



Verity



Trystan



Raquel



Danny



Catherine



Andy

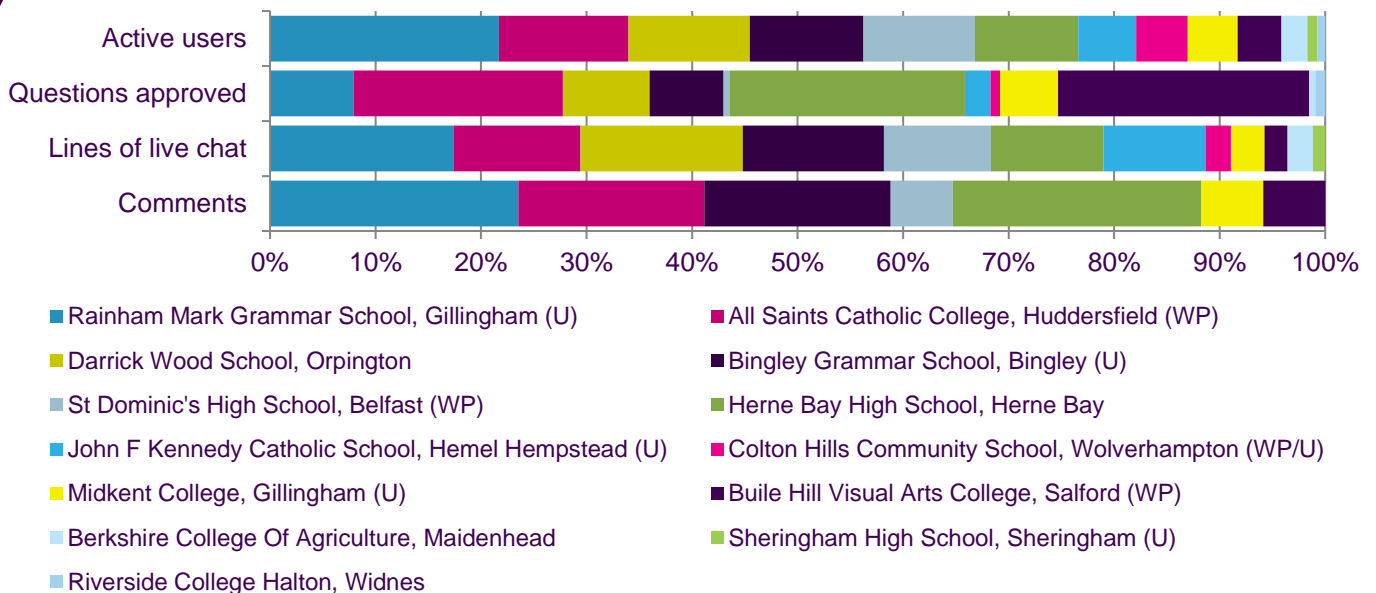
November 2018

The Epidemic Zone was a themed zone supported by Wellcome with six scientists participating:

- Verity Hill is a PhD student, using genetics to better understand the spread and evolution of the Ebola virus
- Trystan Leng uses maths to study the spread of sexually transmitted infections through populations and how to control that spread as part of his PhD research
- Raquel Medialdea Carrera is a field epidemiologist at the European Centre for Disease Control and identifies epidemics and how to control them
- Danny Ward, the winner of this zone, is a PhD student trying to understand how bacteria are able to infect living things and how we can stop them doing so
- Catherine Smith is an infectious disease data scientist working at UCL using coding to assess disease epidemiology
- Andy Guise conducts research and lectures on inequality, health and homelessness at King's College London

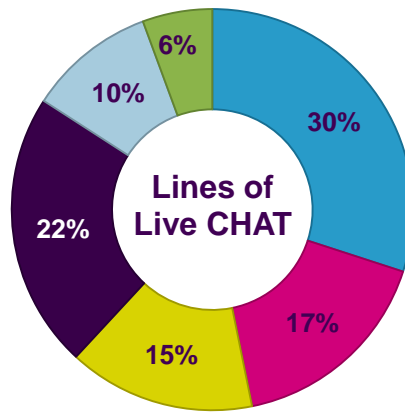
Students were very interested in the zone theme, asking about each of the scientists' areas of research in addition to general questions about epidemics and diseases. A third of the questions put to the scientists in ASK concerned careers and education, but students were also interested to know about the scientists' spare time and hobbies.

School data at a glance



We want to increase the participation of under-represented groups going into STEM careers. Find out what we mean by our under-served (U) and WP schools (WP), and how you can support us in working with more of these at about.imascientist.org.uk/under-served-and-wp

Scientist activity



SCIENTIST	PROFILE VIEWS	POSITION
Danny Ward	814	Winner
Trystan Leng	704	2nd
Raquel Medialdea	558	3rd
Verity Hill	668	4th
Catherine Smith	444	5th
Andy Guise	500	6th

Key figures from the Epidemic Zone and the averages of the November zones

PAGE VIEWS	EPIDEMIC ZONE	NOV '18 ZONES AVERAGE
Total zone	19,406	18,272
ASK page	1,755	1,482
CHAT page	1,716	1,443
VOTE page	865	742

	EPIDEMIC ZONE	NOV '18 ZONES AVERAGE	IAS 2012-18 AVERAGE
Epidemic Zone Schools	13	10	10
Students logged in	608	471	391
% of students active in ASK, CHAT or VOTE	87%	87%	86%
Questions asked	1,346	711	690
Questions approved	656	337	302
Answers given	1,252	585	539
Comments	56	57	74
Votes	468	378	307
Live chats	24	21	16
Lines of live chat	7,858	8,300	5,642
Average lines per live chat	327	395	358

Popular topics

Most of the questions focussed generally on epidemics, with questions about the worst epidemics, how they are characterised and how something becomes an epidemic.

'Diseases' was a popular keyword in live chats, with students asking about named diseases that they had prior experience/knowledge of, or asking Verity if she worried she'd ever catch a disease while working on it.

The students asked Danny about his research into bacteria, and Trystan was asked frequently "how can you use maths to study STIs?"

Verity's research into Ebola was another popular topic, with students asking things like "Can you catch Ebola in England?" and "How is Ebola transmitted?"

In ASK, there were more questions about careers and education, but students were also interested in how the scientists' spent their spare time, what their hobbies were and who inspired them.

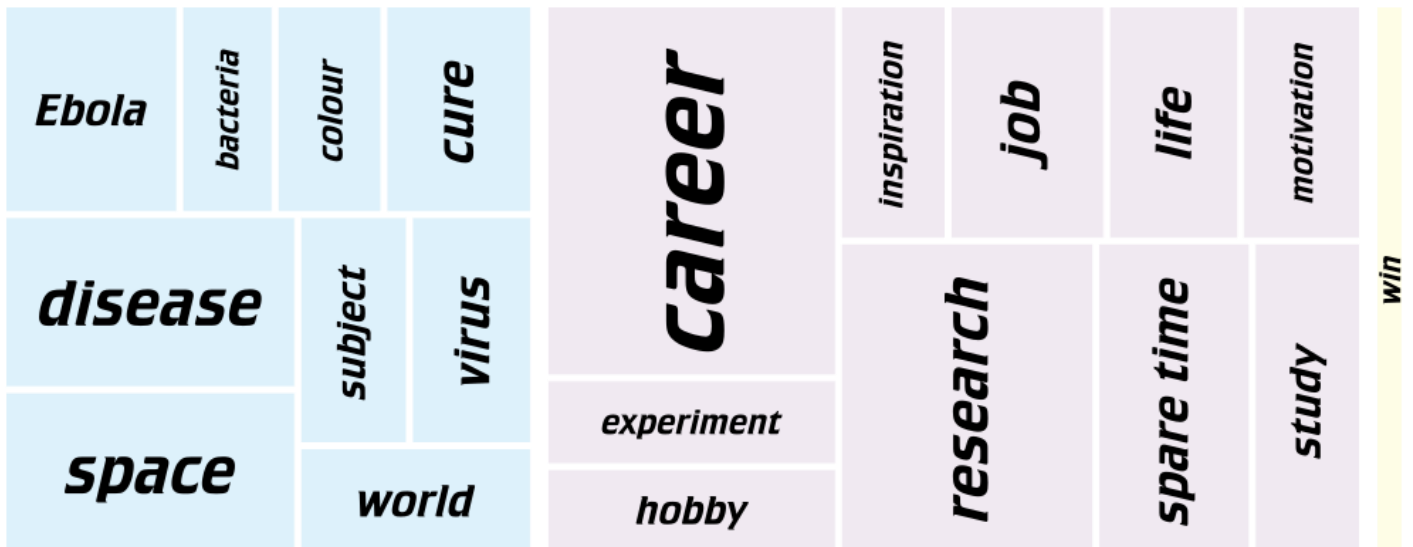
Chat

Keywords from live chats in the zone. Size of the word represents its popularity



Ask?

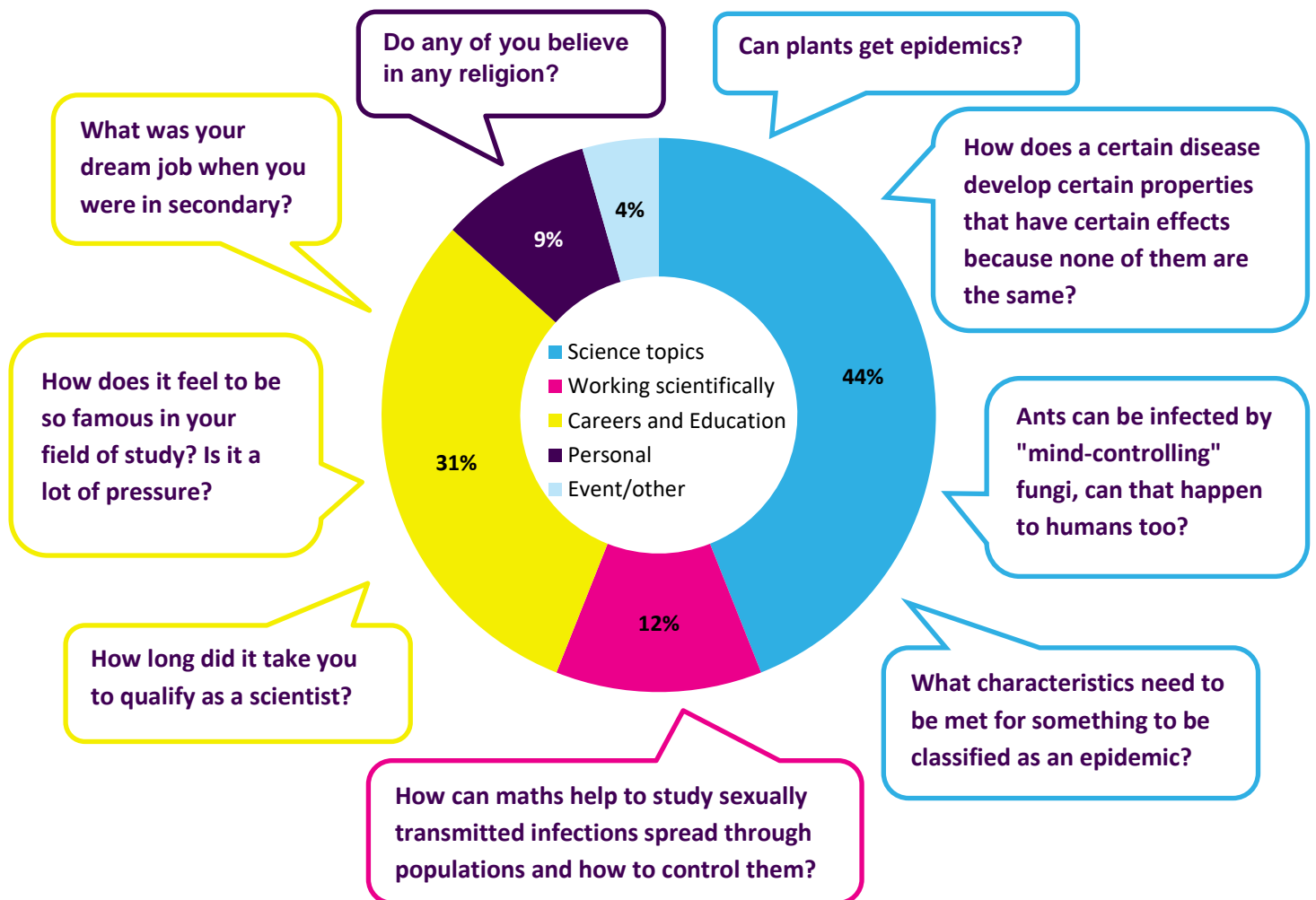
Top Keywords of questions approved in the Zone



■ Science ■ Being a scientist ■ Event/other

Question themes and example questions in the Zone

Find out about how we've coded the questions at about.imascientist.org.uk/student-question-coding



Examples of good engagement

Students were very interested in Verity's ebola research, and showed an awareness of current news and skepticism around the issue, which Verity was able to respond to:

"Do you think that the ebola crisis is over now and if not why do you think that is?" – Student

"The one in West Africa is! But there's an ebola crisis in the Democratic Republic of the Congo at the moment - there's an outbreak in a war zone and there's a lot of violence making it hard to control" – Verity, scientist

"Why do you think the News and Publicity do not cover these Ebola crises" – Student

"Hmm good question – the news isn't very good at showing us things that don't directly affect Europe or the US. The West African epidemic mostly hit the news when british and american medics became infected" – Verity, scientist

"Some people think that the Government is behind this to lower the population. What do you have to say to this?" – Student

"I think it's really sad – it's a legacy of colonialism in these countries leading to mistrust of westerners (and also the memory of awful things that were done). It is very much not true – Ebola came from bats!" – Verity, scientist

“Thank you for your reply. Do you think more education will allow people to learn more about this topic?” – Student

“I hope so! Every outbreak response has to include “community engagement” which is about showing people why the control measure is useful, and helping it to make sense” – Verity, scientist

The scientists also engaged in everyday chat with the students, which helped them appear more ‘human’ and could be seen as ‘someone like me’, thus contributing to the students’ science capital*:

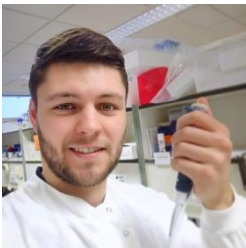
“Are any of you fans of Doctor Who? Im quite a big fan of DW...” – Student 1

“I am a big fan of Doctor Who. I really liked David Tennant, the tenth doctor.” – Danny, scientist

“Yeah! I went off it a bit when it was Matt Smith and Peter Capaldi, but I loved Christopher Eccleston a lot, and David Tennant was good too. I’m excited to see what Jodie Whittaker is like” – Verity, scientist

“Out of the new series, he’s also my favourite, but when it comes to the classic series, it is John Pertwee, the third doctor. Also thanks for the response!” – Student 1

“I love the new doctor” – Student 2



Scientist winner: [Danny Ward](#)

Danny’s plans for the prize money: *“fund outreach sessions in areas where science isn’t popular to show off all the cool inventions and technology which have been made possible through STEM, including table-top experiments and a game.”*

Read Danny’s [thank you message](#).

Student winner: [766epdp24](#)

For great engagement during the activity, 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 about the Epidemic Zone...

I have learnt that jobs involving science are more interesting than they may seem. – Student

Thanks so much for putting on this event again. We have been engaging with it for a number of years now and our pupils really do enjoy the experience. – Teacher

*Science capital is a measure of someone’s engagement or relationship with science, how much they value it and whether they feel it is ‘for me’. More info at imascientist.org.uk/science-capital

Feedback

Here are a few of the comments made about November's *I'm a Scientist* activity...

The students were actually cheering when the first scientist answered a question. It was a fantastic moment. – **Teacher**

I have learnt about other scientists' lives and that even if they are scientists they have the same life as us. – **Student**

The whole event probably involved more students from a wider variety of backgrounds than any single real-life event. – **Scientist**

I have learnt that many scientists did not have any clue as to what they wanted to be when they left school. – **Student**

I have learned that science isn't just sitting with some test tubes pouring them into a big pot and that they are real, rather interesting jobs that I could consider going into. – **Student**

I would like to say thank you. Friday when our children went on the live chat, there was so much excitement with the children when they saw the scientist replying. The buzz they got from it was fantastic. It is a long time since I've seen children buzzing from science. – **Teacher**