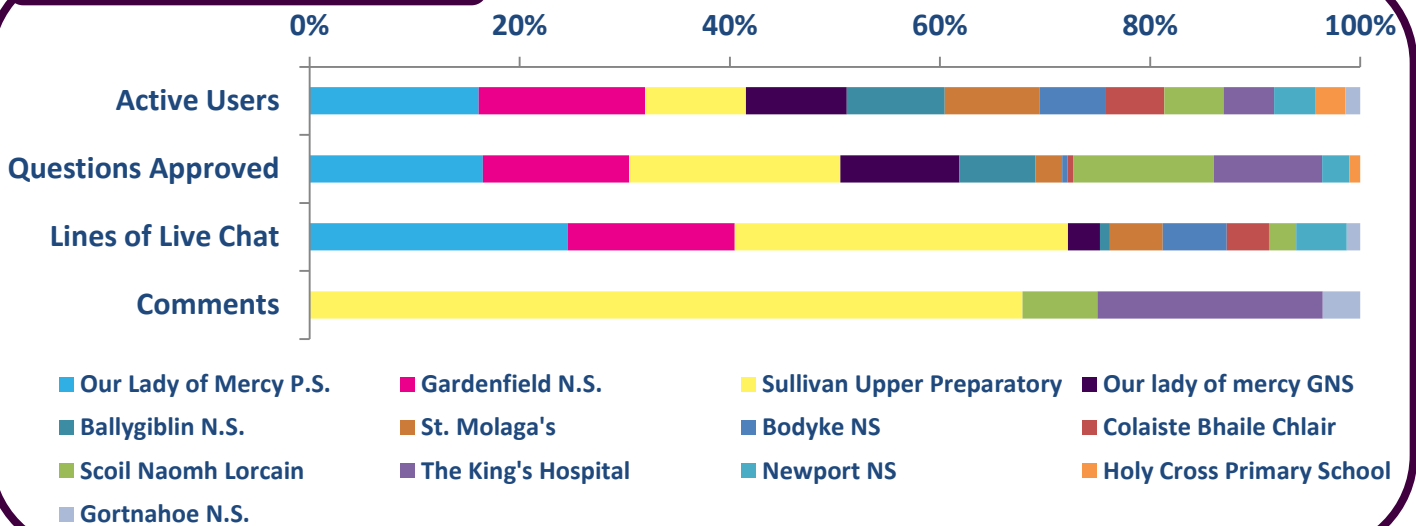


November 2015

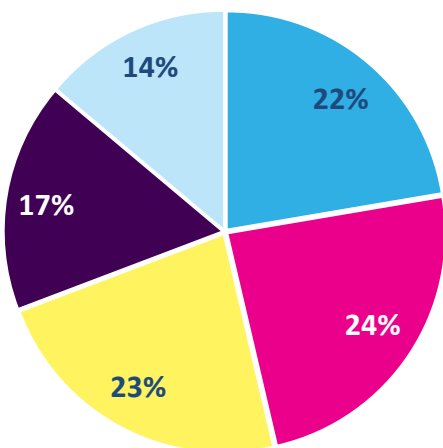
The Nitrogen Zone was a general science zone for primary schools funded by the Science Foundation Ireland's Discover programme. It included five scientists from a variety of backgrounds: laser imaging, genetic statistics, marine research, haematology, and microbiology. Questions from students ranged from covering these areas of research, to questions about the scientists' lives, to more general science topics like space and cancer. Some live chats were fast-paced and lively and some were slower when conducted through a teacher account. This zone saw the highest number of submitted questions, comments and votes from students, and the most answers from scientists in ASK, reflecting a diverse and engaged zone.

School data at a glance

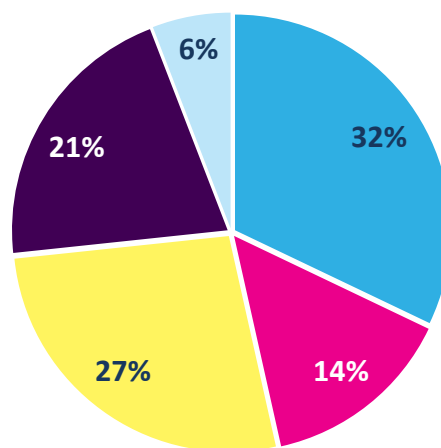


Scientist activity

Answers



Lines of Live chat



| Scientist | Profile views | Position |
|--------------------|---------------|----------|
| Uday Bangavadi | 655 | Winner |
| Irene Regan | 703 | 2nd |
| Chloe Huseyin | 698 | 3rd |
| Ricardo Segurado | 605 | 4th |
| Pierre Casaulbielh | 508 | 5th |

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

| PAGE VIEWS | NITROGEN ZONE | NOV '15 ZONES AVERAGE |
|------------|---------------|-----------------------|
| Total zone | 21,241 | 21,393 |
| ASK page | 2,122 | 1,860 |
| CHAT page | 2,003 | 2,420 |
| VOTE page | 1,781 | 1,433 |

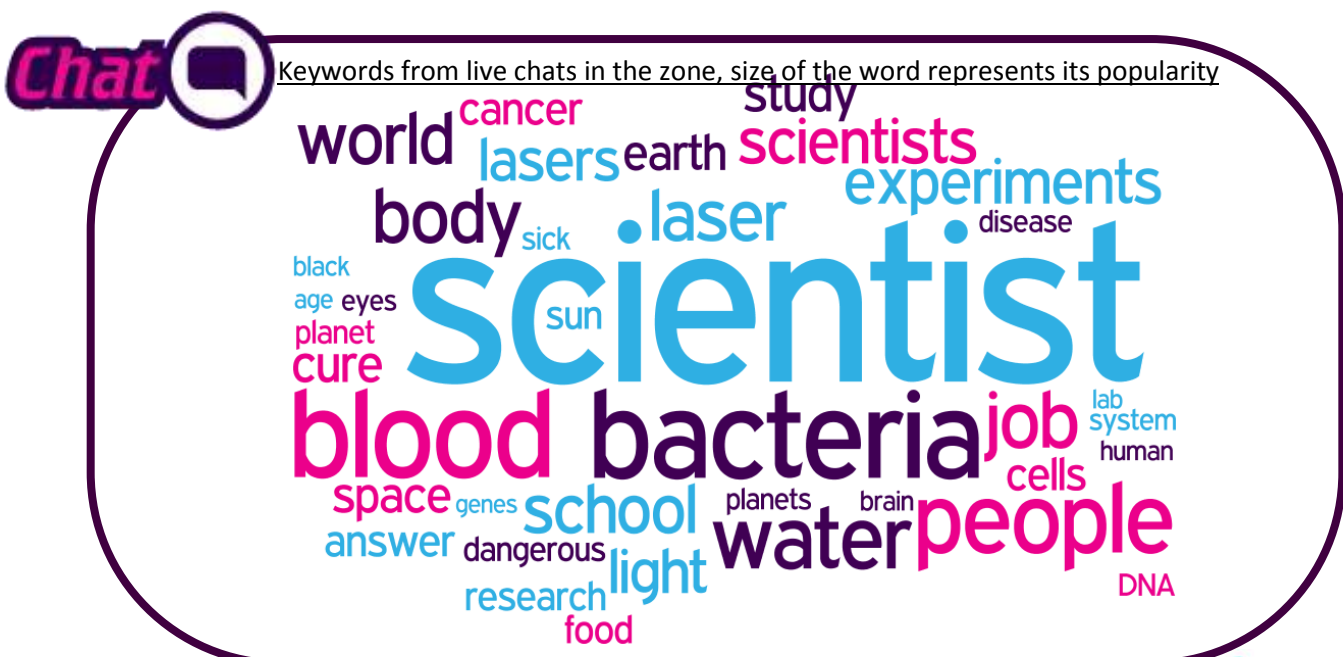
| | NITROGEN ZONE | NOV '15 ZONES AVERAGE | IAS IRELAND AVERAGE |
|---|---------------|-----------------------|---------------------|
| Schools | 13 | 12 | 11 |
| Students logged in | 390 | 409 | 355 |
| % of students active in ASK, CHAT or VOTE | 93% | 91% | 84% |
| Questions asked | 851 | 746 | 649 |
| Questions approved | 194 | 192 | 250 |
| Answers given | 533 | 447 | 496 |
| Comments | 54 | 35 | 63 |
| Votes | 388 | 326 | 280 |
| Live chats | 19 | 17 | 15 |
| Lines of live chat | 3,794 | 3,842 | 3,926 |
| Average lines per live chat | 200 | 226 | 266 |

Popular topics

The popular subjects for questions from students echoed the respective backgrounds of the scientists. For example, Uday was asked how his lasers worked, Chloe answered many questions about bacteria, and Irene faced questions about working in a hospital with blood. Students were often interested in the experiments that the scientists carried out, especially if they were risky.

There were also questions asking about the life of a scientist, and asking for advice on becoming one. On a few occasions the researchers got to address the cultural stereotypes that exist about themselves, such as the 'mad' scientist.

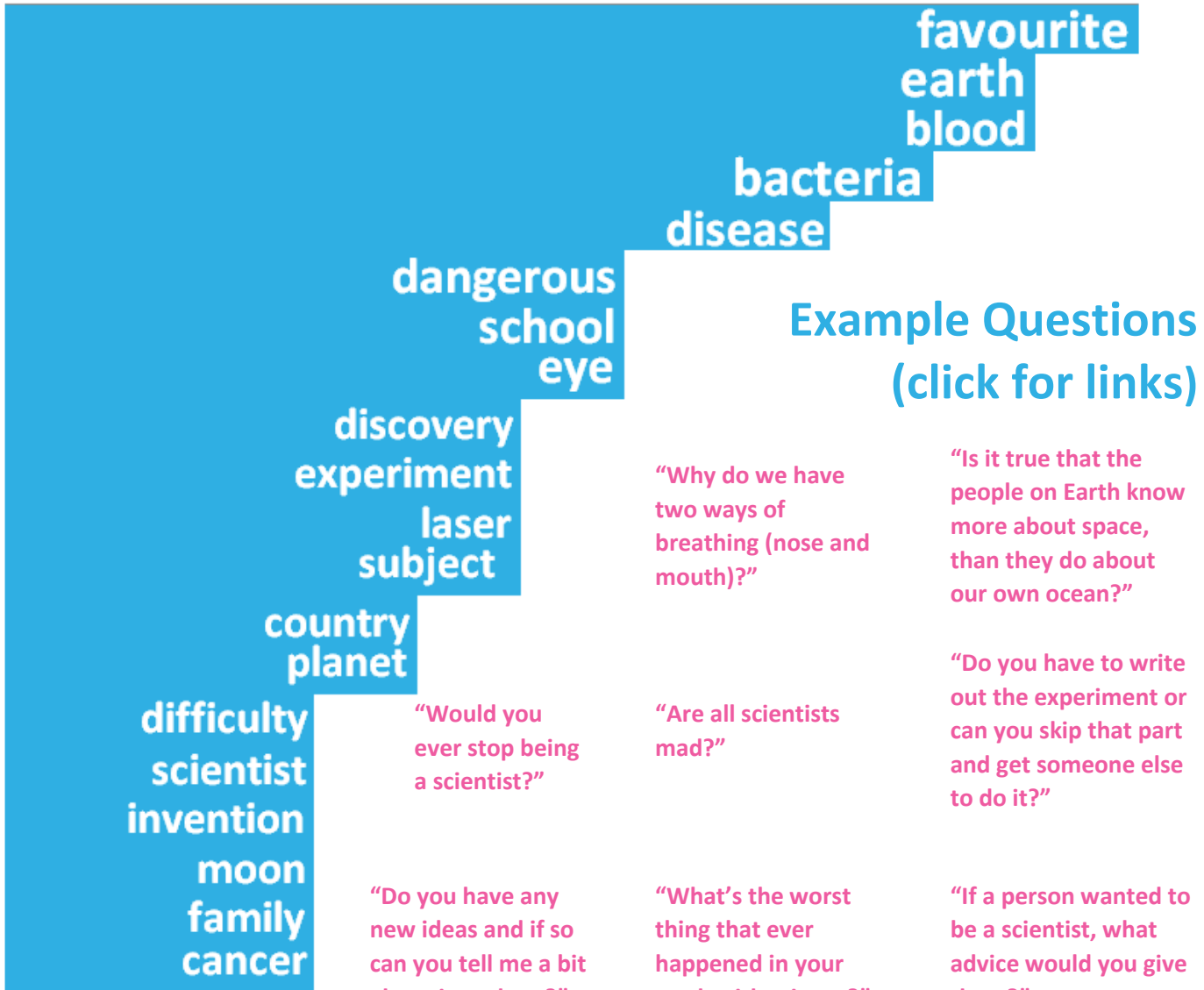
The students also used the opportunity to talk to real scientists to ask for explanations of different scientific phenomena in both ASK and live chats, especially those related to space, such as black holes and planets.





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

0 1 2 3 4 5 6 7 8 9 10 11



Example Questions (click for links)

“Why do we have two ways of breathing (nose and mouth)?”

“Is it true that the people on Earth know more about space, than they do about our own ocean?”

“Are all scientists mad?”

“Do you have to write out the experiment or can you skip that part and get someone else to do it?”

“Do you have any new ideas and if so can you tell me a bit about it or them?”

“What’s the worst thing that ever happened in your work with science?”

“If a person wanted to be a scientist, what advice would you give them?”

“Do scientists all wear white coats and work in labs?”

“If there is something wrong with the blood that you never heard of what do you do?”

“What machine do you turn on when you get to work first?”

“What is the craziest thing you have done as a scientist?”

“Why does the moon sometimes come out during the day?”

“Do you believe every sickness has a cure?”

“Is there any planets like earth in galaxy Andromeda?”

“What would happen if you didn’t have animals to test drugs on?”

Examples of good engagement

Chloe was very good at initiating conversations when students were slow or hesitant to ask questions of their own. She managed to start some good chats:

“What kind of science experiments have you guys done (or seen on TV) that you thought were interesting?” – **Chloe, scientist**

“We learnt that oil and water do not mix.” – **Student**

“That’s a cool one, there are lots of other liquids that don’t mix just like that, we can use the same principle to clean up things like drugs if they have impurities in them. What we try and do is find two liquids that don’t mix and we mix the drug that we want to clean into them and (what we hope happens) is the impurities stay in one liquid and the nice clean drug stays in the other liquid! Cool eh? Then we just get rid of the liquid that has the impurities and take our drug back out.” – **Chloe, scientist**

“What is your favourite chemical reaction??” – **Student**

“My favourite chemical reaction is called “saponification”... it is simply making soap. Mixing a fatty element (oil, fat) with caustic soda, we get this nice and creamy or hard material we use to clean ourselves.... with a bit of flower essence, it is very nice” – **Pierre, scientist**

“Adding alkali metals like sodium to water to make salt, you should check it out online, it’s cool seeing the metal zip around the top of the water” – **Chloe, scientist**

Scientist winner: Uday Bangavadi

Uday’s plans for the prize money: *“I would purchase science experiment kits and donate them to the school so that the kids get an opportunity to work themselves on the experiment and develop interest on science.”* Read Uday’s [thank you message](#).



Student winner: Melody/Amazing

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...

“It’s been great talking to you. It’s been great having 2 scientists to ourselves.” – **Student**

“I got such a kick out of answering the questions! Not all were easy, and on top of that pitching it at the right level was tricky” – **Ricardo, scientist**

“This is a learning tool for the boys and girls but I have to say I learnt loads also.” – **Irene, scientist**