Encouraging Engineering Curiosity

Research indicates that children need to see a wide variety of role models in order to enhance their identification with people in STEM (Fogg-Rogers & Hobbs, 2019). A critical DETI Skills Inspire resource has therefore been the development of new role modelling career cards for KS2 and KS3 children.

DETI Skills Inspire collaborated with MyFutureMyChoice, an education charity which promotes engagement and connection with STEM careers. The collaboration culminated in a card game "Engineering Curiosity" (in the style of Top Trumps) showcasing the wealth of different engineering roles and opportunities available. The cards show a great diversity and variety of engineers, with accompanying skills, background context, and colourful illustrations, and are available to download from the Curiosity Connections website.



The engineers depicted on the cards are based upon real engineers working in the West of England. To describe their job and determine their Top Trump scores, the engineers were interviewed about their route into engineering, as well as their skill set. A conscious effort was made to include more females and people from Black and Asian backgrounds, as they are underrepresented

in the engineering field. The diversity of people, careers and workplaces is intended to challenge perceptions of engineers and the jobs available in STEM and show the children that people like them are part of engineering.

Each card is also accompanied by a short Tik-Tok style video, made by the engineers themselves, showing them at work or talking about their role. The videos are fun and light-hearted, intending to further cement the concept that engineers are real people and that they come from a wide range of relatable skills and backgrounds. The videos can be accessed through the DETI Inspire YouTube channel.



Over half of the Engineering Curiosity cards are made up of women

In addition to the card pack, a full set of lesson plans, assembly ideas and activities have been developed for use with KS1, KS2 and KS3 classes. The resources are designed to work best with live interaction and support from a STEM ambassador or student engineer, however they also include suggestions for online delivery.

Engineering Curiosity cards have been offered free to every school involved. 327 packs have been sent out to 79 different schools and community groups.



The cards and resources have also been used directly in DETI Skills Inspire outreach, these engagements equate to 821 children, across 25 classes in years 3-8.

Partners



