Centre for Industry Education Collaboration (CIEC)

Children Challenging Industry (CCI)

Evaluation Report 2023-24



The Centre for Industry Education Collaboration (CIEC) aims to promote excellence in primary science teaching and learning, increase children's and teachers' awareness of STEM careers and industries, and raise children's science capital.

Children Challenging Industry (CCI)

The CCI programme, delivered by the Centre for Industry Education Collaboration (CIEC), brings industry into the classroom to make science relevant and exciting, show real-world applications, and support teachers with National Curriculum-linked science teaching.

What does CCI involve?

- In-school science activities
- Company site visits and/or CCI ambassador visits
- Teacher CPD and classroom support

Since 1996, CCI has:

- Reached 62,000 children
- Supported 15,600 teachers
- Enabled 1,160 site visits

CCI empowers children and teachers by linking science learning to real jobs, people, and industries.



Participation in 2023-24



68 CPD sessions for 679 teachers



1861 children from 68 schools



41 site visits



27 ambassador visits



EDUCATION COLLABORATION

How is CCI's impact evaluated? Children and teachers respond to surveys before and after participating in CCI, sharing their views of science and industry.

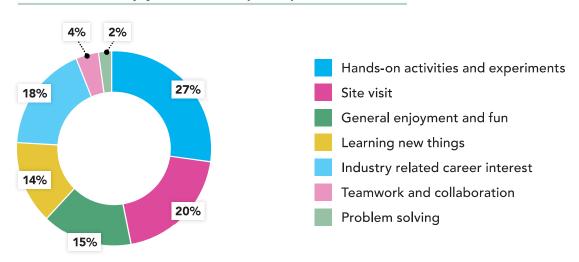
2023-24 Evaluation Sample

- 1,670 children from 68 schools
- 48% of the children were girls and 52% were boys.
- 51% of the children were in Year 5 and 49% were in Year 6.
- Children were from schools in the North East (49%),
 Humber (24%), and East of England (26%)
- 54% site visit, 46% ambassador led sessions

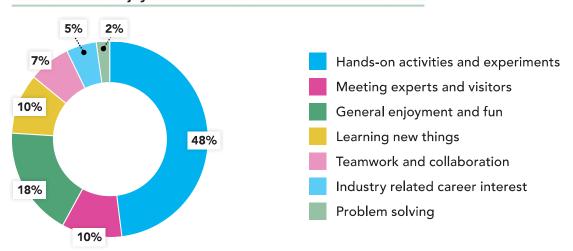


What children enjoyed the most

What children enjoyed most who participated in site visit



What children enjoyed most who received ambassador visits



Fun and exciting "I loved the experiments!"

Learning something new

"We got to try things we've never done before."

Feeling like a real scientist

"We had our own jobs like real scientists."

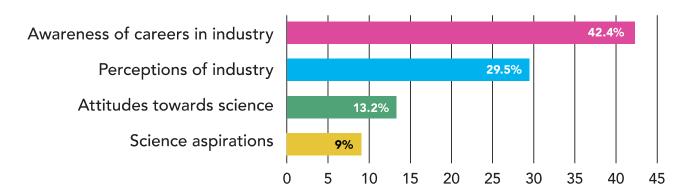
Hands on and visible results

"We test and see what happened ourselves."

Positive changes for children across key areas

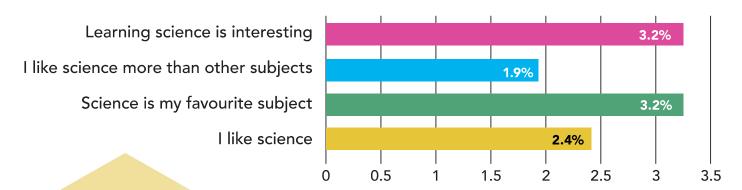
Children showed clear positive changes in how they see science and industry after taking part in the CCI programme.

Score increases after CCI



Children's scores increased by 42% in awareness of careers, 30% in positive perceptions of industry, 13% in positive attitudes towards science, and 9% in science aspirations.

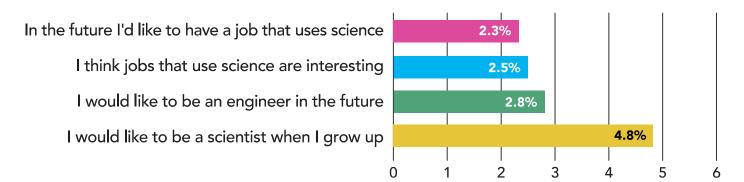
Percentage increase in mean scores of children's attitudes towards science



"It was one of the most interesting science experiments our class has had in a while" (Boy, year 6)

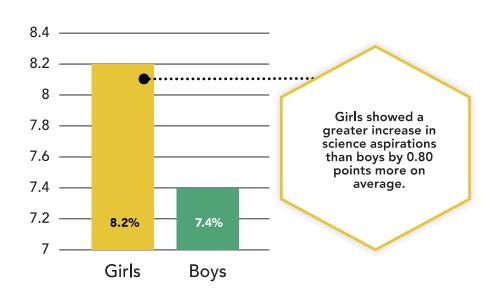
More children saw themselves in science careers after taking part in CCI

Percentage increase in children's science aspirations



Girls showed a greater improvement in science aspirations than boys after CCI

Mean change in science aspiration by gender





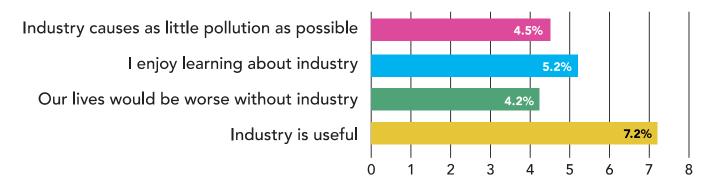
"It was fun and as I thought industry was all bad and it just causes climate change, but it is actually a HUGE, good impact on our everyday products" (Girl, Year 5)

"It made me think a lot harder about what I want to do when I am older and it made me enjoy science a lot more." (Girl, year 6)



Children gained a clearer, more positive view of industry and its everyday value

Children's changing perceptions of industry



Children better understand who works in industry and why it matters

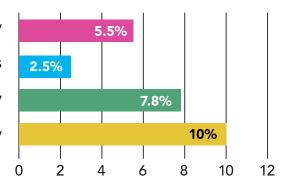
Increase in mean scores of children in awareness of industry careers

Engineers and scientists have important jobs in industry

There are women scientists and engineers

Young people work in industry

Many engineers and scientists work in industry



"It helps you to think like an engineer and scientist at the same time."(Boy, year 6)



What do we know about the participant teachers?



Average 10 years in the classroom



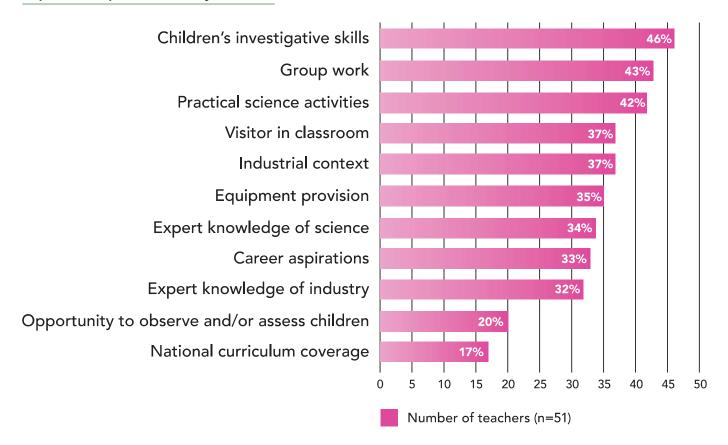
Average of 2.8 days spent doing Science CPD



25 teachers participated in CCI for the first time

Teachers valued the programme's resources and sessions as practical, high-quality, and impactful

Top-rated aspects of CCI by teachers





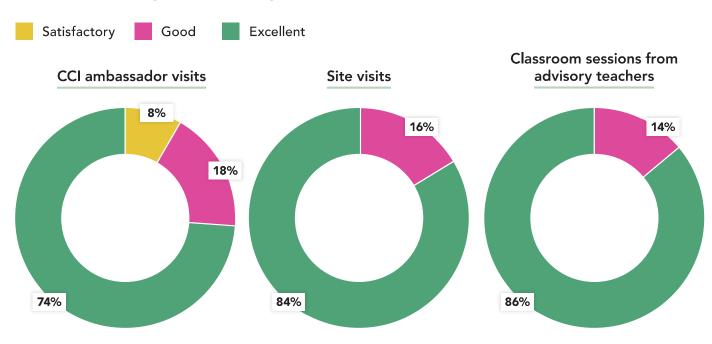
"I have taken the approaches and lesson design into further sessions and included some of the activities in the medium-term planning for next academic year."



Empowering teachers through CCI

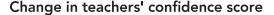
CCI strengthens teacher expertise. From positive programme feedback to lasting classroom impact, teachers gain valuable, long-term skills.

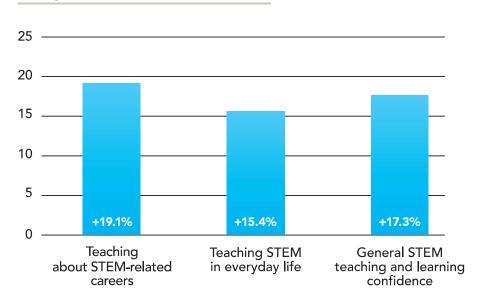
Teachers' ratings of the programme components



Teachers highly valued the programme's practical and collaborative approach. Investigative skills, group work, and hands-on activities stood out, with advisory-led sessions receiving the highest praise.

Teachers felt more confident embedding STEM in everyday learning, with strengthened skills to support careers education and real-world science





"I think I will approach science investigations in a more open way and allow the children more freedom to think for themselves."

"I feel more confident in delivering the lessons and using the context of local industry to make the learning link to real life."

The 2023-24 CCI team of advisory teachers:



Melanie Boyeson



Rebecca Cornwell



Clare Draper



Mackayla Millar

Results summary

The 2023–2024 evaluation of the Children Challenging Industry (CCI) programme shows clear positive impacts on both children and teachers. Children demonstrated significant positive changes in their attitudes towards science, aspirations for science-related careers, and perceptions of industry. These gains were consistent across regions, with girls showing greater increases in science aspirations than boys.

Children reported enjoying science more and expressing greater interest in future science careers. Their understanding of industry also improved with more children seeing it as useful, relevant to daily life, and environmentally responsible.

Teachers were highly satisfied with the programme. They particularly valued the classroom sessions led by the advisory teacher, industry ambassador visits, and practical science activities. Confidence in teaching industry-related science grew significantly, and many teachers reported adapting their practice and gaining a better understanding of science capital.

Overall, the CCI programme continues to support equitable and engaging science learning by connecting classroom content with real-world industry, while also enhancing teachers' professional learning.

CONTACT INFORMATION

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