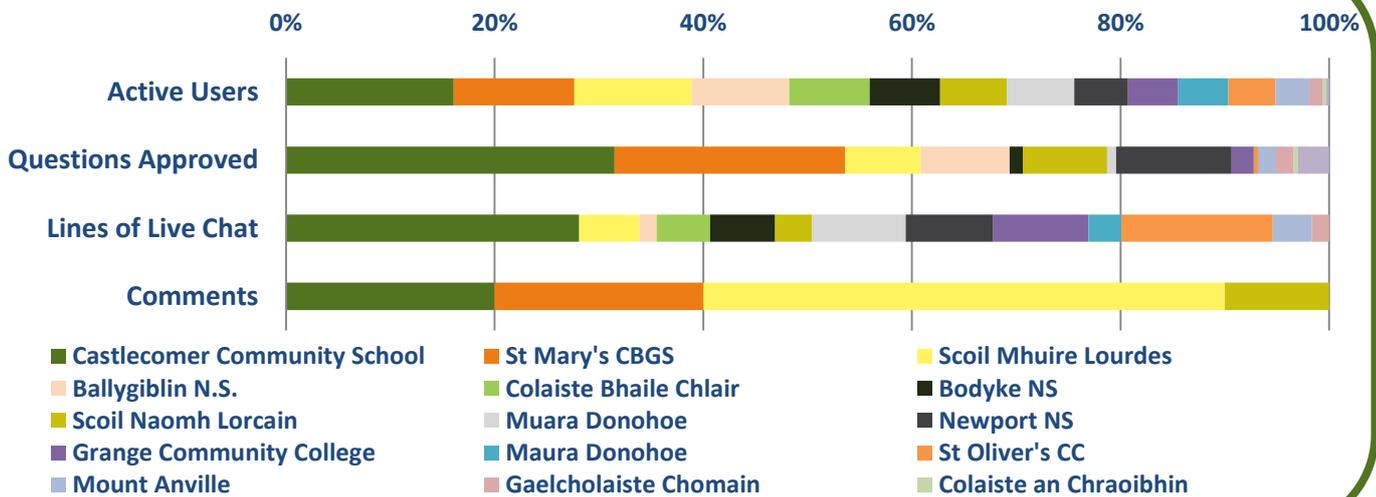




## November 2015

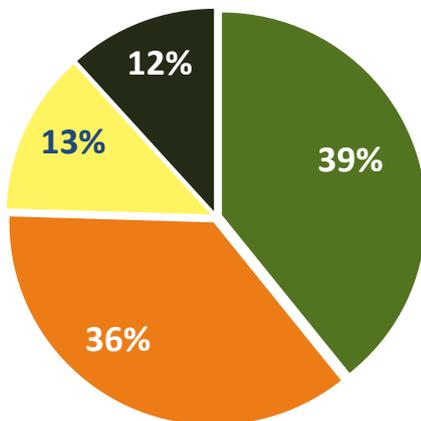
The Metre Zone was a general engineering zone funded by the Science Foundation Discover programme. It featured engineers from a mix of different backgrounds, such as IT systems, biomedical engineering and civil engineering. Questions in ASK and discussion in live chat was focused on the personal experiences of the engineers and questions about their current roles and projects, such as medical devices and sanitation. The zone was the largest so far in I'm an Engineer Ireland, with students from 16 schools submitting nearly 650 questions. The final two engineers, Martin and Nicola, contributed 75% of the total answers and live chat content. Martin was particularly good in live chats, attending 11 of the 13 sessions.

### School data at a glance

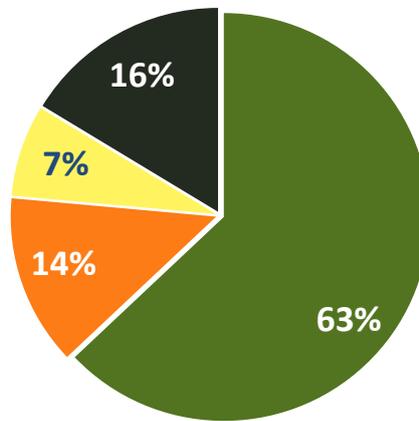


### Engineer activity

#### Answers



#### Lines of live chat



Engineer	Profile views	Position
Martin O'Halloran	478	Winner
Nicola Greene	510	2nd
Alex Jaeger	592	3rd
Antonio Vargas-Gonzalez	457	4th
Christina Lynch	343	5th

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

PAGE VIEWS	METRE ZONE	NOV '15 IAE AVERAGE
Total zone	12,967	15,033
ASK page	1,587	1,308
CHAT page	1,720	2,167
VOTE page	956	1,184

	METRE ZONE	IAE IRELAND AVERAGE	IAS IRELAND AVERAGE
Schools	16	10	11
Students logged in	350	286	355
% of students active in ASK, CHAT or VOTE	89%	86%	84
Questions asked	643	563	649
Questions approved	235	231	250
Answers given	365	523	533
Comments	11	31	63
Votes	241	216	280
Live chats	13	13	15
Lines of live chat	2,465	3,290	3,926
Average lines per live chat	190	229	265

### Popular topics

There was a lot of interest in the current roles and careers of each engineer. In particular, students were interested in how Cristina got a job at Microsoft. There was much interest in Nicola's work on toilets and sanitation, as well as her travels and experiences of working in different developing countries. Students were very interested in the design and experimentation involved with the medical device work of Alex and Martin, including how they get their ideas and the processes involved in their jobs.

There were many questions about the personal likes of the engineers, such as their food preferences, which demonstrated the students wished to understand the personalities of the engineers.

Elsewhere, there were a lot of similar questions asked about working as an engineer, design, problem solving and the challenges involved, how the engineers became interested in engineering or the work they currently do, what they like about the job and what they see as the importance of their work to the world at large.

There were fewer general questions about engineering or science subjects, though some eclectic submissions were made about pandas, black holes and Eratosthenes' theory of the round earth.



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

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34

job

favourite

medical device

engineer

design

toilet

people

problem

invention

engineering

solve

study

school

GCSE

country

travel

unicef

career

sport

friend

### Example Questions (click for links)

“In your opinion what is the best invention ever?”

“How will your research affect people? If so how many and in what way?”

“Would you have believed Eratosthenes' theory that the Earth was round, in that time period?”

“Have you ever designed a tube to look inside someone?”

“Who is your favourite scientist/engineer?”

“What does engineering mean to you?”

“What skills are required to do the job that you are doing?”

“Have you ever hit a road block with your ideas?”

“Where do you get your ideas for new medical devices?”

“What got you interested in Sanitation Engineering?”

“Have you made new friends at the type of job you are in?”

“What has been the highlight of your work with UNICEF?”

“What is the most challenging engineering project you have been involved in in the past year?”

“Does poo in anyway pollute or harm any life in the ocean?”

“Did you find it difficult to get a job after graduating?”

“Why is there a poorer toilet system in Kenya?”

“Where do you design the medical devices, in a lab or in an office?”

“If you are rarely in the office, where do you design the toilets?”

## Examples of good engagement

There was generally a very good atmosphere in the live chats and the engineers were able to clearly explain why their work mattered:

*“How will your work affect people? If so how many and in what way??” – Student*

*“This is a great question. In my work, our goal is:*

*1. Create new devices to improve medical treatment*

*2. Create new companies based on these devices to provide jobs and taxes to the Irish economy.*

*One device we built is for imaging the kidneys of babies. The current imaging method used in the hospitals is very expensive and very painful to the babies. We’re replacing that old system (which uses dangerous x-rays) with a really low cost and totally pain free method to image the kidneys.”– Martin, engineer*

*“I hope that my work does affect people, the aims I have are to*

*(i) Improve health and productivity of Kenyans through provision of good sanitation (it is a sad reality that diseases as basic as diarrhoea can still lead to death here or days lost from school/work)*

*(ii) Improve the profits of business owners so that they are more encouraged to serve people on a lower income and make products/services available to them” – Nicola, engineer*

## Engineer winner: Martin O’Halloran

Martin’s plans for the prize money: *“I will use the funds to purchase a 3D printer for a large local secondary school. They have students who enter the F1 in schools Technology Challenge. They’ve have been very successful in this competition having teams coming 2nd in the senior and 1st in the junior categories of the Nationals. They also have DCG in the school where the students use Solidworks and I want to have students print out their designs on a 3D printer. Overall they have many uses for a 3D printer and it would help enormously in promoting Engineering in the school”.* Read [Martin’s thank you message](#).



## Student winner: saoirse99x

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...



**Bodyke N.S.**  
@bodykens

Thanks to @IAEGMOOH & @NicNakNoe for our live chat session. It's not easy answering q&a from a whole school at once!



**Nicola Greene**  
@NicNakNoe

Enjoying @IAEGMOOH teaching Irish students about engineering. Tough questions though: 'what's your life goal' Deary me!