OPERATIONAL RESEARCH IN EDUCATION

IMPACT REPORT 2025

OR IN EDUCATION

Inspiring the next generation of problem-solvers through OR

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2025 marks our strongest year of growth, reach and engagement across the OR in Education (ORiE) programme since COVID. Our aim remains for every student to know what OR is. Our mission is to raise awareness of OR and its career opportunities among young people and educators, and to strengthen the UK's future pipeline of problem-solvers.

Through workshops, careers fairs, science festivals and teacher engagement, our volunteers have helped students understand how OR underpins decision-making in a wide range of sectors like healthcare, logistics, sustainability, finance, AI and more. This year we reached an estimated **3220 students** and **157 teachers** across **35 events**, exceeding our annual KPI of 30 events and marking a **34% increase** from last year's 26 events.

We continue to expand our geographic footprint, increase volunteer engagement and strengthen partnerships – particularly with the Government Operational Research Service (GORS) and Mathematics in Education and Industry (MEI) – to ensure young people across the UK have opportunities to discover the world of OR. Demand for our outreach continues to grow, reflecting increased enthusiasm among educators and students for real-world, applied-maths learning and careers linked to OR, analytics and data science.

The ORiE Taskforce plays a central role in guiding the programme's direction and delivery. Comprising educators and practitioners, the Taskforce supports strategic planning, volunteer engagement and the development of workshops and event content. It advises on school, university and industry partnerships and helps expand the reach of our events.

We remain incredibly grateful to our volunteers, ORiE Taskforce members and partners for their time, energy and dedication.

3220
students

157
teachers

35
events

34% increase

from last year's 26 events

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OUR REACH AND IMPACT IN 2025

Key Highlights

157

teachers
engaged through conferences and targeted activities

3220

students
reached across the UK

35

events
delivered

39

active volunteers
including 5 repeat volunteers

428

new ORS student membership sign ups

Strong digital engagement

941

average impressions per LinkedIn post

19

workshops at 10 events
continued growth in workshop delivery

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UNIVERSITY ENGAGEMENT

UNIVERSITIES VISITED INCLUDED:

- University of Birmingham
- University of Leeds
- Nottingham Trent University
- University of Bath
- University of Southampton
- Oxford University
- Cranfield University
- Durham University
- Loughborough University
- De Monfort University
- University of Cambridge
- University of East Anglia
- University of Plymouth

We attended 16 university careers fairs across the UK, engaging nearly 1900 university students. Many had never encountered OR before and were surprised by the breadth of industries and roles it influences. University fairs are also a key opportunity to collaborate with other organisations, like GORS. Many GORS volunteers supported these events, and we hosted a joint stand at the University of Cambridge careers fair. These fairs allow OR professionals to speak directly with students about real projects and career pathways.

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SCHOOL ENGAGEMENT

Across primary and secondary schools, we delivered **19 interactive workshops** and participated in **6 careers or science fairs**.

A key highlight was our **Operational Research STEM Day** held for the second year at the National Memorial Arboretum with the support of the Advanced Mathematics Support Programme (AMSP). This year, ninety-seven Year 9 students from seven different schools attended. Schools from areas with historically low participation in post-GCSE mathematics were prioritised, supported by ORS funding to enable more state-funded schools to take part. Students took part in two hands-on ORiE workshops (our Paper Cups and Swedebuild workshops) delivered by ORS staff, ORiE Taskforce Chair, Matthew, and an ORiE volunteer. Students also engaged in a Careers in Mathematics session delivered by the AMSP and a guided tour of the Arboretum exploring OR's historical and wartime origins.

ORiE Taskforce member James, also represented ORiE at the **Greenwich Maths Time** event at the University of Greenwich. James delivered our Swedebuild workshop twice to over 80 students and engaged teachers in discussions about introducing OR and problem-solving in the classroom. It was great to be back at the event again this year, continuing to inspire students and building our relationship with the organisers.

We also returned to the **DiscoverChemEngLive** event hosted by IChemE for the second year. Approximately 400 students attended the event and visited the ORiE stand, taking part in interactive activities like our puzzle cubes and paper cups challenge. Our presence highlighted OR's cross-disciplinary relevance and introduced students to OR-related pathways.

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Scan here to access our free teachers resources

TEACHER ENGAGEMENT

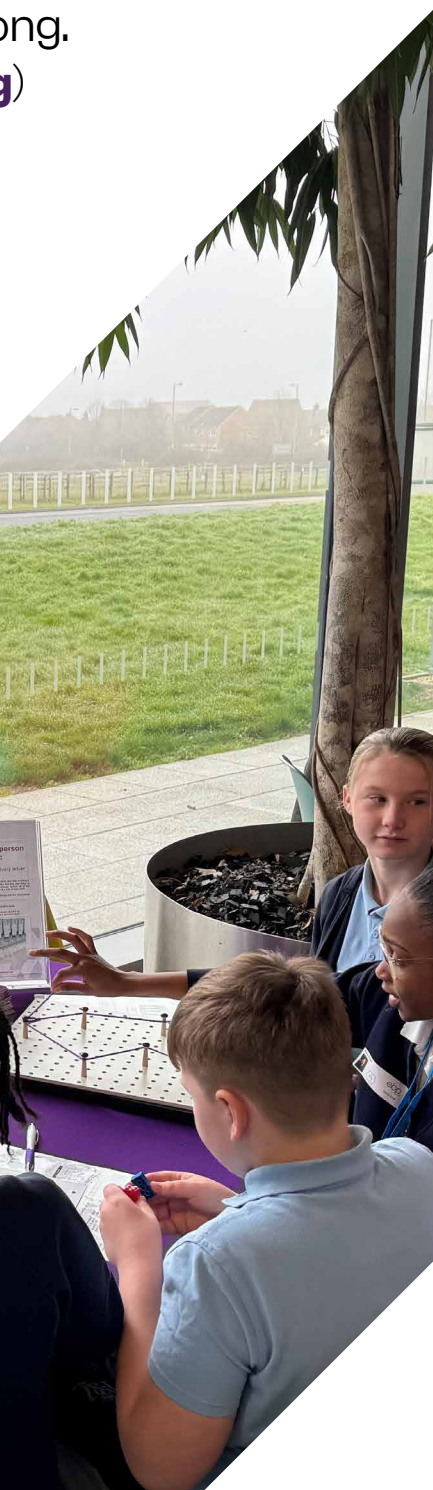
A priority for the ORiE Taskforce this year was to strengthen outreach to teachers to amplify long-term student impact. As part of this effort, we attended two teacher conferences, the **MEI Conference** and the **Joint Conference of Mathematics Subject Associations**, to promote our free teaching resources and encourage schools to request visits from ORiE volunteers. Supporting teachers directly helps multiply our reach.

Our **ORiE workshops** continue to be available for free via the TES website (**www.tes.com/teaching-resources/shop/TheORSociety**) and can now also be downloaded directly from our website (**www.theorsociety.com/TeachersResources**). These resources introduce OR techniques such as process improvement and optimisation through hands-on, interactive activities. Each workshop includes, slides, speaker notes, worksheets and answer sheets, offering real examples of maths applied to real-world problems.

This year, we revamped our Paper Cups Workshop to include a competitive element, allowing groups of students to optimise their origami paper cup production process and measure percentage improvements.

We also launched a new teaching resource: The Travelling Swiftie Problem video, created by ORS member Matthew Howells, which explains the Travelling Salesperson Problem through the lens of a Taylor Swift song. (**https://youtu.be/6qrr64Ba9ug**)

“Volunteers were punctual organised, enthusiastic and well equipped. They were excellent at speaking about where maths could take our pupils – really inspired them.”



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LOOKING AHEAD

Our priorities for 2026 include:

- Expanding Teacher Engagement: developing additional workshops and resources, and increasing our presence at teacher conferences and training courses.
- Increasing Geographic Reach: particularly in Scotland, Wales and under-served regions of England – building on efforts started this year.
- Enhancing KPI tracking: continuing to improve data collection for long-term insight into programme impact and reach.

"I love the impact the Operational Research Society is creating, and I am happy to be a volunteer for more outreach that can reach awareness about the Society, sharing resources and opportunities available in operational research"

"It was a great learning experience to interact with students, parents and teachers. It felt so fulfilling to spread the awareness about the OR Society"

"As usual, very enjoyable and uplifting to run workshops and get reactions from young people"