

## March 2021

The Kilogram Zone ([kilogram21.imanengineer.ie](https://kilogram21.imanengineer.ie)) ran from 1 to 26 March 2021 and was funded by **Science Foundation Ireland (SFI)**.

The Zone featured 30 engineers working across a broad range of fields.

### Key activity figures

|                             | Kilogram Zone |
|-----------------------------|---------------|
| Schools                     | 9             |
| Students logged in          | 238           |
| Students active             | 84%           |
| Engineers                   | 30            |
| Questions asked             | 177           |
| Questions approved          | 108           |
| Answers given               | 321           |
| Engineer comments           | 16            |
| Student comments            | 16            |
| Live chats                  | 20            |
| Lines of live chat          | 3,812         |
| Average lines per live chat | 97            |
| Votes cast                  | 90            |

### Engineers

30 engineers created profiles. They included:

- **Helena Mylise Sorensen**, PhD student at Dublin City University
- **Alan Diaz**, PhD student at CONNECT Centre
- **Jun Lin**, research scientist at University College Cork

### Students

238 students from 9 schools across Ireland logged into the Zone.

77% of active students were from target schools: 73% from underserved schools and 13% from widening participation schools.

### Live chats

20 live chats took place during the activity: 14 were school classes booked by teachers and 6 were additional chats, open to all the students.

On average, 5 engineers attended each live chat.

### Impact of the COVID-19 pandemic

The number of students who logged in was a fifth of the number that logged into the **Red Zone**; a 4 week Zone which ran as part of *I'm a Scientist, Get me out of here* in November 2020.

The higher number of COVID-19 cases in March 2021 increased uncertainty and pressure in schools. In response to a survey of teachers who did not take part, teachers reported restrictions limiting access to IT equipment, as well as not enough time to dedicate to the activity due to the need to catch up on core curriculum work.

## School activity

Students from 9 schools across Ireland participated in the Zone. In addition to live chats booked by teachers, there were Thursday evening chats for the students and their families.

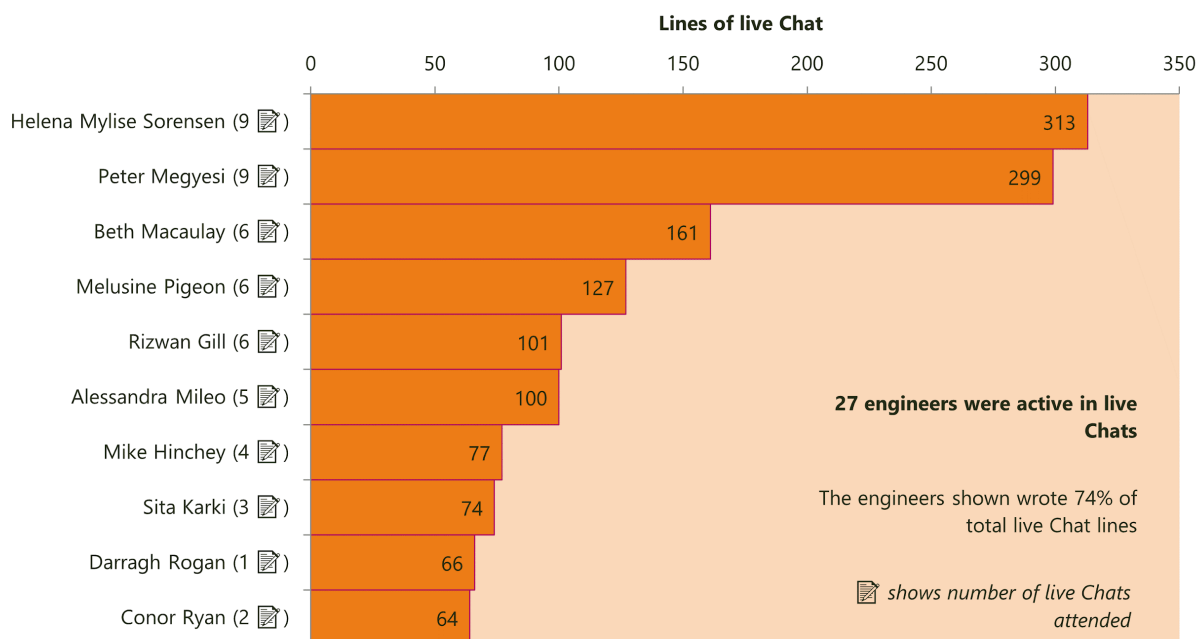
| School                                      | Active users | Chats attended | Chat lines (total) | Chat lines (per user) | Questions approved |
|---|--------------|----------------|--------------------|-----------------------|--------------------|
| St Colmans Clara National School, Kilkenny  | 47           | 2              | 382                | 8                     | 68                 |
| Kingswood Community College, Dublin (U)     | 37           | 1              | 95                 | 3                     | 9                  |
| St Pius X Girls National School, Dublin (U) | 35           | 2              | 606                | 17                    | 25                 |
| Leixlip Community School, Kildare (U)       | 19           | 1              | 116                | 6                     | 1                  |
| Cabra Community College, Dublin (WP/U)      | 18           | 3              | 171                | 10                    | 3                  |
| St. Brigid's Secondary School, Kerry (U)    | 18           | 1              | 79                 | 4                     | 1                  |
| St Molaga's School NS, Dublin (U)           | 15           | 1              | 239                | 16                    | 1                  |
| Bridgetown College, Wexford (WP)            | 8            | 1              | 44                 | 6                     | 0                  |
| MASTERSONS N S, Leitrim (U)                 | 4            | 2              | 210                | 53                    | 0                  |

We want to increase the participation of under-represented groups. Find out what we mean by under-served (U) and widening participation (WP) schools, and how you can support us in working with more of these: [imanengineer.ie/under-served-and-wp](http://imanengineer.ie/under-served-and-wp)

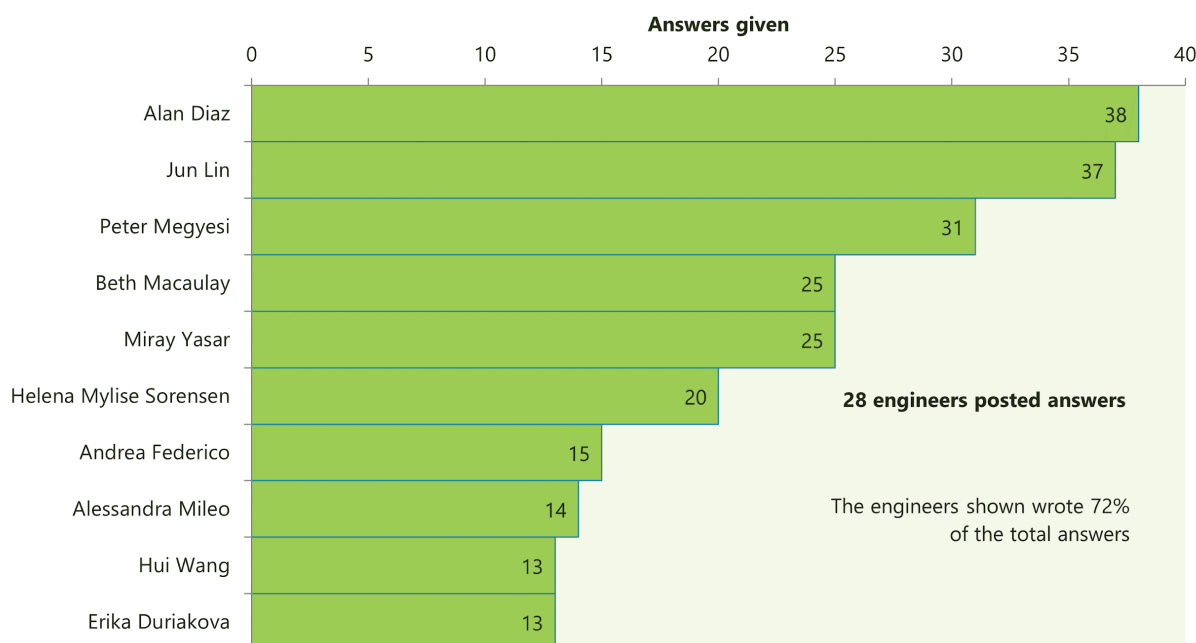
# Engineer activity

30 engineers interacted with students, writing 1,874 lines of live chat, and providing 321 answers to 108 posted questions. See all the engineers at [kilogram21.imanengineer.ie/engineers](http://kilogram21.imanengineer.ie/engineers)

## 10 most active engineers in live Chats



## 10 most active engineers in posting answers



[illegible]

| Topic                  | Percentage |
|------------------------|------------|
| STEM topics            | 14%        |
| Working scientifically | 13%        |
| Careers and Education  | 63%        |
| Personal               | 9%         |
| Event/other            | 1%         |

What kinds of books do you enjoy reading

## Good engagement

One student opened up about her concern of trying to get into a male-dominated industry.

**Student:** would you have any advice to girls that want to go into engineering or any part of STEM? It seems like a very intimidating sector to go into

**Melusine (engineer):** Dare to go. There is actually nothing scary when you are there :)

**Begum (engineer):** there is absolutely no need to worry. There are plenty of other women out there! GO FOR IT! :)

**Helena Mylise (engineer):** Believe in yourself! The boys/men are not any better than you and you have just as much right to be there as everyone else :D

**Peter (engineer):** Look for like minded people, maybe girls maybe boys but it's always easier if you do together with others + see that it can be done

**Jun (engineer):** girls are no different to boys in engineering or science. There are a lot of female engineers and scientists around me :)

Students were interested in science research in Ireland.

**Student:** Do you see a positive outlook for science in Ireland? If so/not, why?

**Melusine (engineer):** I am very biased for this question because I love science so for me it has a positive outlook anywhere. And I hope to promote it nicely :)

**Jun (engineer):** I work in a research centre (Tyndall/UCC) and I think there is definitely a positive outlook there in Ireland for science. We have a diversity of groups working in different areas which are getting funded by agencies like for example, science foundation Ireland.

**Begum (engineer):** There are some good companies and researchers in Ireland, and plenty of funding for computer science. It is also very attractive for non-nationals as it is an English speaking country. I believe there is plenty of opportunities in Ireland for CS.

This student found common ground with an engineer through the joy of food.

**Student:** what are your favourite things to eat when you are working very hard

**Darragh (engineer):** definately junk food - pizza, red bull, polo mints, sugar, very bad habit!

**Student:** same with me we have a lot in common im gonna vote for youuuu;))

**Darragh:** thank you so much! Eat your vegetables!

**Student:** I do, I really like carrots

**Darragh:** nice one!

And this student found a connection through books.

**Student:** [...] the thing that really got me into history was watching Horrible Histories

**Beth (engineer):** Oh i loved horrible histories too! we used to have the books in school and we would read them all the time. have you read the book "under the hawthorne tree"?

**Student:** No but I read the sequel to it in school Wildflower Girl which is one of my favourites

**Beth:** thats actually funny - i also read wildflower girl before i read under the hawthorne tree haha. under the hawthorne tree is still one of my favourite books - when I went to study in Germany for 6 months, i brought the book with me to remind me of home

**Student:** Which one do you like better?

**Beth:** hmm I think i like under the hawthorne tree better a bit. It can be pretty gruesome at times though, it goes into such detail about what life was like during the famine! there is also a third book called "fields of home" which is mostly about Michael. I haven't read that one yet though!

**Student:** I actually read Fields of Home first but gave it up within the first 50 pages because I had no idea what was happening!

**Beth:** haha i think you need the backstory of "under the hawthorne tree" to understand that one. what other books do you like?

**Student:** My favourite book is" Everything that could go wrong" by Stewart Foster who I actually texted online and he replied!

**Beth:** oh thats really cool of him! i must look that book up



# Engineers of the Week

Students voted each week for their favourite engineer to be named Engineer of the Week.

The first and second Engineers of the Week were:

- **Beth Macaulay**, Research Master's student at Dublin City University
- **Peter Megyesi**, Software Engineer at The Insight Centre for Data Analytics



The third Engineer of the Week was also crowned Zone winner, with the most votes at the end of the Zone:

- **Mike Hinchey**, Head of Department of the Department of Computer Science & Information Systems at University of Limerick

As Zone winner, they receive €500 to spend on further public outreach projects.



"I'm really delighted – and extremely surprised – to be chosen as the winner.

I hope *I'm an Engineer* has convinced some [students] that a career in engineering could be right for [them]. Even if it didn't, hopefully it gave [...] a better awareness and appreciation of engineering and how it's used in so many areas: in everything from entertainment and games, to medical devices and healthcare, through to robotics and space exploration.

Thanks to the moderators for giving some short breaks – [the] questions came fast and furious. It was a very well-organised event."

You can read their full statement at

[kilogram21.imanengineer.ie/2021/03/30/a-thank-you-from-your-winner](http://kilogram21.imanengineer.ie/2021/03/30/a-thank-you-from-your-winner)

## Feedback

A great experience for children in that it's a super platform for them to ask questions to engineers which are then answered within a short time frame. Also every child's question is relevant, there is no judgement in relation to simplicity/complexity of the question asked.

**Teacher**

thanks so much! after this chat i might think of being [an engineer] myself!

**Student**

Thank you so so much for your time, this was brilliant!

**Teacher**

Shame it's coming to an end! It's been really good fun :) a lot of these students are buzzing with great questions, it's been great.

**Beth** (Engineer)

Thank you so so much for your time, this was brilliant!

**Student**

I would really like to thank all of the engineers for their fantastic responses [...]. I think that my students can agree with me in saying that we have all learned so much.

**Teacher**