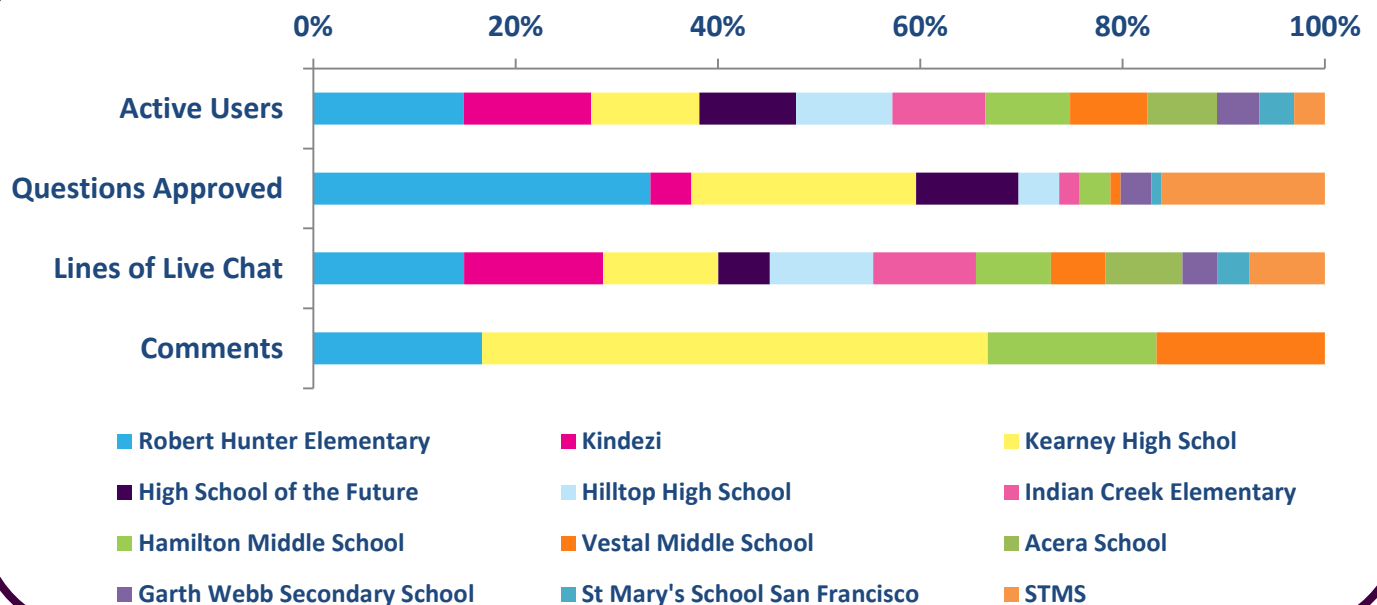


May 2015

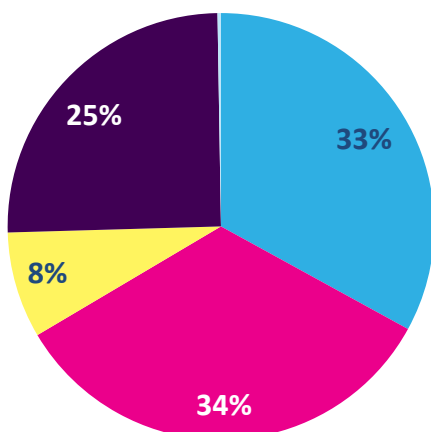
The Hydrogen Zone was a general science zone and the first ever USA event. The zone had a promising number of participating students (262) compared to the average for the UK March (383) event, spread fairly evenly across the schools taking part. Some schools enrolled multiple classes and some classes undertook multiple live chats. In some cases success in the first chat led to teachers wanting a live chat the following day to enable students to continue their interactions. The majority of questions submitted were approved and chats were well attended with nearly all live chats featuring three or more scientists and schools making 89% of booked chats. Zoe, Jeff and Lindsay were particularly well engaged, answering over 90% of questions and contributing over 90% of the live chat content.

School data at a glance

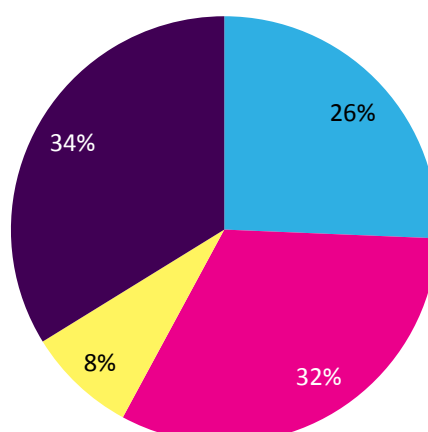


Scientists' activity

Answers



Lines of live chat



Scientist	Profile views	Position
Jeff Shi	470	Winner
K. Lindsay Hunter	482	2nd
Kenzi Clark	404	3rd
Zoe Getman-Pickering	423	4th
Avani Wildani	341	5th

Key figures from the Hydrogen Zone, and the average of the May zones

PAGE VIEWS	HYDROGEN ZONE	UK MARCH 2015 ZONES AVERAGE
Total zone	19,699	36,564
ASK page	1,542	2,481
CHAT page	2,721	4,878
VOTE page	2,175	2,422

Popular topics

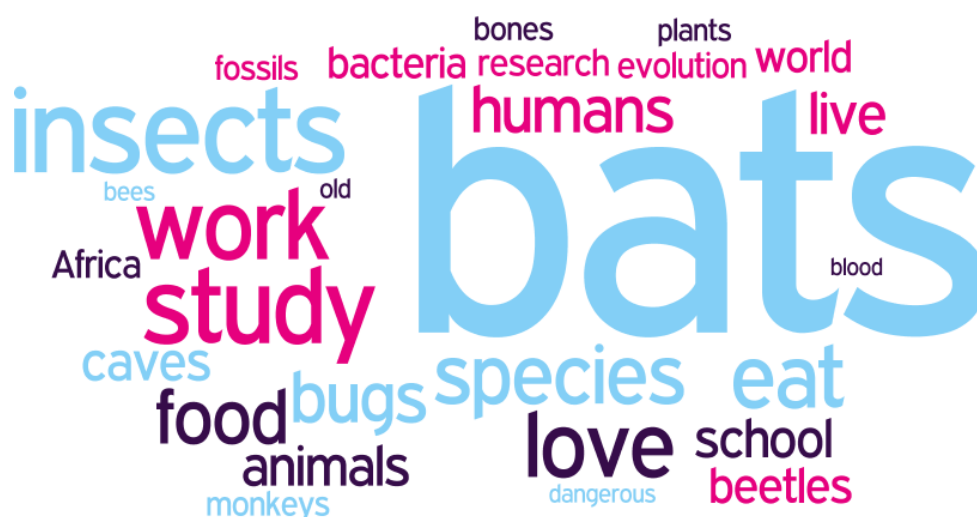
As a general science zone the questions were quite varied. Popular topics in the zone were bats, insects, caves and food – showing the students picked up on the research interests of the scientists. Lots of the students wanted to know about superheroes and batman due to Jeff's research and profile description. During chats there were also lots of questions about caves, fossils evolution and sometimes eating insects. Chats predominantly featured biology and often topics overlapped, with Lindsay, Zoe, Kenzi and Jeff co-operating to answer the students' questions.

Many students asked the scientists how they got interested in their subjects, what they liked at school and how they ended up doing the work that they do. Areas of potential controversy arose, such as animals being hurt in research, the ethics of dissection, evolution, GMOs and artificial ingredients in food, and the scientists responded excellently providing clear and well-reasoned explanations that were invariably well received.

	HYDROGEN ZONE	IAS UK AVERAGE
Students	262	338
% of students active in ASK, CHAT or VOTE	80%	83%
Questions asked	402	713
Questions approved	260	297
Answers given	385	540
Comments	45	86
Votes	396	270
Lines of live chat	3,224	4,437
Live chats	17	13
Average lines of live chat	190	335
Schools	13	8

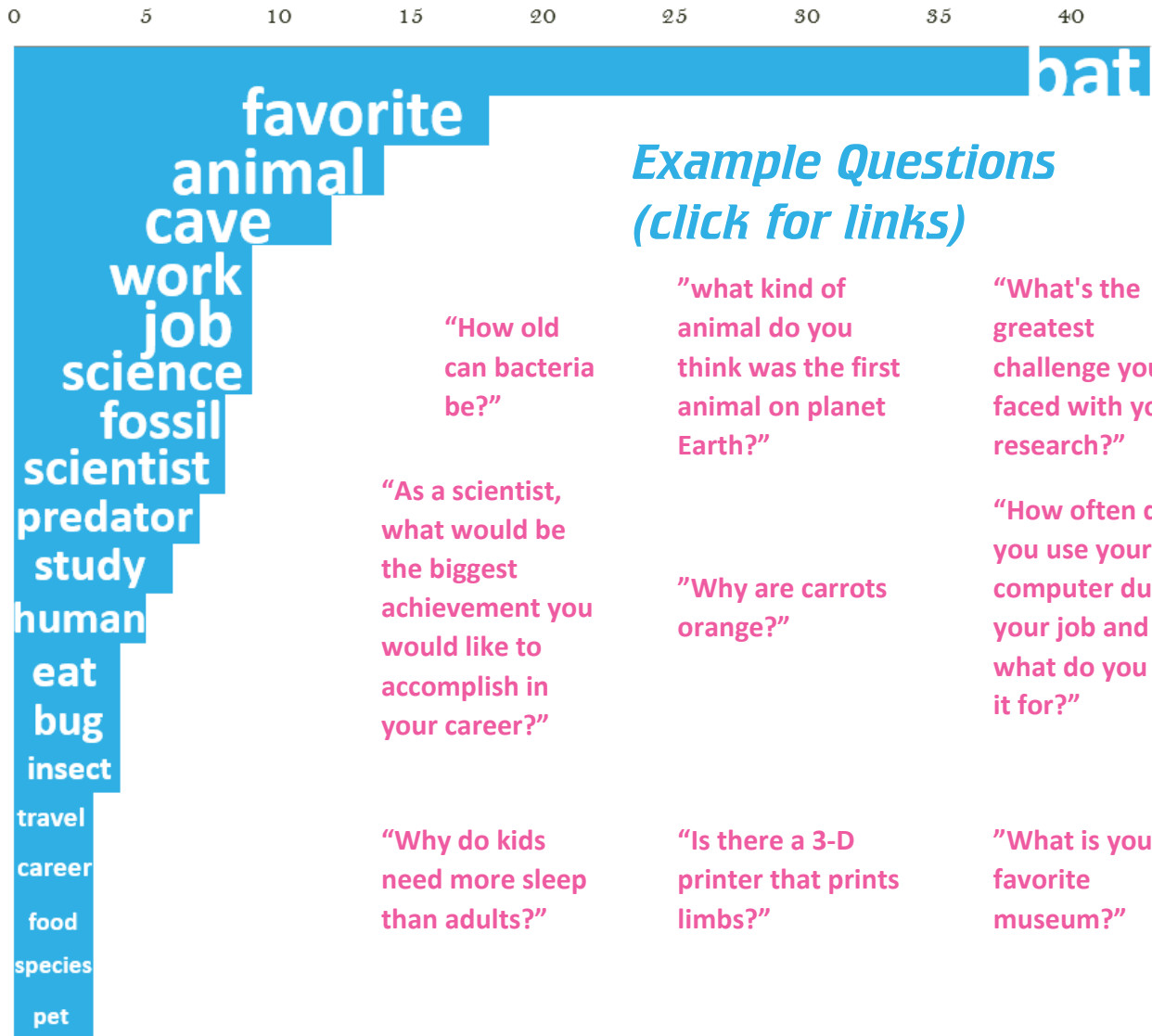


Keywords from live chats in the zone, size of the word represents its popularity





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



Example Questions (click for links)

"Is there a type of bat that fly's at day?"

"How old can bacteria be?"

"As a scientist, what would be the biggest achievement you would like to accomplish in your career?"

"Why do kids need more sleep than adults?"

"What's your favorite book about science?"

"what kind of animal do you think was the first animal on planet Earth?"

"Why are carrots orange?"

"Is there a 3-D printer that prints limbs?"

"Why do lions have manes?"

"What's the greatest challenge you've faced with your research?"

"How often do you use your computer during your job and what do you use it for?"

"What is your favorite museum?"

"Are bats completely blind?"

"How do bats communicate with each other?"

"How do our eyes work?"

"How does bacteria change food into a different food?"

"What advice do you give to students who want to become scientists?"

Examples of good engagement

Lindsay and Zoe were particularly good at engaging students in the live chats. They were often very frank about their personal lives and experiences at school and as scientists. This often won over students and developed stronger connections.

"can you believe in evolution and god at the same time?" – Student

"I dont, but many people do." – Zoe, scientist

"i know plenty of people who do just that." – Jeff, scientist

"some people see god as the designer of all of the forces and changes we see as scientists." – Zoe, scientist

"I actually converted from Roman Catholicism to Judaism during my PhD studying evolution. They explain different parts of the world and how humans think." – Lindsay, scientist

"Charles Darwin struggled with his discoveries and his religion." – Zoe, scientist

"Humans are absolutely amazing in their ability to hold two seemingly contradictory positions at the same time." – Lindsay, scientist

"@Lindsay I think a lot of people would say they don't contradict each other at all, though!" – Jeff, scientist

"Evolution and religion don't always mix, but religion and a belief in god are not always the same thing." – Zoe, scientist

Live chats were almost always very productive and students were often well prepared with questions and always focused during the chats. Many questions were about factual scientific information, often surprising the scientists, and demonstrating the curiosity of the students. There were few instances of lengthy back and forth casual conversation between the students and the scientists, though the students were often delighted and very grateful to be talking to "real" scientists.

"do insects hibernates during winter" – Student

"some insects hibernate, but the way they hibernate is pretty different than mammals or other larger animals. a lot of butterflies/moth s either hibernate or migrate to escape the cold!" – Jeff, scientist

"Is that why insects seem bigger in the beginning of summer middle of spring?" – Student

"my guess would be that a lot of those are fattening up to mate, but i'll let @Zoe confirm that!" – Jeff, scientist

"I never noticed that. In part, there are different insects out at different times, so maybe the bigger ones come out during the summer. I think Jeff has a point. Lots of good food around, and they want to look big and strong to attract a sexy mate." – Zoe, scientist

The students also asked about careers and school, and the scientists were good at giving out inspiring and practical advice that expressed the fundamental essence of scientific enquiry.

"what are some tips to become a scientist" – Student

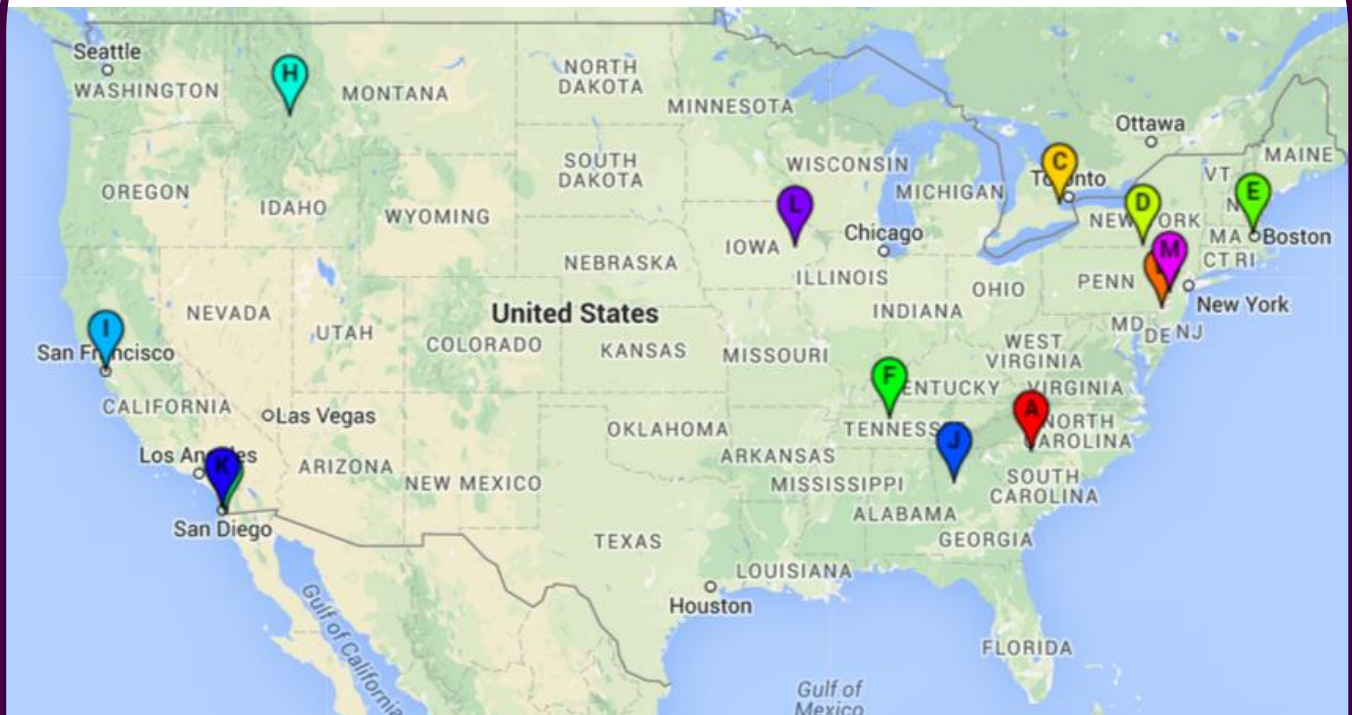
"Curiosity is key for being a scientist! Sometimes you have to spend a lot of time to solve a problem, but in the end, getting to answer your question is worth it!" – Kenzi, scientist

"You want to be a scientist? go find some experiences! there are lots of summer camps and clubs that help you learn skills for being a scientist. Get your parents to send you to those. It helps you figure out what you are interested in and what you like, plus it makes it easier to get into a good college." – Zoe, scientist

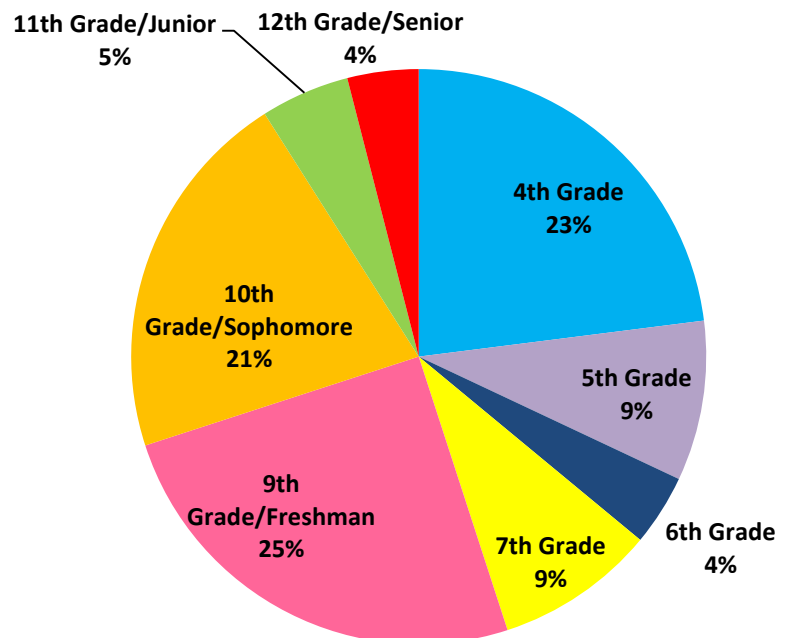
"it's hard work, but never forget to keep asking questions!" – Jeff, scientist

Schools and students

Schools and students taking part in the Hydrogen zone

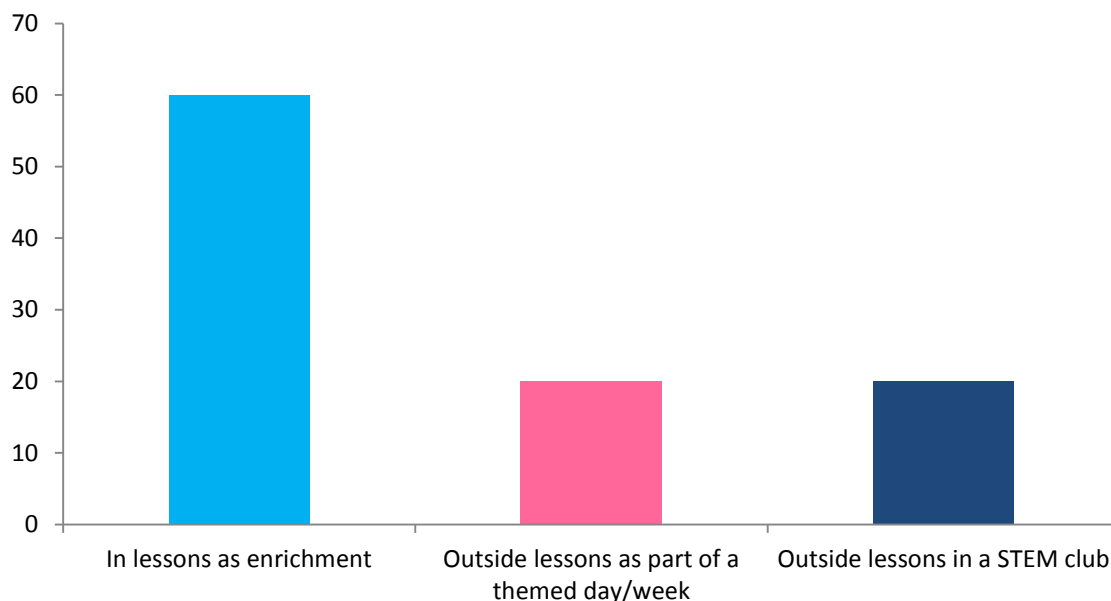


- Saluda Trail Middle School, SC
- High School of the Future, PA
- Garth Webb Secondary, ON
- Vestal middle school, NY
- Acera School, MA
- Dickson County High, TN
- Hilltop High School, CA
- Hamilton Middle School, MT
- St Mary's School, CA
- Kindezi School, GA
- Kearny High School, CA
- Indian Creek Elementary, IA
- Robert Hunter Elementary, NJ
- [Unlabeled school in California]



Data based on pre-event survey responses from 210 students

How did teachers run *I'm a Scientist USA* with their pupils?



Scientist winner: Jeff Shi

Jeff's plans for the prize money: "Since most people find it hard to imagine just how diverse bats are, I will photocopy skulls using 3D printing technology to make replicas for teaching and outreach." Read Jeff's [thank you message](#).



Student winner: Camille Smith, Kindezi School

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...

"The thing I enjoyed the most was the way you shared your answers in scientific as well as interesting ways." – **Kaiya, student**

"omg I l.o.v.e scientists" – **Brebre, student**

"I am so glad I am actually talking to real scientists! Thanks for the great experience!"
– **Maizie, student**



Kenzi Clark @clarkkenzi · May 21
@imascientistUS thanks for letting me take part in this amazing event!
So much fun!

[View conversation](#)



K. Lindsay Hunter @Paleo_Bonegirl · May 22
A huge THANKS to @imascientistUS & all the participating #schools
for allowing me to chat so many awesome #students!

"You should see and hear them standing and clapping when they realized Zoe could still answer and that Lindsay was back, too!" –
Ms Scharnau, Teacher