Intel Ireland Balloon Rocket Launch

What is this?

To celebrate Engineer's Week 2019, Intel Ireland approached 16 schools in our locality with the aim of engaging all 850 third class students in a suitably levelled science and engineering lesson. Intel Ireland employees volunteered to deliver a presentation to each class, explaining what engineering is and highlighting the important work of engineers in society generally, as well as an overview of who we are at Intel Ireland and the work we do. The Intel Ireland volunteer then led the class in a practical demonstration; 'The balloon rocket launch challenge', a simple experiment which uses a straw, balloon and string to demonstrate Newton's third law of motion, and provide a basic explanation for how engineers can practically apply scientific principles to launch real rockets. The practical demonstration had an emphasis on teamwork, the scientific method, fair testing and trial and error. The Intel volunteer then answered any questions the students and teachers had.

Who was involved?

31 Intel volunteers engaged with 850 third class students and their teachers in 16 local schools.

How was the relationship established?

For this engagement, Intel contacted each school, initially via email and subsequently by telephone, to ask if they would be interested in participating in this activity to celebrate Engineer's Week, with Intel providing the volunteers and materials for the challenge. Some of the schools already had a relationship with Intel having engaged with us in other STEM outreach and community projects, for others this was the first engagement.

How can this exemplar be used to inform practice?

With very inexpensive materials thus creating minimal cost, the Intel volunteers were able to demonstrate a scientific principle and some of the fundamentals of experimentation to 8 - 10 year olds in a very accessible, fun and interesting way. The Intel volunteers were also able to interact with the students, answering any technical questions they might have.

What was done?

Intel Ireland reached out to 16 local primary schools with the aim of engaging third class students in an appropriately levelled science and engineering lesson, using inexpensive and widely available materials to demonstrate a scientific principle and the fundamentals of experimentation in an accessible and interesting way.

Why was it done?

The purpose of the engagement was to celebrate Engineer's Week (an annual, National initiative), to engage with local school children giving them an idea of what

engineers are and what they do, as well as providing an insight into what we do at Intel. Additionally, we wanted to take the opportunity to show how the fundamentals of science can be demonstrated in a fun, engaging and inexpensive way.

What was the impact?

Feedback from the participating teachers has been overwhelmingly positive, with teachers saying that they felt the participating students benefitted from and enjoyed the interaction. They felt that having a STEM professional present to answer the children's questions was really helpful and we also received feedback suggesting some teachers would now be more inclined to do STEM activities with the children, having seen how interested they were. Feedback from the Intel volunteers was also very positive, with volunteers stating that they had really enjoyed the interaction, and that they felt it had been beneficial to the participating students.