





Photo credit Paul Watt

Case study: Glasgow Science Centre - Learning Lab

To date Glasgow Science Centre's Learning Lab programmes has engaged over 4000 teachers and 100,000 pupils throughout Scotland and Northern England. Designed by Glasgow Science Centre and delivered through a network of Science and Discovery Centres, Learning Lab provides targeted curriculum resources from early years to secondary school, bringing practical science and opportunities to engage with real scientists that enhance STEM education and provide equitable science learning opportunities. The programme provides training for teachers, offers up to 20 hours of learning per pupil.

Early intervention

Learning Lab is a unique STEM programme that supports teachers and inspires students through varied learning experiences that take place over several weeks.

With funding from industry partners, we give children aged 5 – 14 an immersive and accessible introduction to STEM subjects through interactive Learning Labs that spark their curiosity and introduce them to core and topical subjects. The memorable programmes are anchored in the curriculum, and include hands-on activities, home learning, a visit to the Science Centre and the chance to meet industry experts.



"The Space Learning Pathway is a quality project and excellent match with our objectives, which include highlighting diverse career role models to students along with the pathways into space sector careers"

- Phil Weaver, Education and Future Workforce Lead UK Space Agency



Our impact

The Learning Lab has had a positive impact on teachers, particularly in helping pupils connect science to their everyday lives and future aspirations. In a recent report on *Learning Lab: Powering the Future*, **92%** of teachers agreed or strongly agreed that their pupils were more able to identify connections between science and their own lives, a notable increase from 47% pre-participation to **66%** post-participation.

Activities like the "Car of the Future" were especially effective, with teachers reporting that pupils gained a clearer understanding of renewable energy and its relevance to their communities. Teachers also highlighted the value of local context, such as the Life Science Centre's workshop linking Newcastle's scientific heritage to modern energy topics, which sparked rich discussions around family and local history.

Career awareness also improved significantly. **62%** of teachers in 2024 agreed that pupils were more interested in science-related careers, and **80%** of primary teachers felt better informed about how pupils could progress into energy careers. Teachers appreciated the real-world relevance and flexibility of the content, with some continuing to use it in lessons the following year.



"My class loved how active the lessons were. They really enjoyed building the turbines and testing them. They learned a lot about renewable energy sources and were able to explain how they could be used in our school to make it more eco-friendly"

Teacher participating in Learning Lab - Renewables Challenge, Dalmarnock
 Primary School, Glasgow

99

Supporting industry

With funding and technical expertise from our industry partners, our pathway programme helps to support the sector to address workforce shortages. It cultivates and nurtures a talent pipeline to

support learners into STEM careers. By working with Glasgow Science Centre, business and industry leaders can help ensure the longevity of the STEM workforce, and the continued growth and success of the scientific community.



"Working in partnership with Glasgow Science Centre means Drax have fantastic opportunities to engage with children from across Scotland who are interested in finding out more about STEM subjects and careers. It was such a pleasure to see first-hand the enthusiasm from visitors to learn more about Hydro power during British Science Week"

- Sarah Cameron, Community Manager (Scotland) Drax

99

glasgowsciencecentre.org