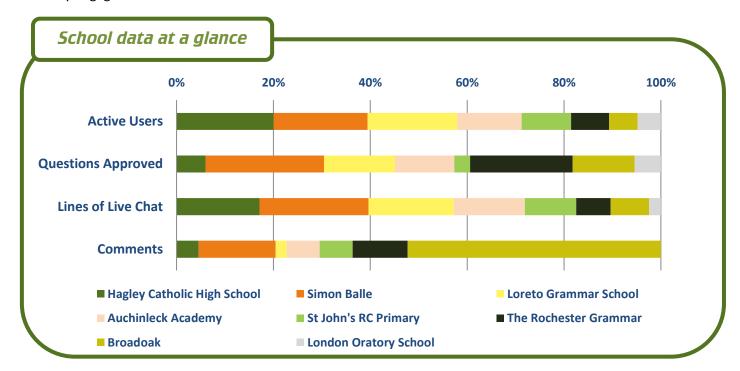


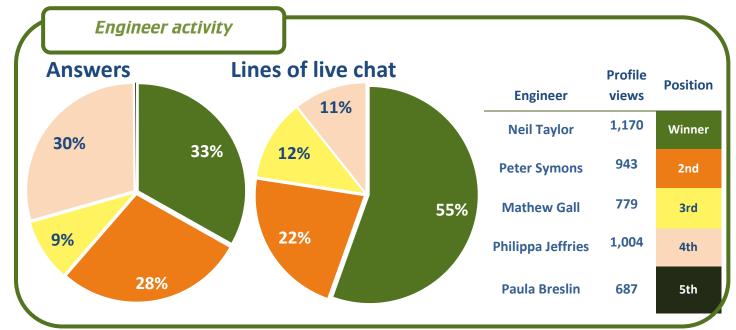




# **March 2015**

The Safety Zone was a themed zone which included engineers whose work improved the safety of different industries, for example in aeroplanes or the internet. This zone had the highest number of students taking part (520) of any *I'm an Engineer* zone run so far. It was the most active of the March zones in many measures, having double the average of questions asked, approved, and answered, and the most live chats booked. Neil, the Zone winner, did particularly well to hold the attention of students during solo chats. Overall, school activity was fairly even resulting in a very engaged zone.









### Key figures from the Safety Zone, and the average of the March zones

**SAFETY** 

ZONE

MARCH '15

ZONES **AVERAGE** 

2014 **AVERAGE** 

8

### Number of page views during the event (plus previous week and following weekend)

	SAFETY ZONE	MARCH '15 ZONES	2014
Total zone	27,373	15,703	13,210
ASK page	2,523	1,056	988
CHAT page	3,736	2,220	1,524
VOTE page	1,661	993	871

Students	520	380	313
% of students active in ASK, CHAT or VOTE	90%	85%	77%
Questions asked	844	358	380
Questions approved	368	148	167
Answers given	748	334	427
Comments	53	23	64
Votes	448	280	280
Lines of live chat	6,739	4,733	3,624
Live chats	19	14	13
Average lines of live chat	355	333	247

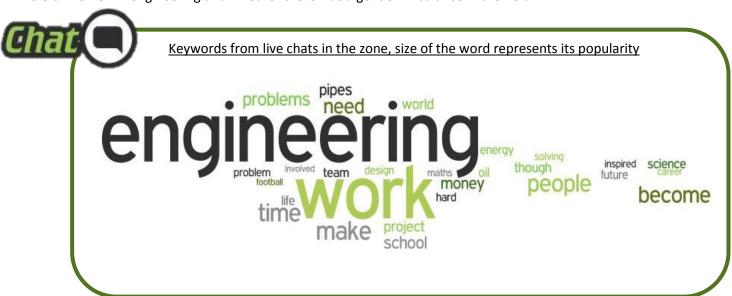
### Popular topics

The majority of questions in ASK were about the nature of engineering (for example, "what is engineering like to you"), and often requiring the engineers to defend the value of their work and of engineering as a whole - for example, "If someone was going to cut the whole of your department, what would you say to defend your job, and the work you do for others?".

Some students quizzed the engineers about specific areas of their work, especially Pete who was asked about his work with planes. Matthew was asked several questions about his work on internet safety, and Neil was often asked about pipe design, sometimes in great detail in live chats. These questions about the specific work of the individual engineers suggest that, although students could be unfamiliar with engineering, they were engaging with the scientists by reading their profiles and becoming interested to know more.

**Schools** 

Other common themes in ASK included the 9/11 twin tower attacks and Malaysia Airways flight MH370, both of them air disasters that were heavily featured in the media. Questions were asked to Philippa, in particular, about the role of women in engineering and whether there was a gender imbalance in the field.









Keywords of questions asked in the zone, length of bar represents frequency of use

0 1 2 3 4 5 6 7 8 9 10 11 12

job pipe type of

# Example Questions (click for links)

current job

career school

project

"What would you define 'safety' as?"

"What do you think is going to become the biggest challenge for engineers in the future?"

road

engineer education aircraft

"What do you think about the stereotype that engineering is a 'male - only' job?"

"Do you think that safety regulations could be holding back major advances in technology?"

design

career advice technology

life

safety

"Is it possible to fall off a bike because you shaved your beard?" "What is the best sustainable source of energy"

"How do the principles of science and mathematics apply to your everyday tasks?"

military invention impact save

"What difference would it make to the Ministry of Defence if nobody checked the aircraft?" "As the world population increases and demand for basic supplies increases, what way do you think engineering will solve important issues, such as world hunger, overcrowding and work shortage?"

"What do you think is the most valuable skills needed to become an engineer?"

"Why are they called pot holes?"

"How is sustainability integrated into your job as an engineer?"

"What is the best design for roads and how can modern techniques prevent large delays and traffic build-ups?" "What do you value more in your work safety or speed/efficiency? Why?"

"Why do you think people focus on the physical aspect of engineering?"





### Examples of good engagement

In general the engineers were highly engaging through their enthusiasm and humour, and both engineers' and students' reactions to the chats were very positive. In busy live chats they were still able to connect on personal levels, often about sport, hobbies or personal ambitions:

"What jobs have you considered you may want to go into when you leave school?" – Philippa, engineer

"Shannon=doesn't know Laura=vet Taylor= Unicorn" - Students

"Shannon - still plenty of time to decide, I would look into where the subjects you enjoy could take you Laura - Best of luck becoming a vet, perhaps you can help Taylor become a Unicorn?" — Philippa, engineer

A common theme in the live chats was the role of women in engineering, around which lively discussion was centred. The engineers and students alike talked positively about the issue and seemed enthusiastic that the existing gender imbalance would decrease.

"What's your opinion on more girls becoming engineers?" - Student

"Yes, getting more females into engineering is very important.... Women are 50% of the population, so we are missing out on lots of great engineers at the moment!" – **Neil, engineer** 

"Am not sure as being a woman has never stopped me doing my job. I think people have the wrong idea of what engineers do, they think I am lifting heavy machinery or similar when I am mostly sat in an office using my brain rather than my muscle. Boys and Girls are just as good as each other at using their brains" — Philippa, engineer

### Engineer winner: Neil Taylor

Neili's plans for the prize money: "I would use the money to invest in materials to design and create a fun, STEM-based version of a puzzle scenario to engage students with STEM subjects and improve teamwork and problem solving skills! If you have ever watched The Crystal Maze or Fort Boyard, you'll know how enthusiastic people get over puzzles that have a time limit! In recent years puzzle rooms have become popular. I'd look to use the game as a way to engage students with STEM subjects (especially engineering!) and hopefully encourage/inspire them to pursue careers in the STEM/engineering sectors" Read Neil's thank you message.



## Student winner: Bearded\_Dragonz

For great engagement during the event, this student will receive a gift voucher and a certificate.

#### Feedback

We're still collecting feedback from teachers, students and engineers but here are a few of the comments made during the event...

"I don't wanna leave you ⊗ I like talking 2 u guys" – De onor, student

"Very impressed by the speed and quality of the answers from the engineers" - **Teacher** 



Survived the first eviction of @IAEGMOOH Hope the kids are having as much fun as me. Some really great questions being asked!!



