



Raising awareness of careers in construction for primary school students

Roots to roof is a brand new STEM challenge designed and delivered by NYBEP in partnership with several Independent Construction Training Groups. It aims to provide an early opportunity for primary school students aged 7-11 years, to engage with STEM, improve their understanding of construction and discover the range of careers available within the construction industry.

The challenge was launched in ten primary schools across the Yorkshire and Humber region with an activity to introduce the job roles within construction, the properties of different building materials along with their cost and environmental impact. The students were then tasked with using this knowledge to form their own construction company and use their assigned team roles to construct a 2D house with a budget of £100,000. The enthusiasm and interest shown was staggering and despite the age range, each class and year that took part really engaged with the activity!

Following the in-class launch, students were invited to bring their ideas 'to life' by constructing 3D models of their buildings along with developing the business plan for their construction company. These were judged by construction ambassadors from local construction businesses and successful teams were invited to present their work at the Grand Final at 'Inspirations 2017', an annual event held at Elvington Air Museum, attended by approximately 2000 pupils.

Winners!



The overall winners were 'Purely Build' from Hallgate Primary School. The research that went into their project was fantastic and the attention, design and presentation was exemplary. The team work and commitment shown was first class and they carried out in-depth research into their job roles, and produced excellent supporting materials which included video advertising and a fabulous prototype house.



Winners of the first Roots to Roof enterprise challenge 'Purely Build' from Hallgate Primary School in Cottingham



The event reached over 300 students around the Yorkshire and Humber area feedback received from the day was very positive from students, teachers and supporters of the event.

"I loved playing the role of Project Manager because I felt like it was a real job" (Female aged 11)

"I didn't realise construction jobs were for girls as well as boys." (Female aged 11)

"I really enjoyed putting my Maths skills, that we've been taught in school, into a real problem"
(Male, aged 11)

"It's made me want to be a Project Manager when I'm older because I've shown I can be bossy in a good way!" (Male, aged 11)

Teachers Feedback

"The project has really engaged some of my pupils that don't really enjoy curriculum based tasks, especially now they have finished their SATs, they almost switch off. They impressed me with how well they worked as a team because it isn't a strength of theirs"

"Staff who visited related to the pupils well, providing advice and guidance but encouraging independence which was just right!"

Key to Success

The key to success of the Roots to Roof enterprise challenge were the launch event activities which enthused students about the challenge and inspired them to take the project forward. The use of the 2D construction jigsaw for students to plan the assembly of their houses helped to lay the foundation for bringing their design to life in a 3D model and the incentive that the best creations would be displayed at the Inspirations 2017 event gave students the drive to follow the project to completion.

Congratulations to the runners up for the Roots to Roof enterprise competition, 'Fast Builders' from Stockwell Academy and the 'Galliford Tribe' from Beverly Minister Primary School, who demonstrated excellent teamwork and design!



With thanks to construction industry training board for funding this initiative.

