CIPR Excellence awards – STEM category – IET Sports of the Future

Brief, objectives and budget

We're heading towards the 4th Industrial Revolution, where estimates suggest up to 85% of children today will be doing jobs that don't exist yet. The UK has an incredible heritage in science and engineering and the government is backing the industry with billions in funding – but there's a problem: a gap in the talent pipeline, caused by a disconnect in young people's perceptions of jobs in STEM as cool and creative industries.

Research from the Institution of Engineering and Technology (IET) showed kids were disengaged, thought engineers were only there to "fix washing machines", and parents and influencers felt unequipped to inspire them. Many see these subjects as boring, too hard and no fun. Engineering is perceived as an industry of 'hard hats and white coats', perpetuating a lack of diversity – e.g. women account for just 12% of engineering roles in the UK, and just 6% of doctors are from working class backgrounds. This could cause the talent pool of young scientists and engineers to dry up, and the profession to stagnate.

The IET joined forces with Kindred to:

- Spark an interest in STEM with young people, between five and 13 years old
- Educate young people and their influencers in the role engineering has to play in their world
- Encourage young people to, later, consider a career in STEM
- Help address the skills gap and lack of diversity the profession faces

The idea, research and planning

We needed five to 13 year olds to 'buy in' to STEM by tapping into something that unites their interests and aligns with the role of an engineer. To be cost effective, ideas needed to flex - appealing to a five year old who's just started school, to a teenager considering GCSE options. Reaching girls and children from low-income backgrounds was also key to addressing stereotyping and improving representation in the industry.

On top of this was the pandemic. We had to reach kids at a time when they were missing the things they enjoy, such as sport, and challenge them to think about it in a completely different way.

We laddered up our objectives: spark an interest in STEM in a broad young audience and help them understand that engineering plays a major part in their world, so they will later consider a STEM career.

The result: Sports of the Future.

Strategy, creativity and innovation

Lockdown (Part One). Schools were closed, parents were looking for ways to occupy their kids' time, and a summer of major, exciting sporting events was cancelled.

We brought the Olympics into kids' own homes – giving them something fun and educational to work on: come up with exciting and innovative designs for future sports, embracing the latest technology. From a supersonic tennis racket to hit the ball harder to trainers that make you run faster – kids simply had to sketch their invention with a brief description of what it is and how it could work.

Entry was free, all children had to do was to let their imaginations run wild.

We negotiated working with cycling champion Mark Cavendish to lead the charge on encouraging kids to enter. Cavendish, who comes from a modest background and is a dad of four, resonates well with children and parents alike, making the competition accessible but exciting. Alongside Cavendish, submissions were scored by a diverse panel of IET judges, including IET Young Woman Engineer of the Year Ying Wan Loh.

The ultimate draw for kids was the top prize: to have their design brought to life as a working prototype, so they could see their dreams translated into a reality, and realise that engineering can create amazing, awe-inspiring solutions to everyday wants and needs.

Delivery/implementation of tactics

Alongside a media launch, we created engaging social content assets to easily spread word of the competition online. This, alongside tapping into a topic that excited and inspired kids and parents, galvanised support from key social influencers too. On top of high-profile media coverage, the likes of Edith Bowman, JB Gill and Imagination Tree amongst others lent their support to the campaign at a very efficient cost, with BBC Newsround's Lindsey Russell even asking for additional content to post.

Our competition winner was 13 year old Charlotte Geary, with her invention of the 'Electrodeck' skateboard that allowed skaters to do more tricks and go faster without having to take their feet off the board. We profiled Charlotte – a female engineer in the making, with a passion for skateboarding that resonated with many young people – using creative photography and film of her with her invention to share with the media and via social channels.

Measurement, evaluation and impact

We not only sparked an interest in STEM subjects with young people – we motivated them to give it a go themselves.

We showed young people and parents that engineering is all around them – intrinsic to their everyday lives. In fact, it helped increase kids' understanding by 22%, and parents and guardians by 12%. More than a third (36%) of parents also said it helped them understand the role it has to play within sports (up from 18%)*.

We helped break down barriers to start tackling diversity within STEM. 77% of parents and guardians say it's helped their child feel it's a career that's accessible and we increased children's perception that 'anyone can be an engineer' by 10%. Parents and guardians of lower income families' perception of engineering being an accessible career rose by 12%, and we smashed the association of "hard hats" with STEM careers, with this dropping by 11%.

Ultimately, we helped three in five (62%) of kids consider a career in science, tech and engineering that they wouldn't have already considered.

We secured 138 pieces of media coverage (100% of which contained at least two key campaign messages), influencer support with a combined reach of 2,625,700, and over half a million engagements on the IET's social channels. We even went global, with French magazine *Julie Magazine* contacting us to request an interview with our winner.

*Independent research, pre and post exposure to campaign material