South Africa

The Communicating Astronomy with the Public 2010 (CAP2010) conference aims to address the modern challenges in astronomy communication from a global perspective. Major themes of CAP2010 will be the outcome and legacy of the International Year of Astronomy 2009 (IYA2009) as well as techniques for how to make public astronomical knowledge accessible to everyone across national, language, political, social and cultural borders and to those with disabilities.
COMPETITION: MATHEMATICAL KANGAROO
18 March 2010
Worldwide

On the third Thursday in March every year, this maths competition takes place simultaneously in schools around the globe. Pupils sit a 75-minute multiple choice test under their teacher’s supervision. The key competence tested is logical combination. Evaluating the tests, collecting results and awarding prizes are organised at a national level.
http://en.wikipedia.org/wiki/Mathematical_Kangaroo

TEACHER TRAINING WORKSHOP: CHEMISTRY
19 March 2010
Berlin, Germany

Organised by Science on Stage Germany and financed by the Technologiestiftung Berlin, this half-day workshop presents two projects. The “Cologne model” project introduces a collection of 50 school experiments on the topic of polymers (synthesis, properties and manufacture, recycling and analysis). The project “Osmosis – new insights into well-known phenomena using low-cost equipments” is suitable for biology and chemistry teachers who have the opportunity to build the equipment, run the experiment and discuss the results. The working language is German, though some English is used.
http://www.scienceonstage.de

EU SUSTAINABLE ENERGY WEEK
22-26 March 2010
Europe-wide

From Monday 22 to Friday 26 March 2010 the 4th edition of the EU Sustainable Energy Week (EUSEW 2010) will take place in Brussels and other major cities across Europe. Under the umbrella of the Sustainable Energy Europe Campaign, an initiative of the European Commission managed by the Executive Agency for Competitiveness & Innovation (EACI), the EU Sustainable Energy Week is Europe’s leading event on energy issues. The focus of this year’s EUSEW is on Europe’s cities and their efforts in the fight against climate change.
http://www.sustenergy.org

EUROPEAN SCIENCE PARLIAMENT CONFERENCE: H2O – MORE THAN JUST A DROP
23-25 March 2009
Aachen, Germany

The European Science Parliament (ESP) is an ongoing discussion forum dealing with current socio-political topics related to science and research. The second ESP conference is split into two phases. The first phase involves an online discussion of a range of topics via a web portal. The second phase will take place in Aachen, with live participation by those invited to join in a face-to-face discussion on the most interesting points. The topic of the ESP 2010 is “H₂O – More than just a drop”.
http://www.science-parliament.eu
MEET THE MATHEMATICIANS
7 April 2010
Edinburgh, UK

Meet the Mathematicians is an event with presentations covering the uses of maths in biology, ecology, engineering and finance, discussions about career paths, and opportunities to talk to professionals and students of mathematics.
http://www.meetmaths.org.uk/

NANOYOU INTERACTIVE DEBATE
8 April 2010
Paris, France

Take part in an interactive debate on the applications and issues of nanoelectronics and nanoinformatics on 8 April 2010 at the Cité des Sciences et de l’Industrie in Paris! Alongside presentations of films and images created for the NANOYOU video and photo contest, youngsters, researchers and designers will debate the main pathways in the development, appropriation and creative reuse of these technologies. The outcomes of the debate will determine the content of the exhibition “DIY futures”.

INTERNATIONAL SCHOOL CONGRESS: NATURAL RESOURCES, SUSTAINABILITY AND HUMANITY
5-8 May 2010
Braga, Portugal

Teachers of all levels, parents, university students and scientists are invited to participate in this year’s International School Congress: Natural Resources, Sustainability and Humanity. The topics to be covered include: climate change, preservation of biodiversity, the carbon cycle and the role of oceans, and water use. Working languages will be English and Portuguese.
http://www.cie-portugal.com

INNOVATIVE TECHNOLOGIES MOVE EUROPE: FINAL EVENT
7 May 2010
Oberhausen, Germany

Teachers and students from across Europe are invited to attend the final event of this year’s Innovative Technologies Move Europe competition. This year the competition topic was energy. Seventeen teams of students and teachers from Germany, Belgium, France and the Netherlands will present their project results. Each team will have produced a model and solved scientific tasks in a creative way to build something innovative, artistic or surprising.
http://www.science-on-stage.de

ELLS LEARNINGLAB: FROM CELLS TO TISSUES TO ORGANISMS – BIOLOGY IN 3D
10-12 May 2010
Heidelberg, Germany

The European Learning Laboratory for the Life Sciences (ELLS) is an education facility that brings secondary school teachers into the research lab for a unique hands-on encounter with state-of-the-art molecular biology techniques. During the three-day LearningLab participants will take an interdisciplinary look at the dynamic field of cell
biology and perform various activities related to cell biological questions.  
http://www.embl.de/training/courses_conferences/course/2010/ELS10-01

PLANT CONSERVATION DAY  
18 May 2010  
Worldwide

The international Plant Conservation Day on 18 May 2010 is dedicated to preserving, protecting and conserving plants for people and the planet. It’s an opportunity for teachers and parents to tell kids about the key role we all play in plants’ conservation. The Plant Conservation Day website provides a series of art and science resources and hands-on learning activities for kids, teachers and parents.  
http://www.plantconservationday.org/

ECSITE ANNUAL CONFERENCE 2010  
3-5 June 2010  
Dortmund, Germany

The Ecsite Annual Conference is the most important European gathering for science centres and museums. From 3 to 5 June 2010 participants can join in challenging sessions and lively discussions, social events and business opportunities, preceded by two days of in-depth pre-conference meetings and workshops.  
http://www.ecsite-conference.net/

MILLENNIUM YOUTH CAMP 2010 – MY CAMP  
6-13 June 2010  
Helsinki, Finland

The first ever international Millennium Youth Camp (MY Camp) will run from 6 to 13 June 2010 in Helsinki, Finland. MY Camp is targeted at young people aged between 16 and 19 who are interested in mathematics, natural sciences, information technology and other technologies. The names of the successful applicants will be announced by 15 March 2010.  
http://www.technologyacademy.fi/millennium-youth-camp-fi.html

SCIENCE FESTIVAL: EXPLORE SCIENCE  
9-13 June 2010  
Mannheim, Germany

Schools and families are invited to discover hands-on experiments, attend lectures by scientists, enjoy scientific shows and much more at the Explore Science festival.  
http://www.explore-science.info

FINAL EVENT OF TEACHING SCIENCE IN EUROPE 3  
11-12 June 2010  
Berlin-Buch, Germany

Since the Science on Stage festival in Berlin in 2008, 52 teachers from 13 European countries have been discussing concepts, methods and content for modern science lessons. At the final event of the initiative, the results of these discussions will be presented in the publication Teaching Science in Europe 3. European teachers are invited to attend the event and learn more about the working groups.  
http://www.science-on-stage.de
EUROPEAN SPACE CAMP 2010
27 June – 5 July 2010
Andenes, Norway

Young people aged between 17 and 21 who are interested in space and science and have a background in physics and mathematics are invited to apply for the European Space Camp, which is organised by the Norwegian Association of Young Scientists. Participants spend a week doing technical experiments, taking part in a rocket campaign, working as real rocket scientists, learning how to exploit the knowledge they already possess and broadening their understanding of applied science. The programme includes group work with hands-on activities related to the rocket launch, lectures and social activities. The deadline for registration is 15 April 2010. Participation is free of charge.

http://www.spacecamp.no

THE EUROSCIENCE OPEN FORUM
2-7 July 2010
Turin, Italy

The Euroscience Open Forum, organised by Euroscience, is a biennial pan-European meeting dedicated to scientific research and innovation. During the forum, the whole city of Turin will be abuzz with activities, conferences, workshops and keynote lectures. The events and happenings around the city are targeted at scientists as well as the general public of all ages.

http://www.esof2010.org

SCIENCE EDUCATION SUMMER SCHOOL: DISCOVER OPEN SCIENCE RESOURCES
4-9 July 2010
Crete, Greece

Science teachers as well as educators from science centres and museums are invited to participate in the summer school DISCOVER OpenScienceResources: Technology Enhanced Science Education and Science Content Organisation, which will be held in Crete from 4 to 9 July 2010.


2010 EARTHWATCH DEBATE
14 October 2010
London, UK

At this annual debate, finalists from Earthwatch’s 2010 Citizen Scientist Competition will argue that their originally conceived and designed volunteer-based research project would help to solve a critical environmental issue. Finalists will present their research proposals, after which they will be cross examined, Dragon’s Den-style, by a panel of experts. The audience will then vote on the winner, who will receive the Earthwatch Citizen Scientist Award and two places on an Earthwatch expedition in 2011.

http://www.earthwatch.org/europe/get_involved/events09/debate