

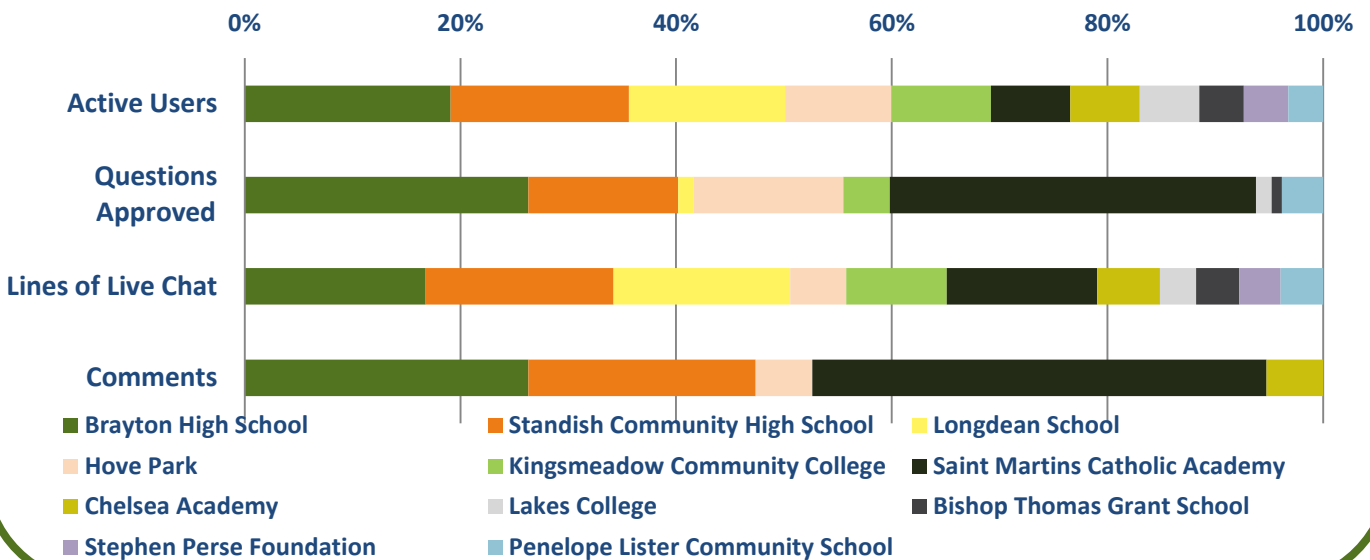


June 2015



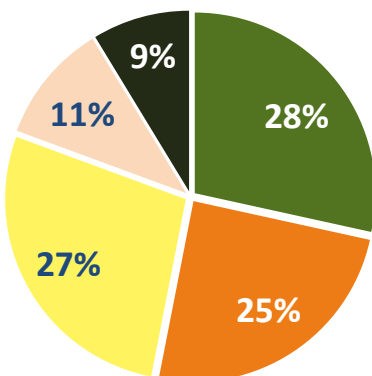
The Energy Zone was a themed zone funded by the Science and Technology Facilities Council (STFC). The participating engineers were working in energy-related fields such as developing renewable energy power plants, improving how buildings use energy and planning the infrastructure needed to deliver North Sea gas to the UK. The Zone had a high percentage of active students (92%) and they were keen to find out about what engineering involves, what the working life of the participating engineers was like and the education needed to become an engineer. This was a very competitive zone amongst the engineers, with Yasmin, Tadhg and Lee in particular engaging well throughout.

School data at a glance

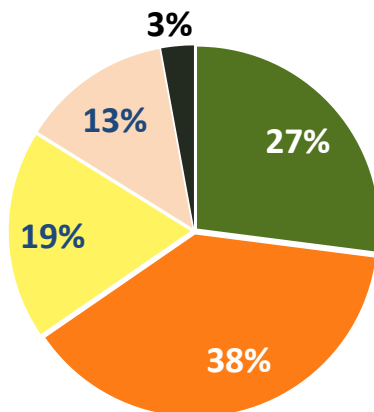


Engineer activity

Answers



Lines of live chat



Engineer	Profile views	Position
Lee Margetts	1,157	Winner
Tadhg O'Donovan	1,243	2nd
Yasmin Ali	1,123	3rd
David Hill	1,028	4th
Liz Meddings	777	5th

Key figures from the Energy Zone, and the average of the June zones

	ENERGY ZONE VIEWS	JUNE '15 AVERAGE
Total zone	26,154	19,241
ASK page	2,018	1,490
CHAT page	3,278	3,100
VOTE page	2,089	1,437

	ENERGY ZONE	JUNE '15 ZONES AVERAGE	IAE 2012-15 AVERAGE
Students	510	413	356
% of students active in ASK, CHAT or VOTE	92%	87%	83%
Questions asked	1055	727	518
Questions approved	209	229	195
Answers given	522	455	435
Comments	25	27	41
Votes	370	311	277
Lines of live chat	6,599	5,574	4,896
Live chats	23	19	16
Average lines of live chat	287	290	305
Schools	11	11	9

Popular topics

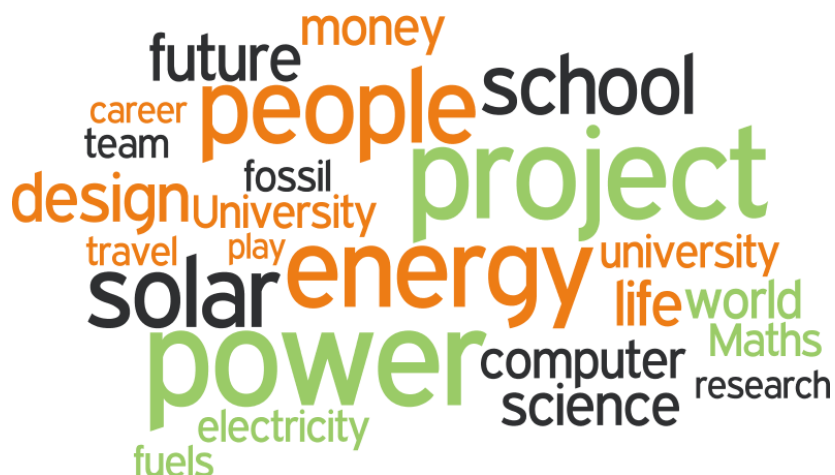
The questions in ASK were mainly centred on the engineers' career, typical day, working hours and pay, and what engineering actually was. Questions about the qualifications necessary to become an engineer were also popular.

Students also asked about what the engineers were currently working on, but questions about a specific element of an engineer's work were fairly rare. This suggests that the students were interested in the engineers' work but perhaps had little prior knowledge of what it might involve. Once explained by the engineers, many students found the details of what they did to be very appealing.

Renewable energy emerged as a broad theme throughout the event, as this topic applied to most of the engineers in this zone, for example Tadhg had undertaken a mini solar power plant project in India. This theme was often tied into the future of energy production, for instance, asking how long humans could keep using fossil fuels.

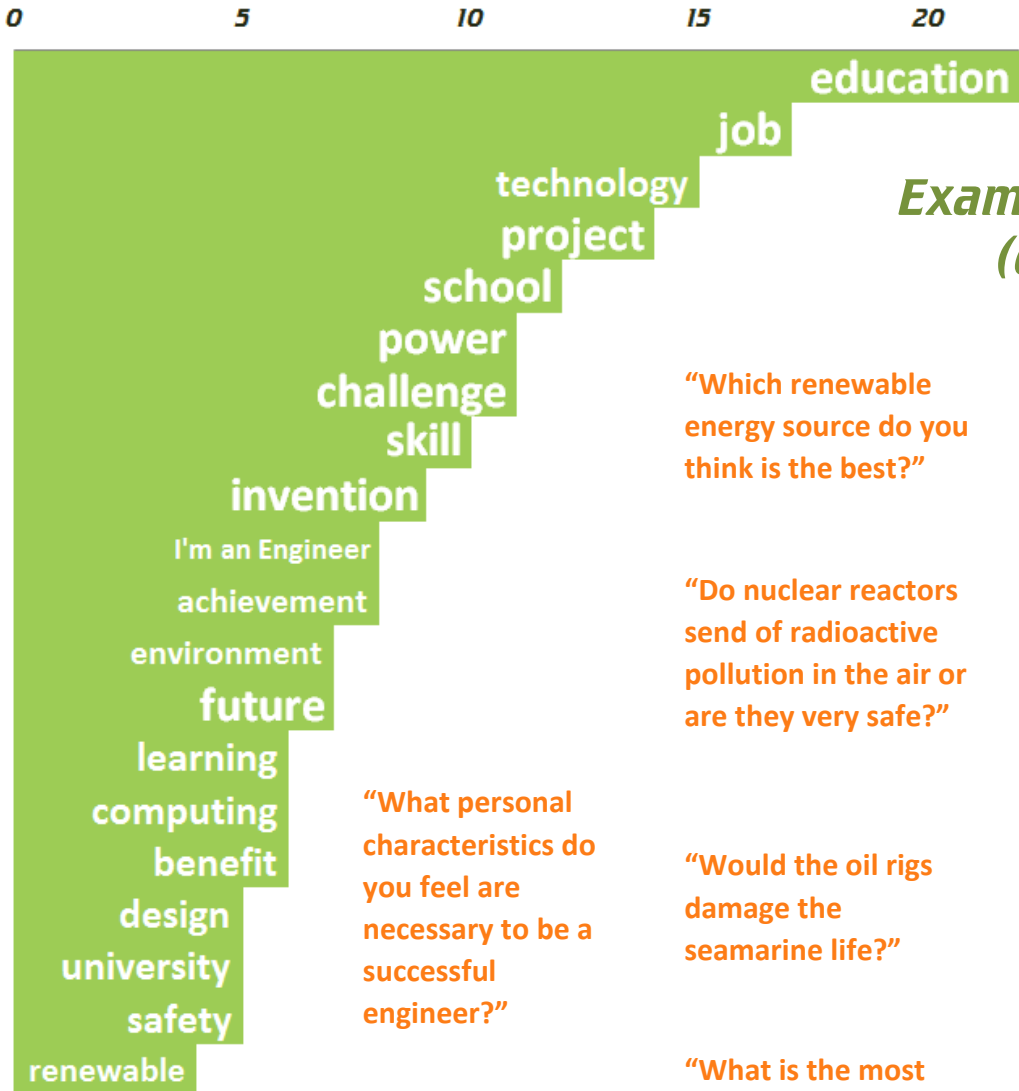


Keywords from live chats in the zone, size of the word represents its popularity





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



Example Questions (click for links)

- “How long have you been programming for and do you enjoy it more than engineering?”
- “Which renewable energy source do you think is the best?”
- “Do nuclear reactors send of radioactive pollution in the air or are they very safe?”
- “Do you think there should be more engineering in school?”
- “What personal characteristics do you feel are necessary to be a successful engineer?”
- “Would the oil rigs damage the seamarine life?”
- “What qualifications do you need to be an engineer?”
- “How do birds sit on high-voltage power lines without getting electrocuted?”
- “How are you going to help the U.K. solve the issue with fossil fuels?”
- “What is the most common way to transfer oil and gas to power stations? And is it more economically efficient than other methods?”
- “How could you re-use wasted energy, such as heat in power stations?”
- “Why is it important to use supercomputers to simulate nuclear reactors, wind farms and dinosaur locomotion?”
- “How can you justify fracking when it has the potential to diminish people’s quality of life?”
- “Do you think there are enough female engineers?”
- “Do you believe the chaos theory?”

Examples of good engagement

All the engineers in this zone were good at explaining what was required to become an engineer. They were very encouraging towards the students that showed an interest, giving them practical, realistic advice, as shown in the responses to this question from ASK:

“Do you think anyone, even people with bad grades, can be an engineer ?- Student

“Definitely. It is possible to get an office job in an engineering company and learn from the ground up. Apprenticeships are also an excellent opportunity or work experience. If you find you enjoy what you are doing and want to progress, it is always possible to study in college later in life, in the evenings or weekends. It is easier to get good grades if you enjoy what you are learning and have a bit of real experience in a real job. So anyone with poor grades shouldn't worry. I got a D in A level Chemistry and Maths.” – Lee, engineer

“Yes! I know loads of really good engineers who are not very academic people... but they learned lots of skills on the job.” – Yasmin, engineer

“Definitely, but it's a lot harder to understand what is happening. I got a D at physics A-level and did struggle on my degree as I had to study a lot harder. A good engineer isn't always the person who got a First as there are other things you need to be good at, other than the technical side, such as team working, thinking creatively and communicating your ideas.” – Liz, engineer

“I'm a firm believer that if you like something you will do well in it! And there are so many different types of engineering out there – if one sparks an interest for you, then you are likely to work at it and your grades will improve :) Best of luck!” – Tadhg, engineer

Engineer winner: Lee Margetts

Lee's plans for the prize money: *“I'd buy a laser scanner to help demonstrate “computer aided engineering” in schools. A laser scanner can be used to create a digital version of any object, inside a computer – including your best friend or your teacher, I'd like to use this technology to demonstrate that computer aided engineering is fun and creative, as well as a key activity in engineering design.”* Read Lee's [thank you message](#).



Student winner: Matthew

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...

“Thanks for talking to us, appreciate your answers and the time you've taken out, especially @Lee for being awake at 1:30am” – ButtKickingCucumbers, student

“The pupils loved it” – Teacher



Liz Meddings
@lzmdngs

Waaaa! I've been evicted from #IAEUK I'd like to thank my fellow contestants for some great answers and the students for the great questions



David Hill
@AeroHilly

@IAEGMOOH @STFC_Matters had a fun morning in the live chats! Hopefully try sneak away from work this afternoon to join some more! :D