



CIEC Promoting Science at ASE, Reading 2013

CIEC *Promoting Science* are presenting two sessions at the Reading conference and the *CIEC* stand (CS41-42) will be showcasing our popular resources.

Many of our resources are now on-line. Find out more about these **FREE** primary resources and browse through printed copies at the *CIEC* stand.

Visit the stand to chat about our CPD, resources and websites – we are always keen to help busy teachers deliver interesting and relevant science lessons, and to work with local authorities and other educational organisations.

Friday 4th January: 13:00-14.00 pm
Room: Palmer Building Room 104

Making maths and science meaningful (Practical Workshop)

How often have you started a scientific investigation only to find that your class have never used a thermometer, have no understanding of scales and are unable to present data to communicate their findings?



Michele Smale

This practical session will explore opportunities to enhance science and maths through the use of real life contexts. Children will be engaged by the industrial setting and teachers will be able to provide a wealth of opportunities to improve pupils' scientific communication skills through the application of maths.

Saturday 5th January: 9:30-10.30 am
Room: Chemistry Building Lab 1

How schools are using ambassadors to support KS3 Practical Science (Practical Workshop)

This is an opportunity to hear about collaboration between local schools and industry to develop curriculum linked, practical activities specifically to involve science ambassadors in supporting year 7 pupils in the classroom.



Gayle Pook

The session will provide an overview of the project, now in its third year, including organisation, impact on pupils, a taste of the activities and access to further context based teaching resources.

Children Challenging Industry KS2-3 HEI STEM Project

“There can be little doubt that the visit by the ambassador really helped to capture the children's imagination and, for many of them, it was the first time they have come into contact with someone who works in the field. This will be reinforced with our pending visit to industry!”
(Y6 teacher and science coordinator)

These are the comments from just one teacher involved in an innovative project to communicate the excitement of STEM-related subjects. 30 HEI ambassadors across 6 universities, 10 high school teachers and 50 primary teachers from the North West, attended Sue Andrews' training enabling them to use work-based contexts more effectively in teaching STEM subjects.

The aim was for *CIEC* to establish a sustainable network of well trained HEI ambassadors and secondary school coordinators who would showcase science and STEM career opportunities. Following on from this training programme the professionals involved have access to exciting teaching materials to inspire the scientific workforce of the future. Free downloadable teaching resources focusing on STEM subjects with National Curriculum links are available at www.ciec.org.uk

“Having a 'real' scientist in the school was exciting and enthralling for the children. They want to carry out many more similar investigations!”
(Y6 teacher and science coordinator)



Making a fruit battery



Project funded by HEI STEMNW

science

primary

industry

STEM

research

investigate

secondary

Teachers and trainers from Southeast University, Nanjing, China visit CIEC *Promoting Science*

CIEC, alongside colleagues from the University of York Science Education Group, delivered a bespoke science education programme, in which the delegates learned about the most effective ways in which science is taught in English primary and secondary schools.



Professor Ye Zhaoning setting up thermal probes to look at the effect of insulation during a primary ICT session

“It has been fascinating finding out about the similarities and differences between the Chinese and English education systems.” says Joy Parvin, “Practical work is common to both countries, and yet independent group work and discussions are something very new to our visitors, and something they were keen to learn about.”



Forming a human bar chart!

CIEC *Promoting Science* web sites

Sites aimed at primary teachers and pupils:

- Children Challenging Industry at www.cciproject.org
- Climate Choices at www.climatechoices.org.uk
- Colour-Ed at www.colour-ed.org
- Industry Animated at www.industry-animated.org
- Plants for Products at www.plants4products.org.uk
- Risk-Ed at www.risk-ed.org
- Rough Guide to Gas at www.roughguidetogas.org.uk
- Science of Healthy Skin **NEW** at www.scienceofhealthyskin.org.uk

Sites aimed at secondary teachers and pupils:

- Food Additives at www.understandingfoodadditives.org
- Greener Industry at www.greener-industry.org.uk
- Industry Animated www.industry-animated.org
- Molecules Matter at www.moleculesmatter.org.uk
- Risk-Ed at www.risk-ed.org
- Sustain-Ed at www.sustain-ed.org
- Sustainability at www.sustainability-ed.org.uk
- Catalysis at www.catalysis-ed.org.uk

The CIEC
Promoting Science
blog

You can find the
CIEC Promoting Science blog
at <http://ciecyork.blogspot.co.uk>

Check it out to see what the
CIEC team are involved in
around the UK.

Industry ambassadors in the classroom; a valuable partnership



Secondary schools in the North East of England have been providing their young scientists with a rare insight into the workings of local industry. The project, which was introduced by *CIEC* two years ago to build upon the *Children Challenging Industry* experience for Year 5-6 pupils, focuses on the close relationship between science and building a successful business.

The companies have agreed to allow scientists, engineers and technical staff time to develop relevant tasks and visit the children at school. They are then able to support Year 7 pupils with practical enquiry related to all aspects of the business, in particular production, research and development.

The project is due to expand further bringing in more schools and companies over a wider geographical area, providing the future workforce with inspiring role models and an insight into potential careers in the industrial sector.

Contacts:

If you would like to know more about the work of *CIEC Promoting Science*, please contact:
Joy Parvin or Gayle Pook, *CIEC Promoting Science*, Department of Chemistry, University of York,
Heslington, York, YO10 5DD
01904 322523 ciec@york.ac.uk www.ciec.org.uk