

Transcript of CCI Video at http://www.ciec.org.uk/cci_film.htm

Commentator. A class of year 5 students at St Clare's Primary School in Middlesbrough are getting hands-on with a science investigation. But this isn't any science lesson: the teacher is from the Chemical Industry Education Centre at the University of York.

Nicky (CCI Advisory Teacher) (to class): And if any water has leaked, where will it be?

Nicky: Children have received a letter from a local company, and they've got three problems and they'd like the children to help. So right from the very beginning all the challenges have come from a real-life starting point.

Nicky (to class): Does that sound quite exciting?

Class: Yes!

Nicky: I think a lot of science that's done in the primary classroom, it doesn't really have a relevance to it, and the children might be finding out which cup keeps a cup of tea warm, but for what reason, and for who and why? So it's very, very important to give the children a reason for doing their science and embedding it into a real-life context.

Joy (CIEC Director): We're carrying out the work that we do because there is a point at which children switch off from science, and that age, at which children switch off, is getting younger and younger. So the purpose of our work is to keep that enthusiasm and interest in science, and also see the relevance – what's the point in doing this, and what could I do with it in the future?

And because there are shortages in the industrial sector at technician level, at higher degree level, we're also wanting them to think in those career terms for the future.

The advisory team work directly in the classroom with children, and we do that via working with teachers as well, in terms of providing professional development for teachers. Some of that is classroom-based, so that the advisory teacher is providing exemplary science lessons; some of it is with whole staff, where we're helping them work out how they can best link their curriculum science with how science takes place in industry.

Sue (Headteacher): What's special about this project is the fact that we also get the support from the industry for the professional development of teachers. We have somebody that comes in and has challenges for our teachers to make science very interesting for the children and it makes it very much a part of their lives, with real-life problems for the children to solve.

Nicky: That training is helping the staff, no-matter what age children they teach, how to help the children to plan investigations; so rather than

saying to the children, "This is what I want you to do," and then the children have to follow a series of steps that the teacher has told them, well it's all about letting the children come up with their own ideas and helping them to plan the steps along the way for themselves.

Commentator. The fun for these children doesn't end in the classroom, as the children go on a visit to a chemical site. A key part of CIEC's work is to arrange visits to industry to build directly on the learning in the classroom. The visit is being led by a chemical engineer.

George (Sembcorp UK): Companies can do it in a number of ways: we can actually put cash straight into the scheme, or you can give in kind, which is actually hosting visits, making your own employees available to actually help with the project, and working with the school children, whilst they're learning about the industry.

It's important to bring young children to see that the industry is a vibrant industry, not a dying industry.

Joy: We spend a lot of time building up our partnerships with industry. We train people on their site in how to communicate effectively with children, a little bit about the curriculum today so they don't get too heavily into molecules, which we don't want them to, and then help them to devise and tailor a site visit to follow on quite precisely the classroom activity the children have conducted.

George: What's in it for our employees? We see it as career professional development for them, because clearly what we see is that they develop their communication skills in a broader way because they have to deal with school-children, they have to deal with teachers, and they have to be able to do different preparation ready for school-children rather than for adults.

The other thing is that they actually learn from the teachers themselves, and we bring some of the teaching skills into the teaching we do in on-the-job training with some of our own employees.

Commentator. The work going on in the North of England covers many facets of CIEC's work through the Children Challenging Industry programme, and combinations of the different strands are available nation-wide.

Joy: At a time when the primary curriculum is undergoing major change it's important that we continue to train our teachers in that changing curriculum, motivate the children about science, and enthuse children to go on into science careers and have a general knowledge of science that helps them understand industry into the future.

www.ciec.org.uk