

# Science in Schools

*Addressing the need to improve science literacy and skills across Europe*

*An initiative under the EU CSR Alliance*

## Benefiting Teachers & Students Through Company Collaboration



*Europe needs young scientists capable of innovation in a competitive society rooted in knowledge. Boosting enrolment in scientific and technical fields of study is one of the objectives set by the Education Ministers in 2001 as part of their contribution to the Lisbon process.*

*So it is crucially important for Europe that its young people should acquire proficiency and knowledge in science subjects.*

*Jan Figel, European Commissioner for Education, Training, Culture and Youth*

There is insufficient interest among young people across Europe in maths, science and technology (MST) studies to meet the future skills needs of European industry.

Many industry organisations support science teaching in schools. We believe that more could be achieved through collaboration across companies and integration with initiatives by government and other stakeholders including professional institutions.

Science in Schools is establishing, or connecting with existing, groups of interested companies and other organisations within countries. The overall aim is to increase the attractiveness and interest in MST amongst students. The intention, longer term, is to improve MST literacy and contribute to higher numbers of qualified students.

- We will offer teachers and students improved awareness of, and wider access to, the MST education resources available from companies, including examples of MST application in the workplace.
- We will run collaborative actions across companies – linked to initiatives such as Engineers Week, national science weeks, and other suitable projects.
- We would like eventually to contribute to the wider discussion of MST teaching in schools based on experience from this initiative.

There is a current emphasis in both national government and EU initiatives on key target groups (girls, primary students and students from disadvantaged minorities), as well as on Teacher Professional Development. We intend to emphasise these themes within this collaboration.

## How Industry Organisations Can Benefit from Participation

Extending the reach of your MST education resources and those of other companies will contribute to skills growth vital to your organisation's success in the longer term. By acting together the aim is to achieve even greater impact and greater return on your education investments.

- Science in Schools can increase awareness and take-up of company MST education programmes by providing a more coherent framework and wider channel through which teachers and students can find your resources.
- It aligns with national and EU aims for the development of MST skills and so is likely to align with your own organisation's aims in this area.



Science in Schools will act through in-country networks and Europe-wide web-based access to resources. We invite participation from interested organisations in one of two ways.

- Become part of a network of contributing organisations, collaborating on cross-company initiatives and making available your existing MST education programmes.
- Participating in a country-level forum for coordinate in-country collaboration to reach teachers/schools).

### How Educators can Gain from this Initiative

There are very many and wide-ranging MST teaching resources available from companies. The challenge for education professionals is to know what exists, how individual resources can best be used to support teaching and how to provide feedback for improvement. Science In Schools aims to improve this situation.

Many of these industry resources are of high quality and proven benefit. They address issues of recognised importance in the development of MST skills. For instance some will have special appeal to girls or to disadvantaged groups; many will role-model scientists and engineers in the workplace; they will demonstrating the real application of MST as it contributes to society; as well as having the potential of contributing teacher professional development.

### Science In Schools Has Strong Support

The need to improve MST skills is well understood. This initiative complements many existing initiatives and aligns with the findings of many studies. For instance, the recommendations from the Rocard report<sup>2</sup> highlight the real contribution companies can make.

- Rocard identifies the need for a change in emphasis from mainly deductive to inquiry-based methods for MST education. Evidence indicates that this approach improves learning and in particular increases participation by students in key target groups: girls, primary, and students from disadvantaged backgrounds.
- Rocard goes on to say that inquiry-based methods create opportunities for external involvement by many organisations, including companies, since these are typically the sorts of resources in which they have invested/

We are well aware that there are many similar initiatives. It is the intention of Science in Schools to complement and integrate with such initiatives where appropriate and not to duplicate.

We have established a Steering Group at European level comprising representatives of the European Commission, European Schoolnet, the Teaching profession, leading companies from a range of industries and countries and CSR Europe.

#### Find out more

Should you wish to participate or to learn more about Science In Schools, please contact one of the following people.

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<sup>1</sup> IBM role is as 'facilitator' of this CSR Europe initiative.

<sup>2</sup> Rocard report on Science Education published by the European Commission D-G Research highlighted the need to change the model of science teaching in schools.

[ <http://ec.europa.eu/research/science-society/index.cfm?fuseaction=public.topic&id=1100&lang=1> ]