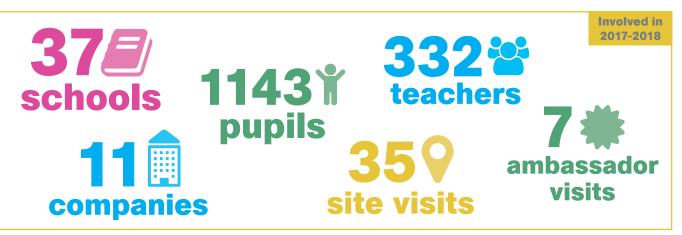


Children Challenging Industry

Since CCI began in 1996 around 47,000 pupils have experienced CCI, involving over 1000 site or ambassador visits from more than 120 companies.



The Children Challenging Industry (CCI) programme places school science in a real-life context.

Key findings from 707 children (36% from the SE and 64% from the NE) representing 37 schools, as well as their 40 teachers, who completed pre- and post-CCI questionnaires are reported here. Attitudes to and awareness of science and industry become more positive. Understanding of the link between school and industry increases, as does the awareness of opportunities for future employment with these industries.

"Cause
it was
fascinating seeing what
you do there. And
watching the robots
work was outstanding
and how they were
programed was over
complicated."

'That industry does not always cause pollution and safety is always important, especially in an industrial area.' "I would expect to see people co-operate and be nice to each other."

> "I learnt that engineers can be girls as well as boys."

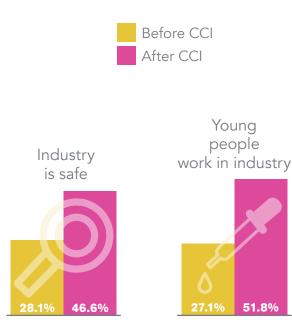
"They
were kind and
they helped us learn
about industry if
we didn't go there
then we would not
know a bit about
industry."

Changed aspirations, greater awareness, improved attitudes

Girls in particular have changed in their aspiration to be engineers: the significant overall positive shift in interest to be an engineer is wholly by virtue of them changing their perceptions, whereas boys are only marginally moved by CCI on this point. Gains are seen for boys and girls in many areas – see overleaf.

Greater awareness, improved attitudes

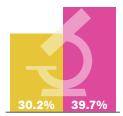


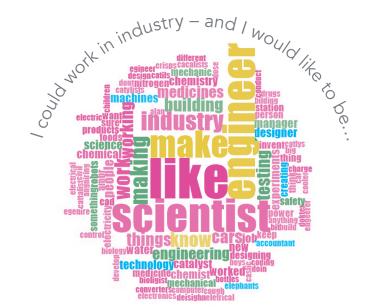




Focus on Industry

I could work in industry in the future





Teachers said

"All children should have an appreciation of the role science plays in industry and to prepare them/ make them aware of science careers in the future."

"Improve my own teaching. Real experiences for children that raise the profile of careers in industry and provide meaningful context for science, maths and technology."

"Practical,
hands-on, engaging
experiences for the
children. Knowledge
that links with their
everyday life and
answers to lots of their
questions."

"This is an excellent programme which is very valuable to children both in terms of progressing their science and increasing their knowledge of industrial careers and what happens locally."

Research with people in industry 2017-2018

Why does industry support educational outreach?

Since CCI began in 1996, more than 120 companies have been involved. People from 28 of these were surveyed and/or interviewed, along with 4 from companies never before involved with CCI.





INTERVIEW SAMPLE

6 interviewees, 4 had never heard of CCI

"What does
CCI offer that
other outreach
programmes don't?"

(survey respondent who had not heard of CCI before) "We have done plenty of ad-hoc events where we visit schools on a one-off basis. What is different about CCI and the reasons we want to get involved are:

it is aimed at primary students
 BEFORE they have decided that a
 STEM career is not for them

2) they come in to see us, which creates a great atmosphere and sense of excitement for our team
3) we think having the support from the advisory teacher to tailor the classes around the visit has far more impact than us doing one-off events."

(survey respondent very involved in CCI)

"Had not previously recognised the importance of capturing children's interest in science and engineering at such a young age but can now."

Why does industry get involved?

- Focus on the community/children
- Corporate Social Responsibility
- Staff-related reasons: team building and staff development
- A way to improve children's perceptions of a career in science with a view to aid future recruitment for the company

Quality and impact

- time and people
- training new staff due to staff turn-over
- providing interest, to both staff and visitors
- pitching at the correct level
- managing a large group of children in a working environment
- running to time
- health and safety

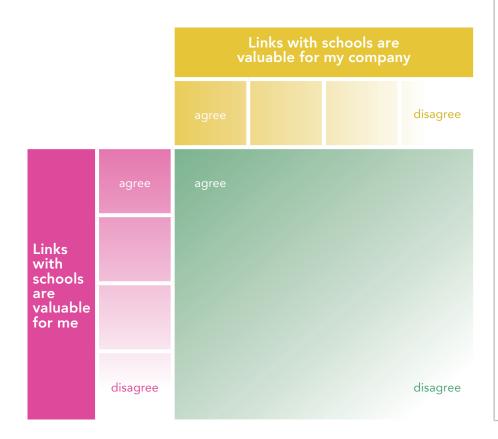


Improvements to CCI

- government funding, to match that already provided by partner companies
- enhanced marketing and advertising to expand the programme
- government commitment to making explicit industry links in the curriculum

School-industry links: value and confidence

The majority of company employees would say: "Links between schools and industry are more important to the company than to the individual."



TO LEARN MORE
OR FIND OUT HOW
YOU CAN BECOME
INVOLVED
PLEASE:

Visit our website:

www.ciec.org.uk

Call us on **01904 322523**

Email: ciec@york.ac.uk

Centre for Industry Education Collaboration University of York, Heslington,

York, YO10 5DD

