



Meet the Scientists...



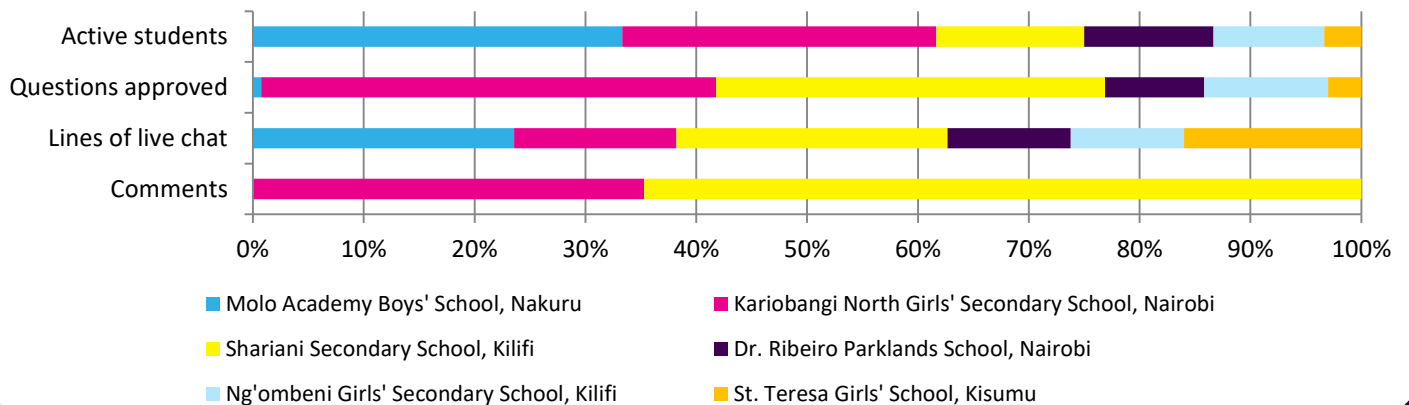
January 2017

The January 2017 event was the second time the I'm a Scientist project has been run in Kenya, and the first event to reach schools outside of Kilifi, with schools from Nairobi, Kisumu, Nakuru and Kilifi taking part in the Zone. This is the second time we have run a Health Zone in I'm a Scientist Kenya.

Cheryl, the winner of the Health Zone, is a lecturer in Biology, and researches malaria resistance, and parasites which cause malaria. Ivy works in mathematical modelling of infectious diseases, using maths to understand how diseases spread, and George works on sickle cell disease. Daniel's work looks at the ethics of health research, while Christina is a medical doctor leading a research study into a vaccine against diarrhoeal disease.

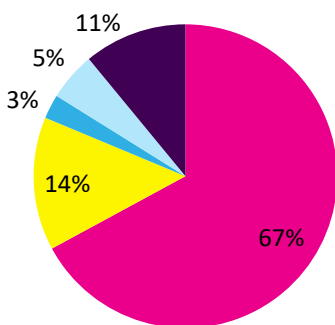
The Health Zone was the quietest of the three zones run this January, with the fewest schools taking part, and therefore questions asked. The engagement among the schools and scientists though was good. Students in the zone were engaged and focused their questions largely around health research, though also touched on subjects such as space, gravity, and physics. Cheryl provided nearly two-thirds of the scientist activity in the zone in both the ASK and CHAT sections.

School data at a glance

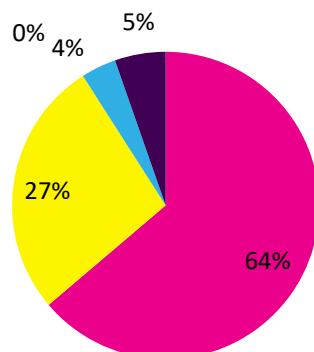


Scientist activity

Answers



Lines of live chat



| Scientist | Profile views | Position |
|------------------|---------------|----------|
| Cheryl Andisi | 186 | Winner |
| Christina Obiero | 133 | 2nd |
| Ivy Kombe | 128 | 3rd |
| Daniel Mbutia | 97 | 4th |
| George Mochamah | 106 | 5th |

Key figures from the zone and the averages of the January 2017 zones

| PAGE VIEWS | HEALTH ZONE | JAN '17 ZONES AVERAGE |
|------------------------|-------------|-----------------------|
| Total zone | 4,478 | 5,266 |
| ASK page | 543 | 1,047 |
| CHAT page ³ | 245 | 467 |
| VOTE page ⁴ | 142 | 259 |

Popular topics

Most questions asked in the zone centred on the health theme. The brain, cancer, and blood were all popular topics of discussion. Students asked questions about the body, HIV and AIDS, gender differences, personal health, as well as sex and sexuality.

There were also more general questions asked in the zone, such as “why is the sky blue?”, “how many atoms does it take for something to become visible to the naked eye?”, as well as questions about gravity, and the alternate universes.

| | HEALTH ZONE | JAN '17 ZONES AVERAGE | 2014 EVENT ¹ |
|--|-------------|-----------------------|-------------------------|
| Schools | 6 | 7 | 10 |
| Students logged in ² | 74 | 95 | 136 |
| % of students active in ASK, CHAT, or VOTE | 81% | 85% | 86% |
| Questions asked | 144 | 395 | 487 |
| Questions approved | 134 | 189 | 282 |
| Answers given | 163 | 146 | 203 |
| Comments | 19 | 16 | 89 |
| Votes | 127 | 156 | 298 |
| Live chats | 6 | 7 | 10 |
| Lines of live chat | 576 | 986 | 1,051 |
| Average lines per live chat | 96 | 131 | 105 |



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



¹ Numbers for the 2014 event are generally higher. This is possibly due to 10 schools taking part in a single zone in 2014. In 2017, 22 schools took part across 3 different zones, with fewer schools taking part in each zone.

² In the 2014 event we measured “registered students”, rather than “students logged in”. The login process for students has changed between events, the numbers look at roughly the same thing though.

³ CHAT page view count may come out lower than expected as a number of chats happened on the back up chat, which was hosted on a different server.

⁴ VOTE page view count may be lower than expected. A number of votes were sent through SMS from the teacher.



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

0 1 2 3 4 5 6 7 8 9



Example Questions (click for links)

What kind of problem are you trying to solve as a scientist?

Which animals are capable of hearing infrasounds?

Does brain size matter? And if yes/no how?

Why do children born by an over aged mother are at a high chance of getting genetic diseases?

Explain why the sky is blue

Why do many scientist don't believe in God

Is it true that boys and girls have different brains? If it is true why?

How many atoms does it take for something to become visible to the naked eye?

How does the brain work and can we fix it when it goes wrong?

When does gravity become weak enough from earth that we'd float away?

It is said that there are multiple universes that's according to Albert Einstein's theory of the universe but my question is if they are there is it possible to create like a portal to the next one?

Why do we have different face shapes

In deserts there are no plants or they are rarely seen photosynthesis hardly takes place to provide oxygen but people still survive, what adaptations do they possess to survive?

Examples of good engagement

Cheryl, especially, answered a lot of questions in the zone. The scientists always answered in an engaging and friendly tone. There was a lot of discussion about brains in the zone, such as this question about the role of brain size, and gender differences...

"Is it true that boys and girls have different brains. If it is true why?" — Janel, Student

"@Janel, Interesting question! There have been a number of questions on this forum, which I hope you can read through asking about brain size and whether it matters. The brain size in males is bigger than that in females. Whether that translates into functional differences is a different question all together. Women have been said to be able to carry out multi-tasking compared to boys, talk more, and better at grasping languages etc... when you go medical schools, or most senior positions you will find more men. i do not think that this translates to better cognitive abilities in men. Now, with equity, women are shown to do just as well as men, or even better (remember KCSE 2016 results? yaay!!) So I'd say it doesn't matter if you are me or female, work hard and your brain won't let you down" — Cheryl, Scientist

"That is nice" — Janel, Student

Students were also not afraid to say when they didn't understand an answer, and ask for a better explanation, such as this question on cancer from a live chat...

"Can we know how cancer manifest itself in a person's body?" — zwingling hazel, Student

"@zwingling hazel Cancer, of whatever kind will be caused by an abnormal rapid cell division ie mitosis. this might lead to functional problems of the organs and tissues affected. but the specific manifestations will differ between cancers." — Cheryl, Scientist

"Thank you but the answer is not understandable please we need further explanation" — zwingling hazel, Student

Cheryl goes on to better explain her answer, and the students say they understand better. When Christina joins the chat, Cheryl asks if Christina can provide a different point of view...

"@Christina Do you have something, from the medical side of things especially on the cancer question?" — Cheryl, Scientist

"@zwingling hazel Manifestation of cancer generally depends on the type of cancer and the body parts affected. There are those general signs and symptoms that a person with cancer would have e.g. weight loss, anaemia (low haemoglobin), poor appetite... For example, if someone has brain cancer they may present with headache and dizziness due to the pressure of the cancer on other brain structures, convulsions, abnormal movements of the hands and legs, abnormal gait (walking abnormally), vomiting due to increased pressure in the brain. If the cancer has grown in parts of the brain that are involved in vision then the person may have poor/blurred eyesight or become blind..." — Christina, Scientist

Scientist winner: Cheryl Andisi

Cheryl's plan for the prize money: *"I'd involve my students at Pwani university in engaging primary schools within Kilifi. Most of the public engagement with science in Kilifi has been done with secondary schools. I am interested in changing the perceptions towards science in both my students at the university and possibly with a few local primary schools."* [Read Cheryl's thank you message.](#)



Feedback

We're still collecting feedback from participants and we will be running some focus groups in April/May 2017. These are comments from initial feedback...

"The students loved the part where their asked questions and instant answers, this created a lot of curiosity and students opened up and asked questions they could not share with their teachers and colleagues." — Teacher, Molo Academy, Nakuru

"They liked the way scientists displayed their profiles ,photos and they really enjoyed reading their profiles. They loved interacting with the scientists through computers." — Teacher, Ng'ombeni Secondary, Kilifi