

GRID: a European network of good practice in science teaching

Sibylle Moebius introduces a project, GRID, to identify and promote innovative science education in Europe.



Sir Harry Kroto at a workshop for primary school children in Waterford, Ireland

The GRID project, GRowing Interest in the Development of teaching science, aims to create a network of decision-makers and schools to exchange good practices in European science teaching. The primary objective is to identify, analyse and promote primary- and

secondary-school initiatives to make science teaching attractive. The ultimate aim is to disseminate the best practices thus identified via a website^{w1}.

The first stage of the GRID project was to analyse European education policies with a direct impact on

schools. This was done by reviewing policy reports, recommendations and institutional plans published by ministries, regional and local education authorities, and educational institutions. This report is currently being finalised and will be available on the GRID website.



Children enjoying Science Week at the Waterford Institute of Technology, Ireland

The Ada Lovelace Project: mentoring for women in science and technology (Germany)

Female university students in science, engineering and mathematics act as mentors to schoolgirls as part of the Ada Lovelace Project^{w3}. The mentors are trained in communication and moderation methods, with supervision by pedagogy or psychology staff. They visit schools and discuss reasons to study science, engineering and mathematics, offer advice on overcoming obstacles, and inform the school students about university life. As a second step, the mentors invite girls to participate in university courses and laboratory work.

Life Learning Center (Italy)

The main goal of the Life Learning Center^{w4} is to provide teachers and school students with hands-on laboratory experience of the life sciences at university. They learn about modern molecular biology, genetics and biotechnology, and use advanced laboratory equipment with the support and supervision of university tutors.

Chemistry at Work (UK)

Chemistry at Work^{w5} events demonstrate to school students the importance of chemistry in everyday life and work, with particular emphasis on what is happening in their local area. The events offer a positive image of the chemical sciences and present them as exciting, interesting and financially beneficial activities that are worth considering as the basis of a career.

Updates on the GRID project

The GRID newsletter, available on the GRID website or by email, is aimed at project partners, science teachers, decision-makers, contributors and all others involved and interested in the project. It documents the project and its activities and events, and provides partners and contributors with practical information. To

Via the GRID website, a major survey has been launched to identify and analyse existing school initiatives to increase the attractiveness of science. If you are a science teacher in a primary, lower or upper secondary school who is involved in an isolated classroom-based initiative, or who is running a major local, county, regional, national or even international project, we encourage you to participate in the survey.

In each of the partner countries, the six to 12 best projects will be selected as case studies. The purpose of the case studies is to maximise the impact of existing projects and encourage their spread across Europe. The case studies will include video clips and interviews with the teachers involved.

Subsequently, workshops will be organised in each partner country, in which teachers can share

their experiences and offer advice to others interested in setting up similar science education projects.



CALMAST chemistry display at the Young Scientist and Technology Exhibition, Ireland



Pupils investigating solar power

The first results

The GRID survey of innovative science education projects in Europe has already identified some particularly inspiring projects.

Physics is Cool (Belgium)

The University of Antwerp has developed a project for secondary schools called 'Physics is Cool'^{w2}. Some 40 kits contain all the materials needed to carry out a wide range of experiments with 14-17 year-old students. A teacher's guide and a CD are also included. The experiments are intended to provoke discussion and improve scientific communication between students, to make them aware of the causes of everyday phenomena, and to confront them with experiments which are rather easy to do but sometimes difficult to explain.



Eoin Gill at the CALMAST stand at the Young Scientist Exhibition, Ireland (left)



Primary school pupils at the Young Scientist Exhibition, Ireland (right)

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Européen de Nancy-Metz, France, and carried out by a European multi-disciplinary consortium.

Web references

w1 – GRID website:

www.amitie.it/grid

w2 – Physics is Cool:

<http://webhost.ua.ac.be/focus/Koffers/english.htm>

w3 – The Ada Lovelace Project:

www.uni-koblenz.de/~alp/projekt_en.htm

w4 – Life Learning Center:

www.golinellifondazione.org/eng/

w5 – Chemistry at Work:

www.rsc.org/Education/chemwork/



All images courtesy of GRID partner Sheila Donegan, CALMAST, Waterford Institute of Technology, Ireland



Chamber of Challenges at the Waterford Institute of Technology, Ireland