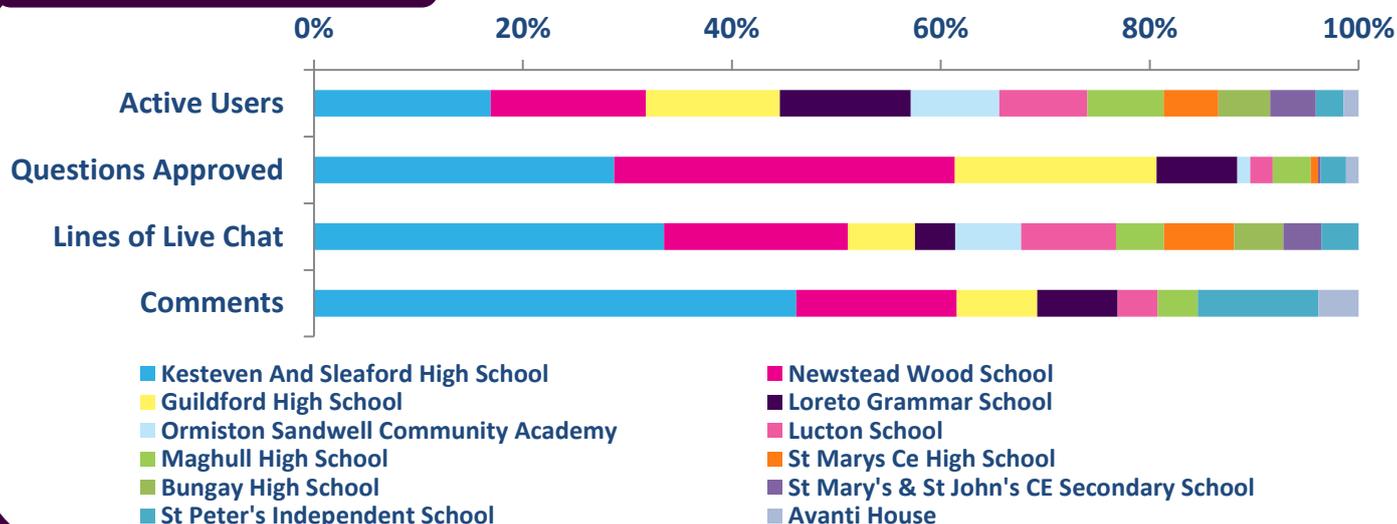




June 2015

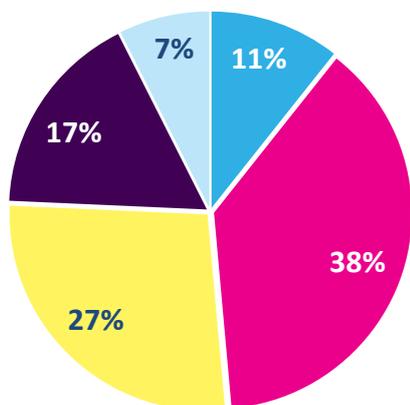
The Ytterbium Zone was a general science zone funded by the Royal Society of Chemistry. At least five members of the Royal Society of Chemistry take part in different general science zones throughout the year. In these zones the participating scientists come from a variety of backgrounds. For instance, in the Ytterbium Zone there were scientists spanning linguistics, bacterial proteins, parasitology, supercomputing and radioactive waste disposal. This wide range of subjects gave the students a chance to ask questions across many areas of science. The scientists in this zone were notable for excellent attendance in live chats, with the majority of chats involving 3 or more scientists.

School data at a glance

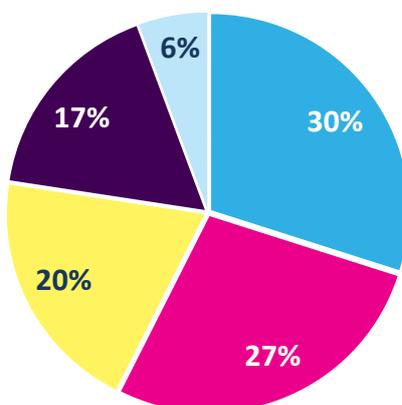


Scientist activity

Answers



Lines of Live chat



Scientist	Profile views	Position
Hayley Clissold	823	Winner
Iain Bethune	536	2nd
Sascha Stolhans	684	3rd
Rebecca Jones	687	4th
Anna Kutner	411	5th

PAGE VIEWS	YTTERBIUM ZONE	JUNE '15 ZONES AVERAGE
Total zone	23,139	23,412
ASK page	1,756	1,818
CHAT page	3,714	2,946
VOTE page	1,326	1,587

	YTTERBIUM ZONE	JUNE '15 ZONES AVERAGE	IAS 2012-15 AVERAGE
Students	407	411	342
% of students active in ASK, CHAT or VOTE	90%	91%	85%
Questions asked	809	805	702
Questions approved	414	358	302
Answers given	527	578	555
Comments	44	57	79
Votes	291	330	273
Lines of live chat	5,571	5,928	4,784
Live chats	19	18	14
Average lines of live chat	293	328	338
Schools	12	12	9

Popular topics

The students had clearly read the scientists' profiles and questioned each scientist on their areas of research. For example, Sascha was asked about language, Hayley answered questions about bacteria and Iain got questions about coding and computers.

There was a theme of human biology in the zone, especially brains ("Is it true we only use 10% of our brain all the time?") and sleep and dreaming. Similarly, space was a popular topic, with black holes being a particular focus ("What's at the bottom of a black hole?") alongside questions about life on other planets.

There were a notable number of more philosophical questions, covering topics such as the future of humanity and theology ("Do we have a soul?").

There were also a number of questions about working as a scientist, some of which covered far-reaching issues, such as sexism in the workplace ("is science a sexist field of work?").



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



Ask ?

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



Example Questions (click for links)

“What are your feelings towards pollution?”

“Why do we yawn, and is yawning contagious?”

“What is the average salary for a scientist?”

“How do human stem cells decide which type of cell they are going to be when the embryo is in the womb?”

“What is beyond the universe?”

“How would you class languages as science?”

“How do atomic clocks work?”

“Does a person get his blood from both parents or just one?”

“Do you believe in magic?”

“Why do we dislike the taste of some things but like the taste of others?”

“Is your work endless?”

“Is ageing inevitable?”

“According to you, which qualities must a good scientist have?”

“Will teleporting ever be possible?”

“Is it true that stars die?”

Examples of good engagement

The following chat excerpts shows how the scientists were able to build rapport by asking questions back to the students and having conversations about personal views. Iain probed the student's views on several occasions:

"Do you believe heaven exists?" – Student

"I don't believe in heaven or life after death. As far as I know there is no evidence of either. What do you think?" – Iain, scientist

"I believe in it. But isn't it God who helps you to discover things?" – Student

"Why do you think that?" – Iain, scientist

"idk" – Student

"idk is a good place to start, have a think about it and see what you can figure out. It's always good to think about why you believe things. Sometimes you end up changing your mind!" – Iain, scientist

"How does the brain generate consciousness?" – Student

"Nobody really knows for sure. Sounds like you should become a Cognitive Scientist!" – Iain, scientist

"No thank you!!" – Student

"Why not - what do you want to be? What are your interests?" – Iain, scientist

Scientist winner: Hayley Clissold

Hayley's plans for the prize money: *"I would like to use the prize money to organise and host an activity stand at a science fair in York. Throughout the year, there are several events throughout the city that enable scientific researchers to engage with the public in a fun and interactive way to raise awareness of the research we do and to make science fun and accessible to everyone. I would like to host a stand specific to bacterial infections to raise awareness of the need to understand how pathogens work and how essential it is to develop treatments and therapies, particularly in a world where antibiotic resistance has become a global threat."* Read Hayley's [thank you message](#).



Student winner: Jazz

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 scientists but here are a few of the comments made during the event...

"This was awesome talking to you three" – **JustCurious, Student**

"Can I have a job with one of you @sascha @Hayley @iain @rebecca" – **BOUST, student**



Rebecca Jones
@RSJonesScience

First @imascientist chat and it was exhilarating! So many great questions! Can't wait for more!



Sascha Stollhans
@SaschaStollhans

@RSJonesScience @imascientist It was fantastic - hard to keep up with all the brilliant questions! #IASUK