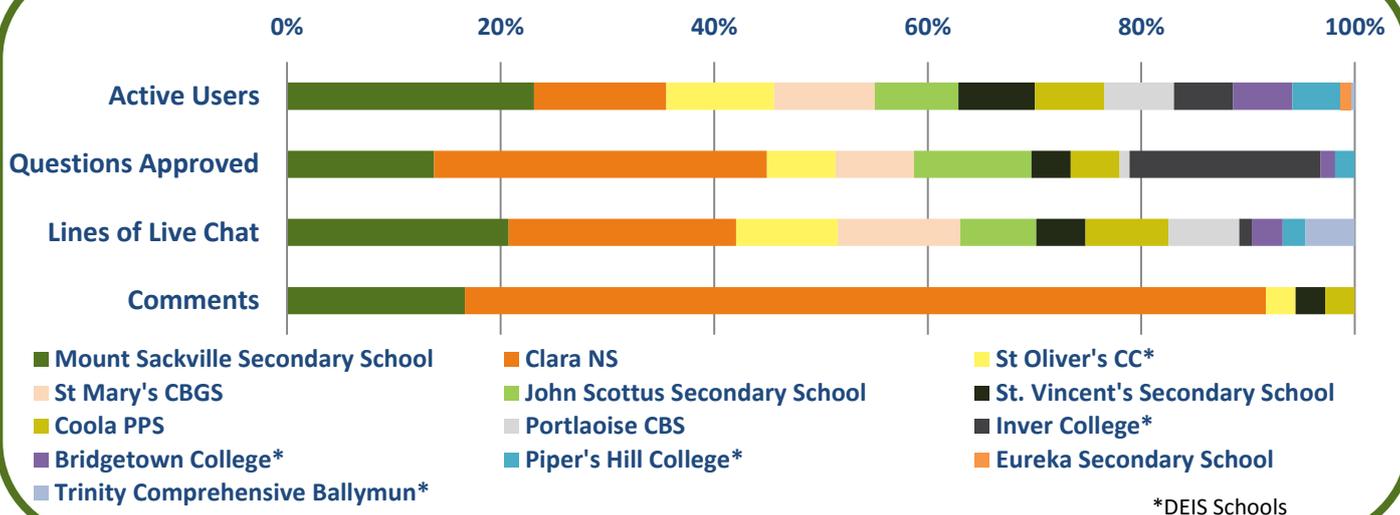




## February 2016

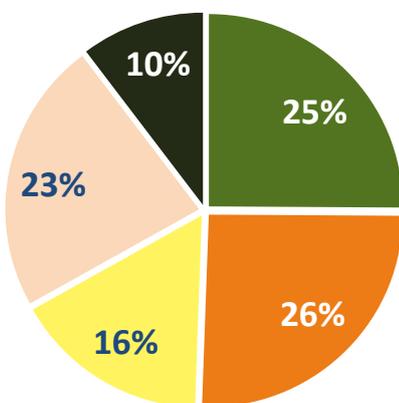
The Space Zone was a themed zone funded by the Science Foundation Ireland Discover programme. Ned is Director of the EurOcean Foundation working with satellites to study the oceans, Colin works at Airbus Defence and Space, Aisling and Laurence work for the European Space Agency and Niamh is a performer who promotes space science and engineering. The zone had many busy live chats with most of the engineers engaging well with the students, discussing science and engineering as a career and the different routes they had taken to get into their current roles. Questions in ASK were focussed on the topic of space in general, as well as specific projects the engineers had worked on. Ned and Colin, the final two engineers, accounted for over half of answers in ASK and lines of live chat between them.

### School data at a glance

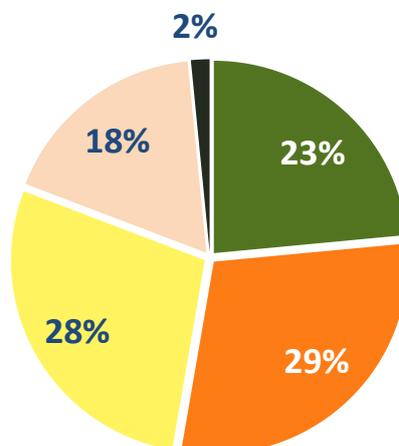


### Engineer activity

#### Answers



#### Lines of live chat



Engineer	Profile views	Position
Ned Dwyer	673	Winner
Colin Shirran	541	2nd
Aisling Shannon	390	3rd
Laurence O'Rourke	447	4th
Niamh Shaw	585	5th

## Key figures from the Energy Zone, and the average of zones in Ireland

PAGE VIEWS	SPACE ZONE	FEB '16 IAE AVERAGE
Total zone	17,146	16,741
ASK page	1,444	1,569
CHAT page	2,338	1,803
VOTE page	1,234	1,227

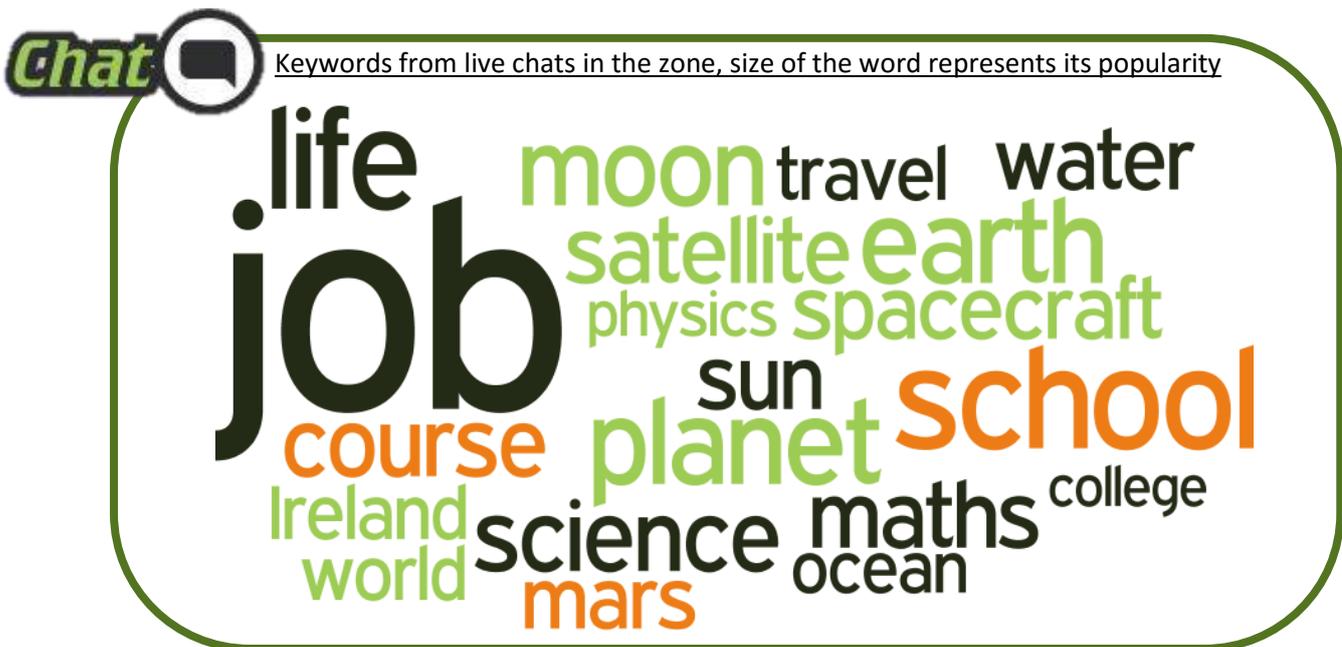
	SPACE ZONE	IAE IRELAND AVERAGE	IAE IRELAND 2014-2016 AVERAGE
Schools	13	12	10
Students logged in	352	333	284
% of students active in ASK, CHAT or VOTE	87%	84%	86%
Questions asked	373	488	494
Questions approved	218	259	240
Answers given	534	599	549
Comments	48	61	41
Votes	271	267	233
Live chats	16	14	14
Lines of live chat	4,408	3,742	3,441
Average lines per live chat	276	266	241

### Popular topics

Most of the engineers received a variety of questions related to their work, showing that the students had read their profiles. For example, Laurence was asked about his work on the Rosetta mission and Niamh about her acting. There was also a focus on what the engineers were doing to make the world better, and what they hope to achieve in the future.

A majority of the questions asked were on topics related to space, such as rockets, planets, satellites and being an astronaut. There was also a lot of interest in science and engineering as a career. Questions included whether the engineers enjoy their jobs and for advice on how to get into the field, such as what GCSEs are needed and which colleges they would recommend studying at.

There were only a few personal questions, such as asking the engineers what football team they supported and what their favourite car is. Students did ask for more information on what the engineers would do if they were to win the money from this competition.





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

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28

engineer

space

favourite

planet

work

earth

job

engineering

world  
rocket

competition

moon

people

comet

school

win

mars

water

car

satellite

### Example Questions (click for links)

“What type of rocket ship would it take to go to Mars?”

“How large is space?”

“Is the Rosetta Mission named after the Rosetta stone?”

“How much would it cost to build a working satellite?”

“What is space?”

“I have heard about the possibility of using a light sail as propulsion for space craft, how would this differ from a normal space craft?”

“When will the Philae Lander return to Earth?”

“What is the main reason spacecraft don’t function properly when in space?”

“Why can we only see some stars in the sky at night and not others?”

“How many dwarf planets are in a solar system?”

“How fast can a comet go?”

“If engineering was a gymnastic move what move would it be for you?”

“If you had the choice, would you rather go to the moon or to Mars?”

“Do you believe that Neil Armstrong was the first to land on the moon, or do you consider the title shared with Buzz Aldrin?”

“Is the sun in space? So why is space so dark?”

“How many black holes are in the universe?”

“Is there a planet we could move to if we ever ran out of resources?”

“Is it possible a spaceship can go at the speed of light?”

## Examples of good engagement

Many students showed an interest in space through carefully considered questions:

*“I heard about the possibility of using a light sail as a form of propulsion for spacecraft in the future. If you were to design a spacecraft that used a light sail, how do you think it would differ from a normal looking spacecraft?” - **Student***

*“I think you are talking about solar sails? The main difference would be that you would not need solar panels, but the sails would be huge, so they would be essentially folded up for the launch and then released once in space” – **Aisling, engineer***

There was a great atmosphere in the chats, with conversations showing a real connection between the engineers and many students:

*“A few years ago we found a Russian naval ship had spilled loads of oil off the south coast of Ireland and using satellites that can see through clouds, we were able to see the oil and we sent the Irish Air Corps out in a plane to check out what was going on” – **Ned, engineer***

*“So Ned, because you clean the sea would you say you’re a world saver as well as an engineer?” – **Student***

*“Ha ha - not really a world saver. Just trying to do a bit to make sure our environment is not totally screwed up!” - **Ned!***

## Engineer winner: Ned Dwyer

Ned’s plans for the prize money: *“Working with the charity Friends of Londiani, I will use the money to give talks at secondary schools in Ireland with whom the charity already works about how satellite engineering is a great help to charities working in the developing world. I will also participate in an online workshop for schools both in Ireland and Kenya to speak about how engineering is helping to make the charity work better.”* Read Ned’s [thank you message](#).



## Student winner: 884spce36

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 engineers but here are a few of the comments made during the event...

*“It was really really good. It was unique in so far as it was possible to reach so many students - most events I’ve been involved with seem to target < 50 students.” – **Engineer***

*“@colin@ned thank you so much for the chat today the students are having a ball” – **Teacher***

*“Thank you amazing engineers! We are learning so much!” - **Student***