

Projectes europeus per a treballar la ciència a l'escola. Quines opcions hi ha i com participar-hi.

Dr. Àgueda Gras-Velázquez

Science Programme Manager 06/03/2013



European Schoolnet (EUN)



Xarxa de 30 Ministeries d'Educació Europeus Promoció de l'ús de les TIC i les tecnologies mdigitals a les aules

Promoció de la dimensió Europea a les escoles

Millora de la qualitat de l'educació a Europa



- serveis per les escoles,
- recerca i investigació,
- recursos educatius



European Schoolnet (EUN) – Equip de ciències















BY EXPERIMENTING



























AMGEN SCIENCE TEACHER TRAINING INITIATIVE



	FUD.	Dissemination	Teacher training / School activites	Piloting / Evaluation		
	EUR	Έ	F F	90		atus
2011-2013	EC Ind. EC /	SSer	ach	늏	running	(inthe
22	12 9 1	10	⊬ 18	13	12	10
STEM in general	12 5 1	10	10	13	12	10
DESIRE	EC	х			run	ning
Pathway	EC		х	х	running	
Scientix 2	EC	x	х		running	
Spice	EC		Χ	Х	finished	
ECB - inGenious	EC / Ind.	x	x	x	running	
STEM white paper 1	Ind.	X			finished	
Intel Fairs	Ind.			x	running	
Thematic						
Remote access labs / eInfrastructures						
Un iS chooLabS	EC		X	х	fini	shed
Go-Lab	EC		X	х	run	ning
Global excursion	EC		X	х	run	ning
Nanotechnologies						
NanoYou	EC	x	X	х		shed
Nanochannels	EC	x	X	х	finished	
na nO pinion	EC	X	X	х	run	ning
Health Sciences						
Xplore Health	EC		x	х		shed
Xplore Health 2.0	Ind.		X	х		shed
Amgen science teacher training initiative	Ind.		Х		run	ning
Energy						
U4Energy	EC	x	х			shed
Futurenergia	Ind.	X	Х		run	ning
Technology	l-d				r	-1
Impact of data loggers on science teaching	Ind.			Х	TINI	shed
Chemistry / Physics	1-4				£: - :	-1
The Global Water Experiment	Ind.		X			shed
Chemistry is all around you	Ind.	X	x			ning
Xperimania	Ind.		X		run	ining











inGenious



- Most significant project ever funded by European Commission FP7 Science in Society programme targeting education
- € 8.3 M 50% from EC funding
- Unique consortium due to:
 - Career focus
 - Industry engagement







Consortium leaders













































Tiger Leap Foundation















Associate partners

















































inGenious - ECB

Activities

http://ingenious-science.eu

- Collecting practices / activities for schools from industry
- Pilot schools test + evaluate practices → info for new practices
- Webinars / chats: experts answering questions from students
- · Workshops, academies, summer schools for teachers
- Online Communities of practice / discussions
- Dissemination / information on careers in industry
- School industry collaboration needs analysis
- Network of 1000 schools by 2013
- Setting up of STEM National Platforms

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Les escoles inGenious – ECB

Escoles in Genious pilot

- Troba pràctiques per la teua classe provenents de la indústria!
- Prova les pràctiques i dis-nos que et semblen
- Participa en tallers (DK, NL, SK, AT)
- Mestres de les escoles pilots seran convidades a l'escola d'estiu anual!
- Participa en xats i comunitats de pràctica

Escoles in Genious

- Troba pràctiques per la teua classe provenents de la indústria!
- Participa en xats i comunitats de pràctica





Industry activities: what teachers say...

Pilot 1: 170 teachers from 150 schools in 21 European countries



"(My pupils) learned some new mathematical and physical rules that aren't in their curriculum yet but that make them more aware of how STEM subjects are related to everyday life."

95% thought the activities had proactively enhanced their teaching skills and practices

80% of teachers say pupils are now more interested in STEM careers



"I gained experience in using ICT tools to do mathematics.

This is an aspect of the curriculum that is generally overlooked"







Home Project

Online Labs

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http://www.go-lab-project.eu/

GO-LAB Summer School 2013

Volos, Greece | 30/07 - 04/08 2013



Go-Lab Summer School 2013



Welcome to the Go-Lab Project!

The Go-Lab Project (Global Online Science Labs for Inquiry Learning at School) opens up remote science laboratories and their online models (online labs) for the large-scale use in education. Its technical framework - the Go-Lab Portal - offers students the opportunity to perform personalized scientific experiments with online labs, whereas teachers may enrich their classroom activities with demonstrations and disseminate best practices in a web-based pedagogic community. At the same time, owners of the labs may promote their scientific activities providing open interfacing

News and Workshops

Go-Lab Summer School 2013

GO-LAB Summer School 2013 Volos, Greece | 30/07 - 04/08 2013

The course's main objective is to introduce to teachers the use of online virtual experimentations and remote laboratories as

GLOBALexcursion

Extended Curriculum for Science Infrastructure Online





eTwinning – Science collaborative projects between teachers from across Europe

eTwinning Central Support Service







La comunitat Scientix







Scientix is financed under the European Union's Seventh Framework Programme for Research and Development

European Schoolnet – Projectes de ciències









































AMGEN SCIENCE TEACHER TRAINING INITIATIVE



Projectes Europeus de ciències

















































































http://scientix.eu











Scientix 1: 2010 - 2012























Tallers









LATEST UPDATES

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NEWS: Scientix 2: taking the next step forward Scientix is taking an important step to building the European community for science and maths education.

The second stage of the project...





English (en)

REPORTS Using authentic questions with students in a museum setting

Make a Refractory Telescope

TEACHING MATERIAL

▼



TRAINING How to make the best use of Blogs

GEO SCHOOLS

PROJECTS: GEOschools - Teaching Geosciences in secondary schools

GEOschools (2011-2013) aimed to provide advice, teaching aids, instruments and other support for teaching geoscience in secondary schools.

Read more ...

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EVENTS FOR THIS MONTH

April, 2013















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Welcome to PATHWAY

TRAINING ACTIVITIES



I think the classroom can help. It is up to schools, and to all initiatives that can educate, including reliable Internet sites, to ensure that young people gradually acquire the correct understanding of scientific procedure. A most difficult task, because even knowledge transmitted by schools is often deposited in the memory like a sequence of miraculous episodes: Madame Curie who come home one evening and discovers radioactivity thanks to a mark on a sheet of paper, Dr. Fleming who glances absently at some mold and discovers penicillin, Galileo who sees a lamp swaying and suddenly discovers everything, even that the world rotates. How can we expect schools to provide correct scientific information when to this day many manuals and books — including respectable ones - say that before Columbus people believed that the Earth was flat, when this is a historic fabrication? The ancient Greeks knew it was round; and the sages of Salamanca who opposed Columbus's voyage had made calculations more accurate than his about the dimensions of the planet. It is the duty of a man of learning not only to do scrupulous research but also to present his knowledge effectively. Scientists sometimes still feel it's not dignified to take an interest in popularization, although masters in the field include Einstein and Heisenberg and the late Stephen Jay Gloud. But if we are to teach a

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BASIC INFORMATION

RESEARCH INFORMATION

TEACHER INFORMATION



PATHWAY: THE PATHWAY TO INQUIRY BASED SCIENCE TEACHING





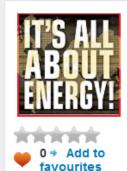
PATHWAY evaluates existing educational methods to promote the effective, widespread use of inquiry- and problem-based science teaching in schools in Europe and beyond.

The aim of the project is to set a pathway toward a standards-based approach for teaching science subjects with inquiry-based techniques and to demonstrate ways to reduce the constraints presented by teachers and school organisation towards these techniques.

This is done by

- a) outlining instructional models that help teachers to organize their classes effectively,
- b) setting up a series of methods to motivate teachers to adopt inquiry-based techniques and activities in their classrooms, and
- c) providing access to a unique collection of open science educational resources and teaching practices fitting the science curricula that have proven efficient in promoting inquiry-based education and that are expanding the limitations of classroom instruction.

This approach enables teachers, teacher trainers, curriculum developers and policymakers to examine their own practices in the light of the best performing approaches that set the standards on what can be achieved. It provides them with a unique tool to to do a la base de la contraction de la contract



Report

Report

> INGENIOUS: IT'S ALL ABOUT ENERGY

Descriptor: physics, climate, materials, chemistry, sa management, environmental education, gas, oil, electr sciences, electricity, fossil, energy

Age: 14-18 Resource type: guide glossary tool

assessment lesson plan

Description: A series of lessons about the future of petroleu...Know More

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Project: Ingenious

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DEFORESTACTION: TAKINGITGLOBAL (PDF)

Descriptor: industry, educational institution

Age: all Resource type: presentation reference other

Description: The DeforestACTION Toolkit is an interdisciplinary educa...Know More

Creative Commons license: (*)(*)(*)

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SuperBenz

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INGENIOUS SUPERBENZ WORKSHOP

Descriptor: finance, mobility, oil, safety, energy

Age: 15-18 Resource type: guide reference case study assessment application lesson plan

Description: Guidelines for a workshop – simulation game on developme...Know More

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HOW ARE DRUGS DEVELOPED? - TAKE PART IN THE RESEARCH OF A DRUG

Descriptor: biology, biotechnology, medicine

Age: > 10 Resource type: Not found guide lesson plan tool

Description: Science centres, museum and schools have a change to rep...Know More

Creative Commons license: 180

Project: Xplore health

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SEARCH RESULTS FOR: nanopinion

PROJECTS



NANOPINION - Monitoring public opinion on Nanotechnology in Europe

Nanopinion monitors public opinions on nanotechnology and engages the general public in debate on potential risks and benefits of nanotechnologies

Read more...

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NEWS



Nanochannels continues as Nanopinion

Following up on the activities and results of Nanochannels, the new FP7 project Nanopinion will map out attitudes to nanotechnology in society and engage the public in the debate on its responsible

Read more...



Become part of the Nanopinion teacher team!

The FP7 project Nanopinion is looking for 16 science and technology teachers to help with outreach to European schools and explore how education in nanotechnologies can be linked to school curricula.

Read more...

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NEWSLETTERS



Scientix Newsletter September 2012

After the summer break, Scientix Newsletter is back. We have had a busy summer updating our repositories; now we have almost 600 teaching materials in our resource database and brand-new online

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Scientix 2: 2013 - 2015























Tallers









Scientix 2: 2013 - 2015



Scientix National Contact Points









Scientix observatory



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English (en)

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SEARCH RESULTS FOR: DESIRE

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PROJECTS



DESIRE: Disseminating Educational Science Innovation & Research in Europe

DESIRE aims to improve the dissemination and exploitation of research results and teaching practices from Lifelong Learning Programme projects and national Ministries of Education.

Read more...



COMPASS: Common Problem Solving Strategies as Links between Mathematics and Science

The goal of COMPASS is to provide teachers with interdisciplinary teaching materials which link mathematics and science. With the materials students can analyse and discuss problems relevant to

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MPASS

NEWS



Second round of the Desire online discussions coming up in September 2012

The Desire project is organising the second round of its online discussion events. Register on the Desire portal and take part in the debate on how to best disseminate new methods and tools in STEM

Read more...



Desire project: share your experience!

The Desire project invites science teachers, science project planners, policy-makers, science events organisers and other science educators to participate in online discussions on their experience in

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NEWSLETTERS



Interested in taking part in Scientix workshop? Take a look at the video we

Scientix Newsletter October 2012

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Més informació?

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Gràcies

