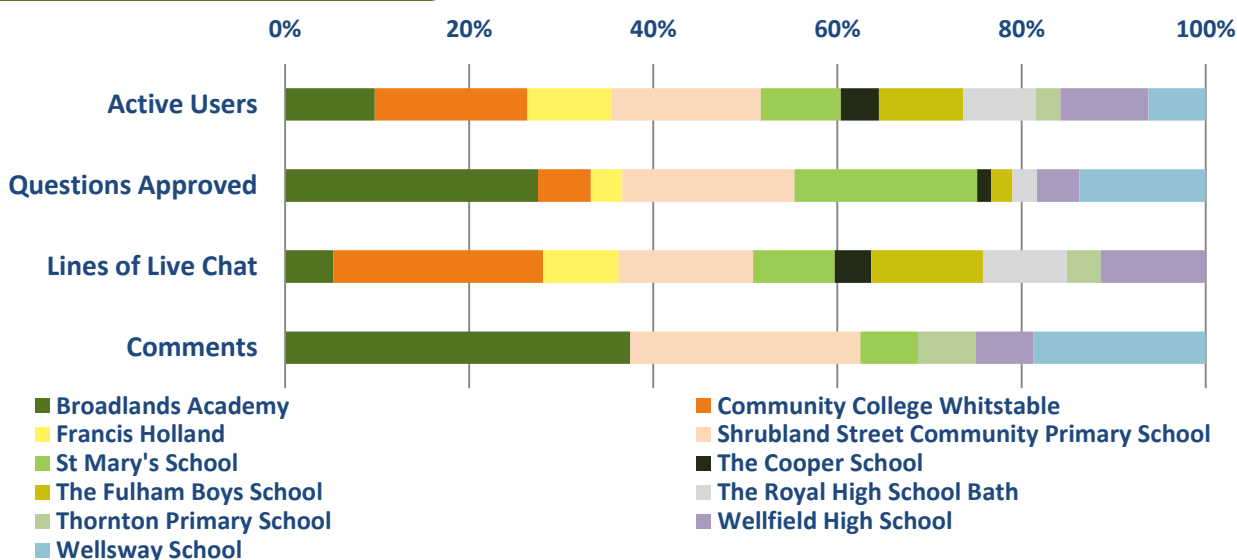


March 2016

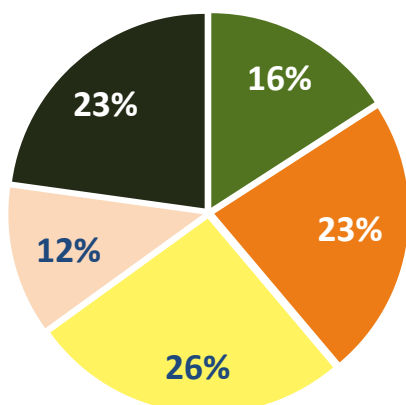
The Surgery Zone was a themed zone funded by the Wellcome Trust. Within the zone, Matt is a Systems Administrator in a cardiothoracic hospital, Dominic is head of the Surgical and Prosthetic Design team at Cardiff Metropolitan University, Monica who designs medical devices for the heart, Maedeh is a Postdoctoral Research Associate who designs devices for patients with hand abnormalities and Matthew designs tools for brain surgery. The zone had a higher than average amount of questions and votes compared to the other March zones, and live chats were busy and energetic. Much of the topics discussed were career focussed, with some more theme-specific questions being asked as the event went on and students had the chance to talk to the engineers through the live chats, which were often busy and fast paced. The two final engineers, Matt and Dominic, accounted for over half of all engineer activity in the ASK section and live chats.

School data at a glance

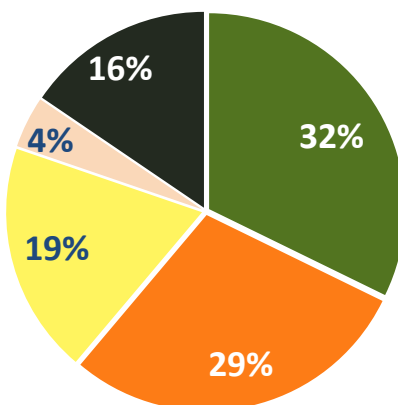


Engineer activity

Answers



Lines of live chat



Engineer	Profile views	Position
Matt Round	977	Winner
Dominic Eggbeer	759	2nd
Monica Rozeik	953	3rd
Maedeh Borhani	694	4th
Matthew Oldfield	690	5th

Key figures from the Surgery Zone and the averages of the March zones

PAGE VIEWS	SURGERY ZONE	MARCH '16 AVERAGE
Total zone	15,502	16,578
ASK page	1,146	1,344
CHAT page	2,698	2,283
VOTE page	1,453	1,170

	SURGERY ZONE	MARCH '16 ZONES AVERAGE	IAE AVERAGE
Schools	11	10	10
Students logged in	541	415	368
% of students active in ASK, CHAT or VOTE	89%	90%	85%
Questions asked	577	538	529
Questions approved	262	211	196
Answers given	592	422	425
Comments	44	31	38
Votes	368	313	285
Live chats	23	18	16
Lines of live chat	6,275	5,011	4,917
Average lines per live chat	273	280	301

Popular topics

Many of the questions were focussed on engineering careers and the positive and negative aspects of the engineers' jobs. Students were interested in what paths the engineers had taken to get to their current positions and whether there had been any major changes along the way. There were

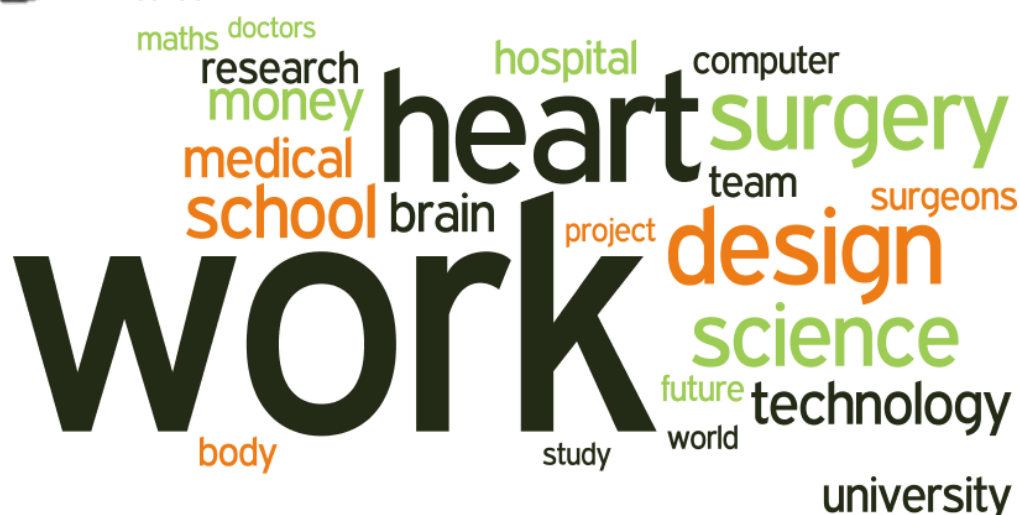
also a lot of questions regarding education, such as University choices, what GCSEs and A Levels the engineers had taken and whether what they learned is still relevant in their present roles.

Students often asked for advice on the best ways to learn more about medicine, and the engineers were very good at providing information and links to relevant websites and resources.

There were instances where students reflected on their own lives and then asked the relevant engineers informed questions. For example, one student explained their grandmother's experience with having a tumour removed and asked Matthew whether there may be a device in the future with less serious side effects. Another student, who has an artificial valve themselves, asked Monica about the changes in technology with this process.



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



Examples of good engagement

On occasion students shared information that interested them with the engineers, provoking interesting discussions:

"Do you think head transplants are going to work on humans?" – Student

"I'm not sure about head transplants as that would include the brain too. But it is possible to do face transplants and create artificial parts of the head already. There have even been ears growing on mice for use on humans. So bits of the head could be transplanted but not all of it, yet!" – Matthew, engineer

"Did any of you hear about the head transplant on the monkey? What did you think about it?" – Student

"I didn't hear about that head transplant. Maybe it will be there for humans sooner than I thought! It sounds interesting but maybe with lots of ethical issues for humans too." – Matthew, engineer

"Apparently the monkey only lived for 20 hours or so" – Student

"That's not much good for the monkey. I hope they learned something! But 20 hours is still a surprisingly long time." – Matthew, engineer

"Thank you so much for your time! It was really interesting talking to you!" – Student

Engineer winner: Matt Round

Matt's plans for the prize money: *"I'd like to invest the money in outreach programs that allow students to have access to medical / imaging work experience."*

Read Matt's [thank you message](#)



Student winner: IOjam

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...

"The chance to engage with the engineers of tomorrow was too good to pass up, I hope the students got as much out of the experience as I did." - Engineer

"I found chatting with professionals unbelievable and I liked their thoughtful replies, especially Dominic's honest reply of running away if his experiments went wrong." – Student

"We should do chats/ votes like this more often. It was also cool to see what they do in their spare time and things." – Student