Steps for a strong legacy of IYA2009
How do we sustain a living legacy?

How do we build effective bridges?

How can we meet partners expectations?

How do we build our future?
1st step
Being awake to society needs
Different in different parts of the world
Different in different times

Science Education

www.hetemeel.com
Cutting edge science in school today. ... A lot has changed !!!
Global Challenges
Time travel without all the fun
2\textsuperscript{nd} step
Recognize and value our differences, weaknesses and strengths
3rd step

Embrace the fact that science, in particular Astronomy, is nowadays at a distance of a click to anyone ... anywhere !!! We are responsible to prepare new generations to use it wisely.
Empowering Teachers

Recommendation 1 - Create new and support existing training courses for the career and professional development of teachers which include practical observations, modern topics and examples.
...well it is easy... we have google !!!!
Establish a community of stakeholders: trainers, teachers, students, scientists and education authorities.

2000 Schools in Europe - 10000 Teachers

Creating the needed online infrastructure for the construction of the Classroom of Tomorrow digital repositories.

Recommendation 4
Action: Create a central portal for educational material in different languages in.....

www.opendiscoveryspace.eu

51 Partners from 23 countries
...now is easy, teachers just to need to learn 100 new online tools!!!
Changing the world teacher by teacher

- Empower teachers to embrace modern trends for science teaching
- Create a strong support and collaborative network
- Introduce cutting edge science in school
- GLOBAL CITIZENSHIP AWARENESS

www.galileoteachers.org
Representatives in 100 countries ➞ 20,000 teachers involved in training events
GTTP - a support network for teachers 24/7

- Teacher Training
- Support Network
- Teachers / Students
- Adaptation of resources to curricula
- Recognition mechanism
- Promoting best practices
4th step

Embrace changes and flip classrooms
Should teachers compete with these?

Journey to the stars
American Museum of Natural History
Teachers
≡
Tutors
Towards the classroom of tomorrow
5th step

Make learning meaningful and close to our daily lives
How should we build the school of tomorrow ...

..... staring today ???
Can research investigation be done by students??
SuperNova Cosmology Project in the genesis of the Global Hands-on Universe Association -> GTTP model (Research based science education)

Nobel of Physics 2011
Saul Perlmutter, Brian P. Schmidt and Adam G. Riess
What do we offer?

- Materials tailored to specific needs
- Following certain criteria:
  - Telescope or naked eye observing
  - Basic Astronomy Theme
- Hands-on
- ICT (if possible)
INQUIRY – The scientific method in schools
Empower educators with the necessary skills to embark in an innovative teaching path: teaching science while doing science.
A black hole lurked at the center of our Galaxy

Original Title:
A black hole lurked at the center of our Galaxy

Keywords:
demonstrator astronomy black hole sagittarius A milkyway centre of our galaxy salsa J kepler

Description:
Teaching about the Universe involves describing extraordinary objects that have little in common with our daily life. Students are introduced to a whole new world of phenomena that they had no idea could exist. Students may get engaged on the subject, but the traditional textbook based instruction does not meet the expectation of the students, since these are theoretical and abstract ideas that they are required to accept and learn. They are shown beautiful pictures, but the essence of the subject is...
Researchers bringing science to schools:
- Black Hole in the Center of our Galaxy
- Exoplanets
- Radio Astronomy
- Spectra
- Image processing
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.
Recommendation 2 - Encourage schools to use their playgrounds as naked-eye astronomical observatories equipped with simple devices. Interested organisations should actively lobby governments and other relevant bodies to minimise light pollution to facilitate the appreciation of the sky throughout Europe.

An idea by Inês Pereira - Portugal
Data mining with Software Excelent for Education !!
• ASTRONOMY@MY
• BACK PACK
INCLUSIVE ASTRONOMY
6th step

Involve local communities
Involving Communities
Resource of the Week:

Sun4all: the size of faculae
by University of Coimbra

Image Credit: NASA/SSO (AlA)

Image Credit: Herbert Pühninger
Acreditation process
Participate in a training session on how to use modern tools and methodologies for science teaching → participation
Bring science to the hands of students → Galileo Teacher
Train other educators \(\rightarrow\) Galileo Ambassador

Cascade effect \(\rightarrow\) Slow But ......

Strong and sustainable effort !!!
Galileo Schools
Galileo Student
7th step
Build
Bridges and reach out

competition
X
COOOLABORATION
Projects and institution collaborating and supporting each other
http://dtc-conference.ea.gr
August 2nd – 4th – Volos, Greece

ABOUT DISCOVER THE COSMOS CONFERENCE
WHO SHOULD ATTEND
This summer the heart of education beats in Volos, Greece! Discover the COSMOS consortium and Global Hands-On Universe Network join forces to organize a 5-day-long International Conference on ‘Te-Infrastructures for an Engaging Science Classroom’. Educators, scientists, teacher students, education policy makers, outreach groups and interested stakeholders are cordially invited to participate in an International Conference that will take place in the City of Volos, Greece during 2-4 August, 2013.

ENJOY!

HOME PAGE

KEYNOTE SPEAKERS
Within the framework of the conference a series of educational workshops will take place which cover most of the known subjects.

CALL FOR PAPERS
Proposals are invited for Oral and Poster presentations, for Workshops and for Science experiments demonstration sessions.

INFORMATION
Find any information you need about Volos, Piti and how to get there!

Read more...
GHOU2008 Workshop

~ 30 nations

Sharing our experiences

Is the best resource

we have.
Value your fraction of this dot...

OBrigada!!!

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