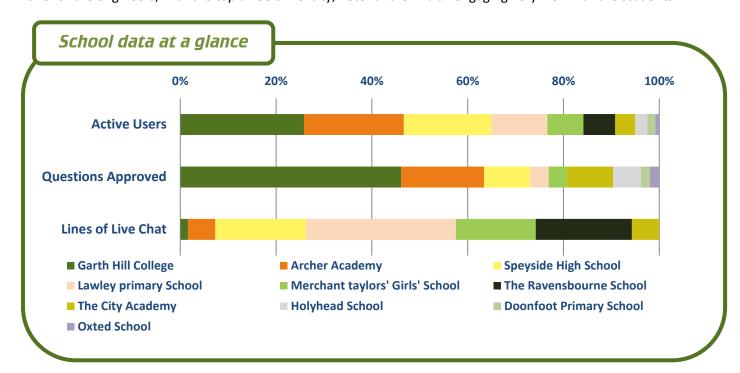
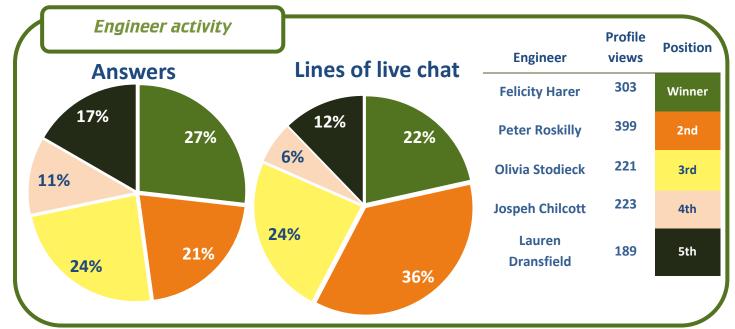




March 2015

The Transport Zone was a themed zone where the engineers were all involved with helping things move, for example creating software to control huge ships, or designing more efficient combustion engines, or researching new materials to produce aircraft. It was the smallest of the March zones, with 186 students registering. Live chats were often relaxed and focused mainly on engineering as a career and the daily lives of the engineers. It was a competitive zone for the engineers, with the top three of Felicity, Peter and Olivia all engaging very well with the students.









<u>Key figures from the Transport Zone, and the average of</u> the March zones

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

	TRANPSORT ZONE	MARCH '15 ZONES	2014
Total zone	6,216	15,703	13,210
ASK page	346	1,056	988
CHAT page	492	2,220	1,524
VOTE page	305	993	871

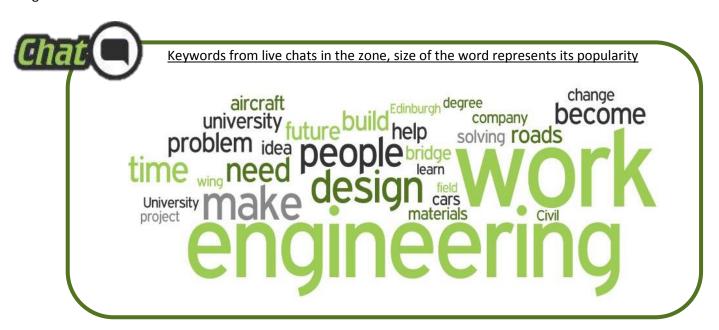
	TRANSPORT ZONE	MARCH '15 ZONES AVERAGE	2014 AVERAGE
Students	186	380	313
% of students active in ASK, CHAT or VOTE	67%	85%	77%
Questions asked	119	358	380
Questions approved	52	148	167
Answers given	138	334	427
Comments	2	23	64
Votes	90	280	280
Lines of live chat	1,012	4,733	3,624
Live chats	7	14	13
Average lines of live chat	145	333	247
Schools	10	8	8

Popular topics

The students mostly asked general engineering questions and asked about the engineers' careers and their day to day lives. They were also interested in what qualifications you need to get into engineering. The theme of transport was brought up in questions about aircraft, cars

and roads, which related specifically to the backgrounds of the engineers.

During live chats, the students got most engaged when talking about the specifics of the work of the engineers, and some of the students had obviously read the engineers' profiles. There was also some interest in the plans the engineers had for the prize money. For example, Fe was asked to explain hackspaces and 3D printing. Live chats were sometimes slow to get going and students could seem unsure of what to ask, concentrating instead on generic questions such as "why did you become an engineer", "how do you become an engineer" and "do you like being an engineer?".









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

0 1 2 3 4 5 6

,	2 3	4 5	В	
		C	career	
job industry current job subjects		Example Questions (click for links)		
ins	pire craft	"What is the best car that you have made?"	"What new discoveries do you believe will radically change the field and industry of engineering?"	
impact education advice invention engineer mechanics	"What programming language do you use?"	"What was the hardest software to fix?"	"What role do test operations technicians do in formula one?"	
ideas transport costing engineering	"What is hackspace and why do they need a 3D printer?"	"Was it easy to program the robot or was it hard?"	"What is it like building aircrafts"	
aerospace "What is the environment, your day to day routine like in your workplace?"	"I would like to become an engineer and would like to know what subjects could help me achieve my goal?"	"How do mechanics come up with the ideas and how can they transport things from one place to another costing them the minimum?"	"What was your least favourite subject at school?"	
"How complicated can a road really be? Is the design of core infrastructure changing quickly in practice or is the industry stagnating?"	"Why do you enjoy engineering and do you find that engineering links to other subjects or is it just focusing on one subject?"	"What are control systems?"	"How did you become so interested in designing plane wings?"	



stagnating?"



Examples of good engagement

Some of the chats involved after-school STEM clubs and some very interested students that had full conversations with the engineers. The engineers were able to give insights into how engineers work and how this has changed:

"Do the computers make the problem solving easier or do they add more things that could go wrong?" – **Student**

"Latching to William's question, do all the skills of working mathematically go unused seeing as you have computers?" – **Student**

"Both - I couldn't solve the big problems and wing simulations without the computers, but if you put wrong data in, you'll get wrong data out - that's where the engineering skills are really important to understand if your calculations are correct and applicable" — Olivia, engineer

"Computers are amazing! In the bad old days people used to literally design cars on massive sheets of paper. Now they can design and test them on computers and even show you how to make them better" – Felicity, engineer

"Definitely not, we still do a lot of hand calcs and still need to be able to understand the data we're seeing, as well as checking the PC is doing what we told it to!" – Lauren, engineer

"Another good question. No. If you don't understand the Maths you can't get the computer to do anything. Computers are an excellent tool. They let us do things quicker and deal with more complicated problems. But they are just a tool, Your brain solves the problem" – Pete, engineer

Engineer winner: Felicity Harer

Felicity's plans for the prize money: "Give it to a hackspace in Birmingham to buy a 3D printer. It's great new technology and hands on experience is the best way to learn! Hackspaces are open to anyone and run loads of open nights — coding, competitive lock picking and making things are just the start! You'll need a reasonably responsible adult to come along with you but I'm sure you'll all have a great time if you get to go and, if Birmingham is too far for you, look up the Maker Spaces in your area and give one of them a go." Read Fe's thank you message.



Student winner: Gullam!SoKawaii!

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 sooo much, this has been a real experience"— Ted, student

"Thank you very much for answering the questions. The children are really inspired by this event" - **Teacher**



Had an incredibly busy live chat from Lawley Primary. Those were some enthusiastic students! #IAEUK



