

# Jacobs

## Jacobs Case study

Beyond the Classroom



Jacobs has been an EngineeringUK Corporate Member for over 7 years. We interviewed Kara Connon, who has recently been appointed the STEAM (science, technology, engineering, arts, maths) lead for Europe to discuss her ambitious plans for Jacobs' new global STEAM strategy.



**Kara** has worked at Jacobs for over 10 years in various roles covering everything from green building assessments, sustainability, landowner liaison to stakeholder management. She started her career in London before moving back to Glasgow where she began working as an education liaison officer on Transport Scotland's A9 Dualling Programme. Kara's understanding of STEAM, how it fits in the curriculum and government agenda, has been largely influenced by the A9 project. Before embarking on her new position, she was STEAM lead for the Glasgow office for 5 years.

## About Jacobs

Jacobs is a leading technology-enabled solutions provider. We challenge today and reinvent tomorrow by solving the world's most critical problems for thriving cities, resilient environments, mission-critical outcomes, operational advancement, scientific discovery and cutting-edge manufacturing, turning abstract ideas into realities that transform the world for good. With \$14 billion in revenue and a talent force of approximately 55,000, Jacobs provides a full spectrum of professional services including consulting, technical, scientific and project delivery for the government and private sector.

People are at the heart of our business. We have an unparalleled focus on inclusion, with a diverse team of visionaries, thinkers and doers.



## How does Jacobs promote STEAM careers and education outreach?

Real-life application of school subjects brings STEAM to life for students and teachers. Our ambassadors are passionate about their work and want to share their knowledge, expertise and enthusiasm with young people to help shape career aspirations, influencing subject choices and highlighting career pathways.

We have over 800 STEAM ambassadors who use Jacobs-funded time (4 hours per year) to volunteer in local schools during working hours to teach young people about careers in STEAM. The majority of our UK offices have at least one partner school that they work with on a regular basis, enabling students to get to know Jacobs as a company and gain an understanding of the careers we offer, our culture and our values.

Engagement with young people enables us to begin building a pipeline of future employees. Working closely with our Talent Acquisition team we provide multiple touchpoints with diverse role models and clear, engaging careers information, at various stages of the learning journey, showing young people the variety of career opportunities in STEAM and embedding Jacobs as an employer of choice.

## Driving equality, diversity & inclusion

At Jacobs, we know that if we are inclusive, we're more connected and if we are diverse, we're more creative. We aim to make inclusion and diversity core attributes of our identity, embedded in all our employment and business practices in all locations. There is a strong focus on this through all our STEAM initiatives, helping us to attract diverse talent into the business.

Responding to Covid-19 we transitioned to virtual delivery of our programmes and this has facilitated greater interaction with young people who were previously much harder for us to reach, extending the scope and impact of our inspiration activities. The pandemic has changed the way we work, communicate and educate through technology. By harnessing the capabilities of online learning, Jacobs is leading the way in digital STEAM delivery, being awarded 'Inspirational STEM Employer' by STEM Learning UK in May 2021.

## Demonstrating equal opportunities for all

We strive to show and teach young people from all backgrounds about all the different careers there are in engineering to inspire them to become engineers.

## Mindset and resilience

Jacobs places real emphasis on the mental health of its workforce. We have mental health champions in each office and a variety of internal networks have been set up to support the different groups of people across society that we have working for us. By leveraging these networks, we are able to deliver a unique style of STEAM engagement, connecting young people to ambassadors of similar backgrounds who understand the challenges faced by diverse areas of society.

## How does Jacobs deliver inspiring outreach activities?

We offer a range of programmes to inspire and show young people how rewarding a career in STEAM can be. Some of our programmes include:

**Careers fairs** - Jacobs has provided each UK office with a careers fair toolkit to support ambassadors and provide a consistent approach and look to careers information and resources. We include a matrix of school subjects and attributes linked to potential jobs and use VR goggles to showcase some of our biggest projects.

**Work experience weeks** - We work regularly with our partner schools to support the curriculum, adding value and an industry perspective to students' learning. Our work experience programmes are delivered in a variety of different ways depending on the office and STEAM lead delivering the programme.

**Graduate and apprentice engagement** - We encourage our graduates and apprentices to become STEAM ambassadors and get involved with local schools in the early years of their careers. Whilst STEAM volunteering is available for any employee, we find that the graduates and apprentices are relatable for the students and eager to share their stories.

**Chartership** - Part of the criteria for Chartership requires employees to fulfil attributes by demonstrating ability in their roles, which includes supporting the inspiration agenda. This fits in perfectly with our drive to broaden young people's understanding of all the potential future careers and pathways available to them.

**Interactive workshops in schools** - Planned in advance with teachers in our partner schools, our interactive sessions are curriculum linked and enable young people to engage with the wide number of disciplines within Jacobs to better understand the practical application of STEAM subjects within industry.

**Academy9 programme** - Academy9 is an exciting, evolving educational initiative from Transport Scotland, linked to the Scottish Government's ambitious A9 Dualling Programme. Its framework is based on knowledge exchange at all levels, built on a series of progressive activities for young people, which is firmly based in challenge learning.

**Virtual engagement** - Through delivery of a set of virtual initiatives, Jacobs employees actively engage with the parents and students from our partner schools and working parents within our own organisation. Initially set up in response to Covid-19, our online tutoring programme supports delivery of all school subjects and is disseminated via weekly live-streaming workshops. New additions to this suite of resources include access to video experiments and a globally accessible virtual careers fair.

**Other national partnerships** - We work closely with The Careers & Enterprise Company as a Cornerstone employer and as part of the Enterprise Advisor network, helping schools and colleges to develop strong careers programmes. Also, 3 of our UK Offices - Glasgow, Manchester and Bristol - have Enthuse Partnerships, delivered through STEM Learning and our STEAM ambassadors are actively engaged in the national STEM ambassador network.



## How is Jacobs shaping its new STEAM strategy for the future?

### Building our brand as an employer of choice

We want to be the employer of choice and to do that we must attract, retain, develop and advance the world's most diverse talent. All organisations must do their part to develop a talent pipeline, ensuring that more diverse candidates enter the workforce with the tools and training they need to contribute. For us, that's STEAM. We're putting a concerted effort into STEAM activities in our communities to help shape young minds to develop an interest and build skills in math, science and the arts. That investment is creating our workforce of the future!

### Improving our STEAM programmes and core activities

Combining expertise, ideas and current activities across regional offices throughout the UK, we've created a wide and engaging range of core STEAM activities which will be integrated into our global STEAM resource library, to guide and support our ambassadors with delivery of STEAM programmes.

### Sharing best practice, knowledge and skills

To ensure we are working to the same standard throughout the organisation, Jacobs is working hard to establish best practice for delivery of STEAM outreach in a number of our offices with plans to roll out a global strategy later in the year.

### Increasing our partnership network and supply chain

As part of our vision for the future we would like our partners to actively engage with us in STEAM and support our ethos. With the emergence of new digital technologies and resources this a great time to adopt a blended approach to support more engagement activities with young people and schools. By working with our network in this way we hope to create an even bigger impact and have an even greater influence in young people's lives and career choices.

## How does Jacobs work in partnership with EngineeringUK through Corporate Membership?

### Building strategic partnerships and networks

Through the Skills Partnership we have been able to work with a wide range of organisations and grow our network. With so many wonderful relationships and resources available, being connected to organisations outside of Jacobs allows us to learn from each other, ensure our STEAM work is aligned with similar organisations and support as many young people and teachers as possible.

### Driving the skills agenda to attain the best talent for the future workforce

As a Corporate Member we get access to new pieces of research from EngineeringUK. This provides valuable insight and analysis into the number of young people progressing through the education and training pipeline into engineering careers and an understanding of the key challenges the engineering community must overcome to grow the number and diversity of the future workforce.

### Identifying and assessing outreach opportunities

EngineeringUK helped us to understand, assess and identify which schools we should be engaging as part of a joint venture programme between Costain and Jacobs in the north east region. Our dedicated business partnership manager conducted research and analysis for us to identify suitable schools, based on core demographic data available, helping to create a more targeted approach for our STEAM engagement through the joint venture programme.

A key area for collaboration going forward, to help assess the impact of our Enthuse Clusters, will be working with our dedicated business partnership manager to implement use of EngineeringUK's Engineering Brand Monitor survey, to examine changes in the knowledge, perceptions and understanding young people have about STEAM and engineering through participating in cluster activities.



## Shaping the development of STEAM inspiration programmes

We were invited by EngineeringUK to join the project group for Neon, a new platform to help teachers to access brilliant engineering inspiration activities. As part of this project, we supported a series of workshops to help shape the direction of Neon, develop digital content and engagement activities and to support the transition of the platform from its inception, design and build through to launch. We have used Neon to advertise our virtual work experience programme to teachers across the UK, which has now seen over 500 young people participate.

## Creating new careers resources and STEAM engagement opportunities

We have worked with EngineeringUK to host webinars and participate in working groups, sharing best practice and insights with the wider engineering community. We recently supported other Corporate Members through participation in a virtual work experience working group to help them transition from face to face to online delivery of work experience activities. We are always happy to share our STEAM journey and findings with other businesses, to help them grow their own outreach programmes.

## The Tomorrow's Engineers Code

We are a proud signatory of The Code, which is a commitment to work toward common goals to increase the diversity and number of young people entering engineering careers. As a Signatory, we're working with EngineeringUK and other organisations in The Code Community to improve the quality, inclusivity, targeting and reach of activities designed to inspire young people.

**For more information about Jacobs visit [www.jacobs.com](http://www.jacobs.com).**

"EngineeringUK is a key organisation we are very engaged with. Membership keeps us at the forefront of industry-wide STEAM educational activity. As part of this strategic alliance, we collaborate with like-minded businesses, sharing knowledge and expertise in a collective drive to inspire, engage and inform the next generation of engineers."

"This collaboration is key to investing in and delivering the future skills needed to create a global Britain and address complex issues such as the climate emergency, resilient communities and natural-resource stresses. Collectively raising young people's aspiration and knowledge of high-skilled STEAM careers and promoting inclusion, diversity and equality in learning, to deliver social mobility and genuine 'levelling up' of the UK economy."

**Donald Morrison**, People & Places Solutions Senior Vice President Europe and Digital Strategies, Jacobs





## Join the Skills Partnership

As a Corporate Member you can get exclusive access to:

- Evidence based research, insights and advice on key issues and developments in UK engineering
- Bespoke strategic support to shape and define a diverse STEM /STEAM outreach programme
- Greater voice and representation in UK engineering to policy makers and education institutions
- Networking opportunities with like-minded organisations to build long-term relationships at member events

## Become a member today

**Inspire the next generation like Jacobs by joining the EngineeringUK Skills Partnership. Get in touch to find out how we can support and work with your business.**



[Click here to find out more](#)

