

Impact of Funded Visits to Techniquiest

STEM Enrichment in Action

STEM education is critical for Wales. We must inspire and nurture the next generation of STEM professionals, vital to building a knowledge economy.

Many Welsh regions face severe economic and educational disadvantage due to unemployment, housing issues, and poor access to services. Schools in these areas lack resources for opportunities such as visits to Techniquiest, creating a significant STEM learning gap between least and most deprived schools. In some of the most deprived areas, only 11% of 15-year-olds achieve 5 GCSEs at grades A*–C.

Research shows STEM experiences beyond the curriculum have a deep and lasting effect on young people, adults, and families, shaping interests, aspirations, and career choices. The COVID-19 pandemic widened attainment gaps, with low-income pupils left further behind. Education Policy Institute (EPI) research, funded by the Nuffield Foundation, found Welsh schools face a wider disadvantage gap than English schools: 22–23 months compared with 18 months. Persistently disadvantaged pupils suffer most: 23 months in England, rising to 29 months in Wales. With numbers growing, improving outcomes for this group should be a priority.

The 2023 Programme for International Student Assessment (PISA) shows Wales as the poorest performing UK nation in reading, maths, and science, with pupils more than a year behind in maths and many struggling in reading and science, largely due to pandemic disruption.

Whatever data is used, it is clear the most disadvantaged children in Wales need our support.



Techniquiest is committed to fundraising so that disadvantaged schools can access its STEM enrichment programmes, particularly free school visits to the Science Centre. The cost-of-living crisis is hitting poorer communities hardest and has reduced schools' ability to book visits. By working with funders to cover the costs, Techniquiest ensures that pupils who would otherwise miss out can benefit from hands-on STEM experiences that support their learning and aspirations.

The Impact of Funded School Visits

Thanks to the generous support of funders, pupils from disadvantaged areas are able to enjoy a full day of STEM enrichment at Techniquiest. From inspiring theatre shows to hours of hands-on exploration across the exhibition floor, these visits create lasting memories and spark curiosity.

The Value of the Trip

Teachers consistently highlight how valuable these opportunities are for both learning and enjoyment:

“Without this funding, we would not have been able to bring 58 pupils to experience your fantastic educational facility. Your staff were amazing, and made our whole school feel very welcome.”

“This was a fantastic opportunity for my pupils. The show was fantastic and all pupils were engaged. This isn’t something I could have provided in the classroom, so I’m grateful for the funded visit. The pupils left so enthusiastic about their day, particularly the new exhibitions which linked perfectly to our Human Body topic. Thank you.”



“We would like to extend our sincere thanks to Techniquest for providing such an enriching and enjoyable educational experience. The visit not only deepened pupils’ understanding of science but also sparked a genuine enthusiasm for learning. We look forward to visiting again in the future!”

The Difference Funding Makes

The cost-of-living crisis is a major barrier for schools, especially in areas of high deprivation. For many, funding is the only way a visit is possible:



“We are from an area of high deprivation so any help towards the cost of school trips makes a huge difference. The children really enjoy their trips and remember them for years to come.”

“Without the funding we would not have been able to go. We live in a very deprived area and many of the kids are knowledgeable and keen to learn but come from disadvantaged backgrounds, so thank you for enabling us to take the children to Techniquest.”

Teachers also stress how unique and memorable the experience is for pupils:

“Our children really enjoyed the whole experience of Techniquest. None of them had ever been or would I imagine visit in the future with their families. They were very engaged and able to talk about all that they had done.”

“The children were absolutely thrilled and were talking about it for weeks afterwards.”

“My class are mostly from deprived families and had never visited before. It was a day of absolute wonder for many, and they got to explore science (usually a really hated subject in our class) in a brand new way.”

The interactive nature of Techniquest is particularly impactful. One teacher commented:



“My pupils most enjoyed the hands-on, interactive exhibits at Techniquest. They were particularly fascinated by the practical experiments that allowed them to explore scientific concepts in an engaging different interests and learning styles, ensuring that each student found something they enjoyed. They loved being able to actively participate in demonstrations, especially those involving physics and engineering.

The immersive experience sparked their curiosity and made complex topics feel accessible and fun.

The opportunity to work in groups also encouraged teamwork and communication, which they found enjoyable. Overall, the combination of education and entertainment made Techniquest a memorable and inspiring experience for all of them.”

Conclusion

Funded visits to Techniquest open doors for disadvantaged pupils, giving them the chance to engage with science in a meaningful, memorable way. These experiences inspire curiosity, build confidence, and raise aspirations. As one teacher summed up:

“Giving pupils the opportunity to visit Techniquest provides them with valuable hands-on experience and exposure to science in an engaging way. It contributes positively to their educational development. Diolch yn fawr!”

