

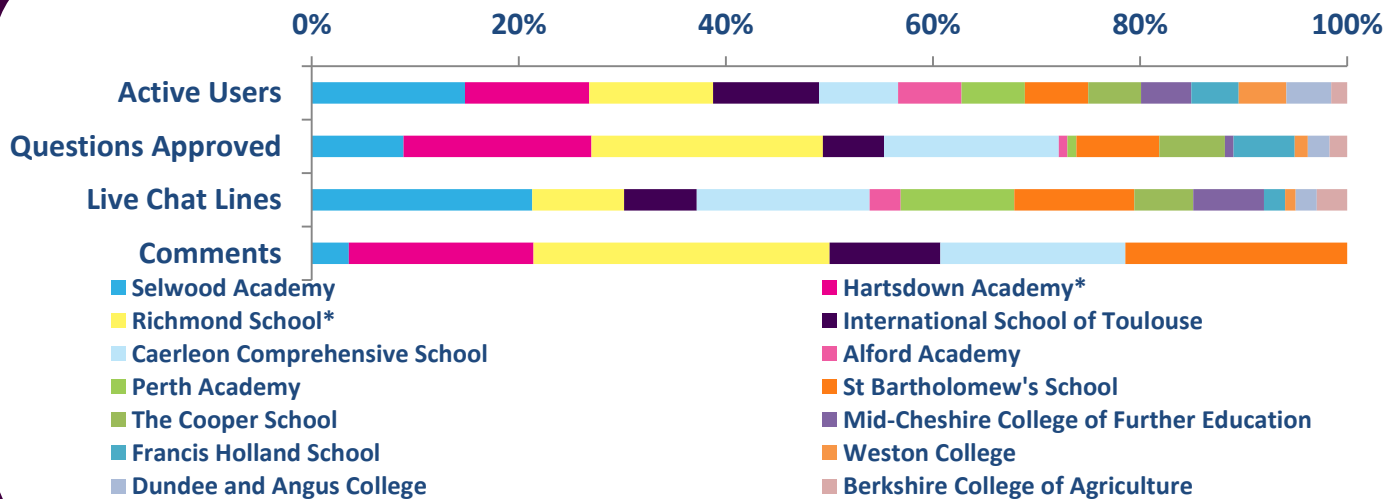


## November 2016

The Brain Zone was a themed zone funded by Wellcome. Ria is researching why some people get dementia while others don't, Rachel is a neuroscientist who studies human brain tissue to help find a treatment for Alzheimer's disease and Joe, the winner of this zone, is looking at how children's brains work and why some find school more difficult than others. Iroise studies the brain and behaviour of adults and adolescents and Adrian is researching 'brain-eating' bacteria to help combat infectious diseases.

All the scientists in this zone were active in both the live chats and ASK section with lots of interest from the students about the zone theme. There were lots of lively, on-topic discussions about the scientists' research and the brain in general, with students often commenting about how much they had learnt.

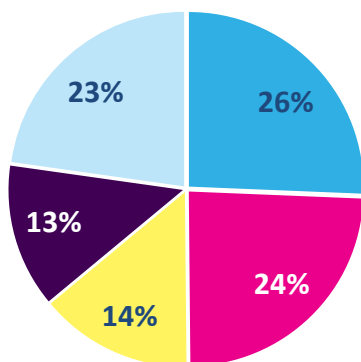
### School data at a glance



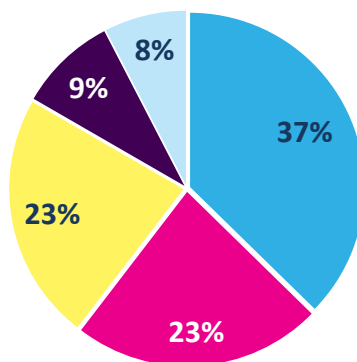
\* Widening participation schools, as defined at <http://about.imascientist.org.uk/2016/widening-participation-2016>

### Scientist activity

#### Answers



#### Lines of Live Chat



Scientist	Profile views	Position
Joe Bathelt	1,034	Winner
Iroise Dumontheil	790	2nd
Rachel Harris	763	3rd
Adrian Chu	794	4th
Ria Vaportzis	994	5th

## Key figures from the Brain Zone and the averages of the November zones

PAGE VIEWS	BRAIN ZONE	NOV '16 ZONES AVERAGE
Total zone	35,138	28,763
ASK page	1,809	2,580
CHAT page	3,674	3,035
VOTE page	1,866	2,124

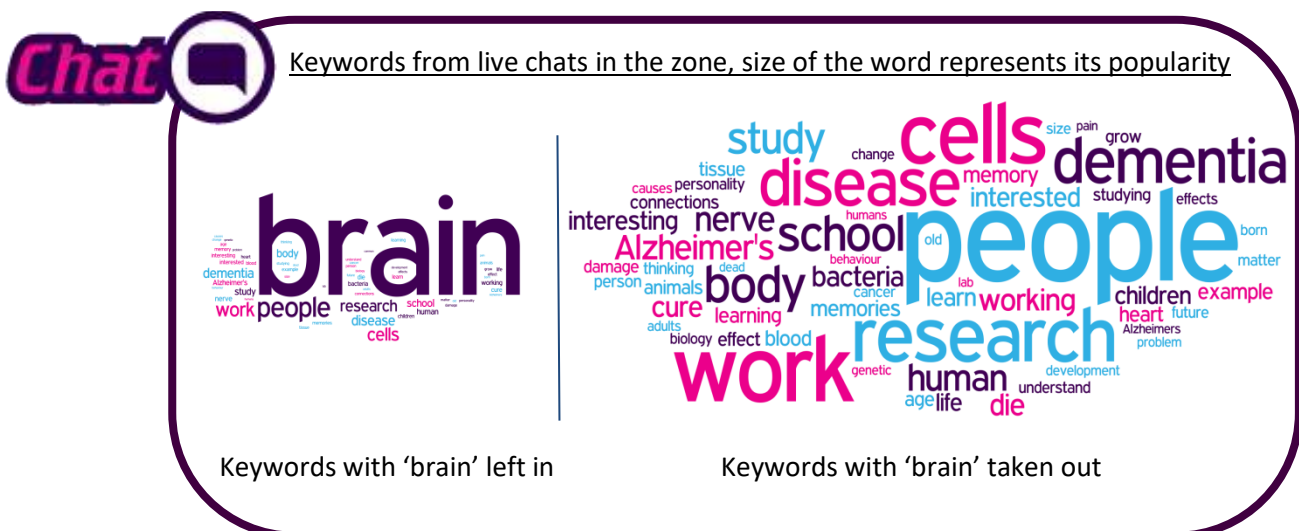
	BRAIN ZONE	NOV '16 ZONES AVERAGE	IAS 2012-16 AVERAGE
Schools	14	15	10
Students logged in	445	512	372
% of students active in ASK, CHAT or VOTE	88%	87%	85%
Questions asked	453	961	718
Questions approved	237	408	309
Answers given	347	520	553
Comments	33	72	78
Votes	397	413	295
Live chats	16	19	15
Lines of live chat	4,851	5,474	5,202
Average lines per live chat	303	400	343

### Popular topics

Many questions in this zone focussed on the theme, with general questions about the brain as well as interest in the scientists' research areas. For example, Ria and Rachel were asked lots about dementia and Alzheimer's disease, with students wanting to know why older people develop these diseases and what kind of tests scientists can do to determine if someone has dementia. Joe was asked about his work with children and Adrian about how dangerous the bacteria he works with it, and whether there is a cure.

Scientists were asked more general questions about the brain, such as the differences between the male and female brain, whether your brain shrinks as you get older and how truthful the right-sided or left-sided brain tests are. Students seemed well prepared with interesting and thoughtful questions and the scientists were very good at explaining complex terminology in ways that students could relate to.

Students also showed an interest in science jobs and career paths, asking the scientists what they thought of their work and about the discoveries they had made through their research.





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

0 2 4 6 8 10 12

dementia  
Example  
Questions  
(click for  
links)

bacteria  
children  
brain

school  
alzheimers  
dream

“What topic at school  
is best for the brain?”

“How do you  
experiment on people  
without going against  
their human rights?”

cure  
adult  
disease  
science  
human  
head

“What is different  
between a teenagers’  
brain and adults’  
brain?”

“What experiments do  
you perform on people  
to determine why  
people get dementia?”

work  
discovery  
job  
cancer  
damage

“Does a bigger brain  
make you smarter?”

“Why is it that mainly  
the older generation get  
dementia and not so  
much the younger  
generation?”

neuroscience

“What is the  
difference between  
female and male  
brains?”

“What is your biggest  
achievement in  
science?”

“Do you think your  
research could help  
schools to educate  
children in a different  
way?”

“When we are babies  
we know nothing at all,  
how do we learn what  
words mean when we  
have no background  
knowledge?”

“What are the perks  
of your jobs?”

“Will your work  
benefit others and  
how long will it take?”

“How would curing  
dementia help  
society?”

“Which scientist first  
discovered the brain  
and when?”

## Examples of good engagement

Students often asked questions about how the brain works in situations they could relate to, for example learning at school, and the scientists were good at explaining complex subjects in an accessible way.

*“Does being bilingual affect your thinking skills for school?” – Student*

*“Bilinguals have been found to be better at so-called executive function that includes the ability to switch between content and suppress distraction. So, being bilingual might give you an advantage.” – Joe, scientist*

*“Can you please explain suppress distraction in further detail?” – Student*

*“Sure, bilinguals were found to automatically activate both languages and suppress the one they are not using. So, you are mostly not answering in French when speaking English and vice versa. This also translates to other abilities. When a bilingual is doing a task like watching a news report, she/he is also better at ignoring the running headlines at the bottom.” – Joe, scientist*

If she didn't know an answer, Iroise was good at relating her research to the question, as well as directing students to other sources of information. This was appreciated by the students:

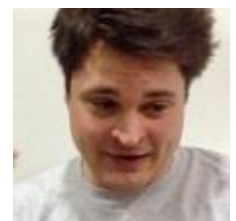
*“Does bullying affect a student's brain and how?” – Student*

*“This is not really my area but you can read about this here: <http://www.brainfacts.org/in-society/in-society/articles/2015/bullying-and-the-brain/> I've worked on a couple of studies looking at social exclusion, rather than bullying, and what the studies showed was that adolescents (it was done with female participants) showed a greater reduction in mood and a greater increase in anxiety after having been excluded (from a ball game played on a computer) and that they showed differences in brain activation compared to adults.” – Iroise, scientist*

*“Thank you this is great - I have already voted for you” – Student*

## Scientist winner: Joe Bathelt

Joe's plans for the prize money: *“Teach children about difficulties with keeping things in mind and what can be done about it. I would use the prize money to develop school lessons with demonstrations that we can take to local schools and also create a website to make this information available more widely.”* Read Joe's [thank you message](#).



## Student winner: 529brng43

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 made me think more about what I want to do in the future thanks again!!!” – Student*

*“Thank you very much for your answers everyone, the excitement in the lab here is palpable. I wish I could get my students asking such interesting questions in all my lessons” – Teacher*