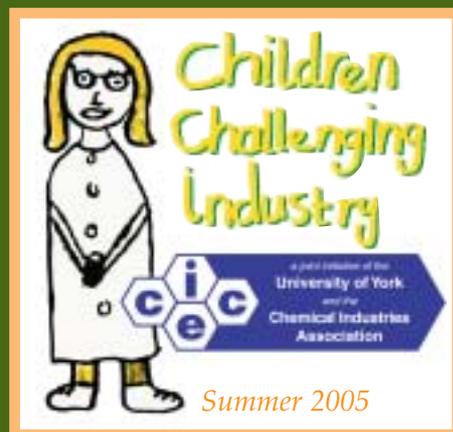


The autumn and spring terms have once again been busy and productive for the **CCI** team. The number of companies receiving training and offering excellent site visits continues to grow, as can be seen from the pieces on the Wilton International Site and Lindsey Oil Refinery. We have the pleasure of including the perspective of one of the children who represented **CCI** at a major science teachers' conference in Leeds earlier this year, as well as that of a governor from the North West.

We have also added a new feature to the newsletter this year, especially for teachers working on **CCI** topics. The black and white insert is intended to provide you with additional resources to support areas such as assessment. We would love to know what you think of this new feature – or any others within this newsletter, so please do contact us. You may even feel inspired to contribute a piece yourself! – **Joy Parvin**, Primary Projects Manager



THE NORTH-WEST

School Governor gives CCI 'the thumbs-up'

As a school governor with an industrial background, I think it is important that children are exposed to the excitement of

"I thought the subjects covered were very wide ranging and the way the scientific solutions related to industrial problems inspired the children."
(A father)

science, its relevance to our everyday lives and application in the real world. This is particularly important at an early age when our views on life and our opportunities start to crystallise.

"I'm going to be a Chemist when I grow up."
(Charlotte age 9, Year 5)

In the main, teachers have not had industrial experience before taking up their career and the **CCI** project has enabled them through INSET days and working on the project to become more aware. **CCI** also ran a very successful parents evening, which helped in the important task of

"Sue's work was stimulating and challenging to both staff and children. It was completely in line with what we had asked her to do as it was based on Science 1 - investigative science. Her knowledge and enthusiasm were an inspiration to us all." (Head teacher)

supporting parents in the education of their children, and exposing them to new ideas.



Pupils from Bunbury Aldersey School demonstrating CCI lessons to their parents and school governors

The quotes speak for themselves and all thanks must go to Sue Andrews for all her work and inspiration.

Peter Crump
Governor, Bunbury Aldersey School, Cheshire

"I thought it was wonderful the way industry and science was brought to the children's attention. Generally children of this age have very little knowledge of what industry produces and it was fabulous to see them being so receptive and involved." (A mother and parent helper)



THE HUMBER REGION

First CCI visit to Lindsey Oil Refinery

Year 6 children from Stanford Junior School spent three science afternoons investigating the properties of plastics and learning about how industry can turn natural resources into purpose-made items such as household utensils, building materials, insulation and packaging.

They then went on a visit to Lindsey Oil Refinery where they were able to find out how oil provides the raw material for plastics,

see insulation in action, and learn how industry on such a huge scale is very aware of environmental issues.

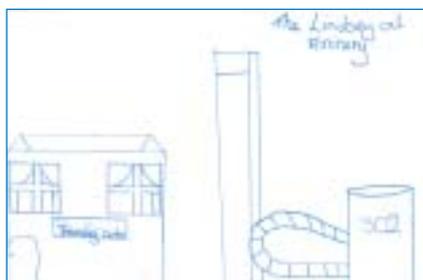
This was Lindsey Oil's first **CCI** visit and the general manager, Mr Poncin, was delighted to speak to the children at the end of the visit to find out what they thought. Many had aspirations to work as scientists, firemen or engineers but by far the

most popular job, after seeing the hi-tec control room, was to work with the computers that control the oil refining process.

Ms Groves, the Year 6 teacher who accompanied them, was impressed by the way that everything the children were shown fitted so well with aspects of the National Curriculum.



The 'control manageress' at LOR



The outside of Lindsey Oil Refinery

Figures for the Humber region Sept 04 - March 05

Number of schools taking part	10
Number of children taking part	300
Number of teachers	68
Number of site visits	9
Number of PSEP schools taking part	17

THE NORTH-WEST

Exciting Times

Kathy Schofield, once a research chemist at ICI, is now science coordinator at St Edward's Catholic Primary School, Runcorn. She was absolutely thrilled when she heard that she had been short-listed for the prestigious Primary Science Teaching Award sponsored by Astra Zeneca and *The Times Education Supplement*.

The school had already been enthusiastic participants in the **CCI** project, so when Kathy was asked to give a demonstration lesson for the Times judges, she lost no time in deciding to use an investigation from "Healthy Drinks and Tasty Toothpaste" one of the new teaching units from **CCI's** extension project Primary Science Enhancement Programme.

"We were so impressed with all the **CCI** lessons that we decided to trial the new teaching units," said Kathy. "If you can make science hands-on and relate it to everyday life, children will respond."

"The ideas and materials are excellent and are very flexible. All the children coped well with the investigations. I organised the class into four groups; two worked independently and two were supported. I changed some of the text very slightly to match the abilities of my younger Y3/4 children. The children tested different types of toothpaste for smell, look, colour, cleaning power and stickability!"

Obviously, *The Times'* judges were impressed with what they saw. Kathy was delighted when she heard the good news. "The children were actually testing their newly-made toothpastes when the photographer from *The Times* arrived to capture the moment!"

Kathy was presented with £500 and her school with £750 at the Association for Science Education conference, held in Leeds in January.



Kathy Schofield and some of her class 'testing toothpaste' for the Primary Science Teaching Award demonstration lesson

BRADFORD

CCI – a very positive experience

The **CCI** project was introduced to Bradford schools through the Excellence in Cities Gifted and Talented programme, as it supports the development of thinking skills required to carry out scientific enquiry successfully. There is some evidence to show a significant rise in the number of children achieving level 5 in science in KS2 SATs in schools that have taken part in **CCI**.

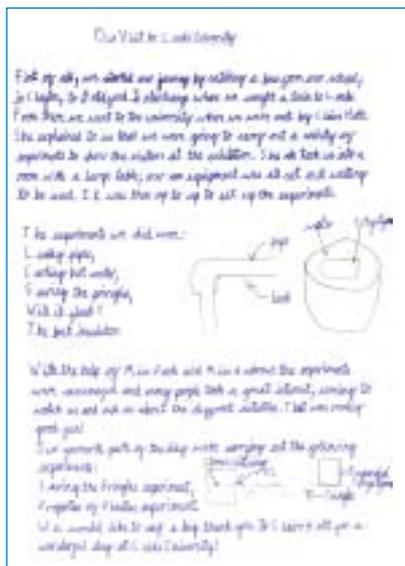
The partnership between Education Bradford, Excellence in Cities and the University of York's **Children Challenging Industry** has been a very positive experience for Bradford primary schools. Over the 3 1/2 years that the project has been running in Bradford 107 schools have benefited from the expertise of Jonathan Barton and Claire Holt. A further 50 schools have gone on to forge their own industry links through taking part in the Primary Science Enhancement Programme.

Individual pupils and schools have had the opportunity to participate in exciting, challenging and enjoyable enrichment activities and competitions, which have further enthused a new generation of scientists. Not only has involvement in **CCI** developed children's scientific enquiry skills and knowledge, but it has also afforded them many opportunities to gain confidence in presentation skills through expressing their ideas to an audience of adults, and to respond to questions and comments about their work. As a result of their outstanding skills in this area, a group of children from Clayton Village Primary School was chosen to give a presentation at the Association for Science Education conference in Leeds this year.

Excellence in Cities in Bradford would like to thank all the companies who have supported the **CCI** project in the region. Through giving their time, energy, enthusiasm and expertise industry have been able to give the children unique learning experiences, which they will never forget.

Anne Lee (Gifted and Talented Coordinator, Excellence in Cities, Bradford)

BRADFORD



Advisory teacher for Bradford moves to Science Consultant Post for Education Bradford

CCI is sorry to lose Claire Holt, the Advisory teacher for the Bradford region. During her time with CCI, Claire has shown great commitment to the project by encouraging new schools and companies to join the project. Her enthusiasm for the fusion of science and industry at the primary level has made involvement in the project in her region very rewarding for both schools and industry.

Claire supervising pupils at the Leeds ASE meeting earlier this year

THE TEES VALLEY

Wilton International Site visits

Children in the Tees Valley have had their first taste of the inaugural joint Wilton International Site visit, as part of the *Children Challenging Industry Project*.

Representatives from the six major companies on the Wilton International Site received training (from Joy Parvin and Nicky Waller) to ensure that the children get the most out of their visits.

Huntsman and INVISTA were the first two companies to host pupils from Thorntree Primary School in Middlesbrough in December. The visit included interactive presentations, science demonstrations, and was completed with a tour around the Wilton International Site.

The Wilton International Site project continues into 2005, with Uniqema and SembCorp hosting a visit for Errington Primary School in March.



Training sessions for representatives at the Wilton International site were met with great enthusiasm



Children from Clayton Village Primary School help demonstrate the Children Challenging Industry activity described in the letter at the ASE meeting held in Leeds in January

BRADFORD

Figures for Bradford Sept 04 - January 05

Number of schools taking part	12
Number of children taking part	367
Number of teachers	178
Number of site visits	6
Company training sessions	0
Number of PSEP pupils taking part	50

Prize Draw

Each term we enter all the schools that return their completed questionnaires to CCI into a draw for £50 to spend on science equipment for their schools.

Wroot Travis Church of England Primary School, The Humber Bank region is the winner of the Autumn term prize draw. We hope the money helped the children enjoy more exciting science activities.

Finally, Dow and ADVANSA will receive further training and host a visit later in the summer term.

Figures for the Tees Valley Sept 04 - March 05

Number of schools taking part	20
Number of children taking part	365
Number of teachers	141
Number of site visits	20
Company training sessions	7

THE HUMBER REGION

Changes in the Humber region

After more than 3 very successful years running the **CCI** project in the Humber, Gayle Pook has taken up a new post within the **Chemical Industry Education Centre**. Gayle began a key post, as National Coordinator for the Primary Science Enhancement Programme, in January 2005. However, Gayle could not resist continuing some **CCI** work, and worked with two further schools in January-February, concluding with school visits to Croda and Drax.

Although schools and companies within the Humber region will see less of Gayle, she will now be able to spread her enthusiasm for science-industry links even more widely across the UK. Beware – she still may pop in and see you some time in her new role!

The recruitment process to replace Gayle is well underway, and we hope to be introducing the new advisory teacher to our partners in the region in September. The advisory teacher will be based at the Humber Chemical Focus (HCF), Grimsby. HCF has supported **CCI** since its inception in the region in 2000, and we are very pleased to enhance our collaboration with them in this way.

Schools who were looking forward to Gayle's input during 2005 will be first on the list to participate during the next academic year!

THE NORTH-WEST

Figures for the North-West Sept 04 - March 05

Number of schools taking part	20
Number of children taking part	662
Number of teachers	256
Number of site visits	18
Company training sessions	4
Number of PSEP schools taking part	7

WEST YORKSHIRE

Figures for West Yorkshire Sept 04 - March 05

Number of schools taking part	14
Number of children taking part	477
Number of teachers	112
Number of site visits	6
Company training sessions	2

WEST YORKSHIRE

Staff at Headfield Church of England Junior School have a practical science session

Following some very successful lessons Michele (the advisory teacher for West Yorkshire) came to do a whole staff meeting. It was a very practical session that engaged all our staff – not an easy thing to do! We had great fun making pop bottle heat exchangers, identifying pens using chromatography and finding the filling for a particular mince pie (unfortunately they weren't in a fit state to eat once they had been dissected).

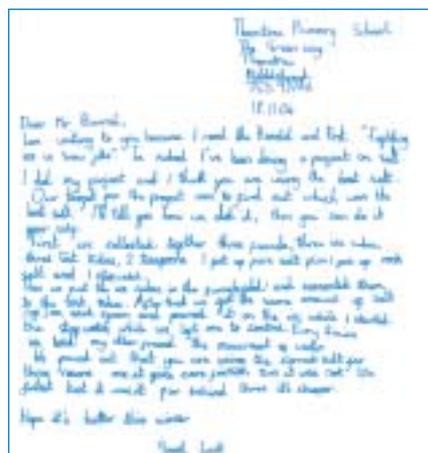
There were also lots of books and resources to view and examples of worksheets to be used with the children. It fired the enthusiasm of our staff for doing more Sc1 and as a consequence our Year 3 staff have rewritten their topic to include the activities Michele showed us.

The whole experience, staff meeting and lessons for children, has been very rewarding for both staff and children. Our relationship with Michele is one we want to continue and foster in the future.

Heather Wood (Deputy Head Teacher and science coordinator)



Staff at Headfield School busy making a heat exchanger



Contacts

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A letter written by a pupil of Thorntree School to the local Highways Maintenance Supervisor as part of their work on 'A Pinch of Salt'