

Meaningful Learning Experiences

Strategic Commitment	✓	Part of a strategic commitment by the academies trust
Curriculum Provision	✓	Bringing meaning to an important topic in maths
Employer Partnerships	✓	Providing the basis for an enduring partnership
Reflective Young People	✓	Developing employability skills and future aspirations
Informed Career Choices	✓	Challenging stereotypes about the Construction Industry

Neighbourhood housing development brings meaning to maths topic for year 9 in Nottingham

The topic of 'Construction and Loci' is covered in mathematics during both Key Stages 3, requiring students to learn about constructing triangles and quadrilaterals and about bisecting angles and lines. Students use these skills to solve worded loci problems during Key Stage 4.

Nottingham Girls Academy chose this maths topic for an employer-linked project, involving year 9 students. Subsequent discussions with Nottingham City Homes focused on opportunities around a neighbourhood housing development, with the project manager providing architect's scale drawings, layout plans, aerial photographs, design briefs and other material.

Nottingham City Homes suggested several real issues facing the housing development that might enable students to apply 'construction and loci' skills. The head of maths decided to challenge students to present their ideas about ensuring adequate access to the houses for bin lorries and emergency services.

A selection of student work was sent to Nottingham City Homes before their employability manager provided feedback at a year 9 assembly. This also created an opportunity for her to talk about the opportunities for women in the Construction Industry.

Follow-up meetings involving the academy trust's careers and employability adviser and Nottingham City Homes' employability manager are exploring potential further developments and joint working.

Benefits for the Students

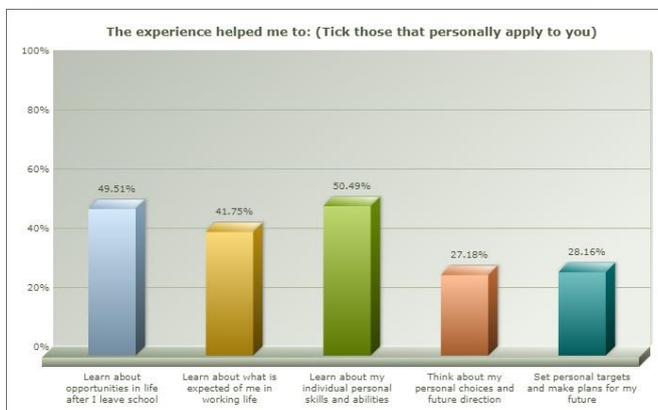
- *'... with this project, we get to talk with our partners and get into detail with it'*
- *'I think it's important for women to do more. I thought it was just about building ...'*
- *'It was fun working in groups and using skills you will use in the future'*
- *'I want to do Sports Science ... and go to college. But, after this assembly, it's opened up another road and I'm looking down it and it looks good'*

Benefits for the School

- Nottingham Academy is part of the Greenwood Academies Trust, which has a strategic commitment to Careers and Employability
- By showing how employer engagement can enrich learning in a core curriculum subject, this project can help to encourage other teachers to develop their classroom practice
- The project helps students see the point of a maths topic that is developed over several years and has the potential to feel laborious for students

Benefits for the Employer

- Nottingham City Homes manages around 27,000 homes. With a vision to create homes and places where people want to live, they are open to fresh ideas from young people
- With a commitment to support development of employability skills, Nottingham City Homes is keen to support school-based initiatives with such high impact
- Working with a girls' school provided an opportunity to challenge gender stereotypes and promote the range of potential roles in the Construction Industry



Using materials provided by the project manager for new build construction at Nottingham City Homes, students created their own scale drawings to make proposals about layout. Involvement of this employer and the employability manager helped to develop students' future aspirations, including consideration about the Construction Industry.