

Academy9 Conference: Building a Legacy

Macdonald Aviemore Resort
19 and 20 March 2019



Academy9
Skills Impact Initiative
of the Year
British Construction
Industry Awards 2018



Foreword

We are delighted to welcome you to our Academy9 Conference.

When we embarked on delivering the Scottish Government's ambitious A9 Dualling Programme, we wanted to use it to make a difference in more ways than a new road alone can achieve. In partnership with the schools situated along the A9 corridor, we designed Academy9 as a framework to bring everyone along with us, raising awareness of STEM and building relationships with pupils and teachers that allow the framework to grow and develop alongside the dualling.

The descriptor 'Building a Legacy', to us, describes the power of education and industry working in partnership to do more than simply raise awareness of STEM, but to learn together how to combine our strengths for mutual reward. As an Academy9 team we have benefited directly from the programme, honing our communications skills, recognising how we all learn in different ways and realising that the skills we have can make a difference. The collaboration involved in developing and delivering Academy9 has also helped bring cohesion between Transport Scotland and the various consultants and contractors and to the delivery of the A9 Dualling Programme itself.

The conference is intended to promote knowledge exchange and opportunities for learning. It will bring together infrastructure and engineering professionals, education professionals from primary through to tertiary, STEM and Developing the Young Workforce personnel, education and industry organisations (from both the public and private sectors), as well as Academy9 pupil participants.

Over these two days you will hear from young people who have participated in Academy9, from our development and delivery team, others leading the way in education-industry initiatives, educational specialists and inspirational international STEM leaders. We will discover the importance of mindset and how Academy9 integrates this throughout its activities. In the workshops, key specialists will provide opportunities for us to develop our thinking about the potential that education-industry collaboration and partnership encourages.

We hope that bringing together a diverse group of people allows us to share experiences of projects and programmes in a range of areas. Together we can inspire young people to achieve their potential and we can contribute to the development of a world-class workforce for the future. When education and industry collaborate, something new and imaginative can be created. This encapsulates the ethos of Academy9 and we hope the conference will inspire you to view such collaboration as a positive step towards creating your own framework and pursuing your own vision.

Once again, thank you for joining us and we hope that you enjoy the conference.

Transport Scotland, Academy9 team



Conference Exhibition

Once you have registered, there is a lot to see and do! This is a great opportunity to engage with young people, industry professionals and state-of-the-art digital technologies.

There are a range of exhibitors from industry and education - stands brimming with information, give-aways and representatives from each organisation that you can have a chat with.

There will also be an opportunity to interact with winners of the Academy9 innovation papers competition - young industry professionals presenting on Virtual Reality Health & Safety; Canal College; Viaduct Pitlochry/Carbon Costing; and Anti-Dazzle Mitigation.

You can experiment with a variety of cutting-edge digital technologies such as visualisation technology and exploring virtual reality at the Digital Technology Area - Visualisation in Construction.

Academy9 Showcase 19 March - 10am - 12 noon

Join young people from Academy9 participant schools who are excited about engaging you in their challenging learning events:

- Make your memory neuro-pathways buzz by learning to juggle and learn how to load a lorry efficiently with Primary 5 pupils as your mentors.
- Explore your knowledge of careers through the eyes of Primary 6 ecologists, geologists and engineers.
- Join S1 pupils to make decisions about town planning using GIS.

S2 and S3 pupils will share their mega-challenge experience, testing the strength and sustainability of their own bridges.

- Take your final career steps with S5 pupils describing the importance of preparing for the world of work.



Academy9 Innovation Papers Competition

Transport Scotland launched the Academy9 Innovation Papers Competition in September 2018, with the aim of raising awareness and inspiring innovation across the field of STEM, and to celebrate the Year of Young People.

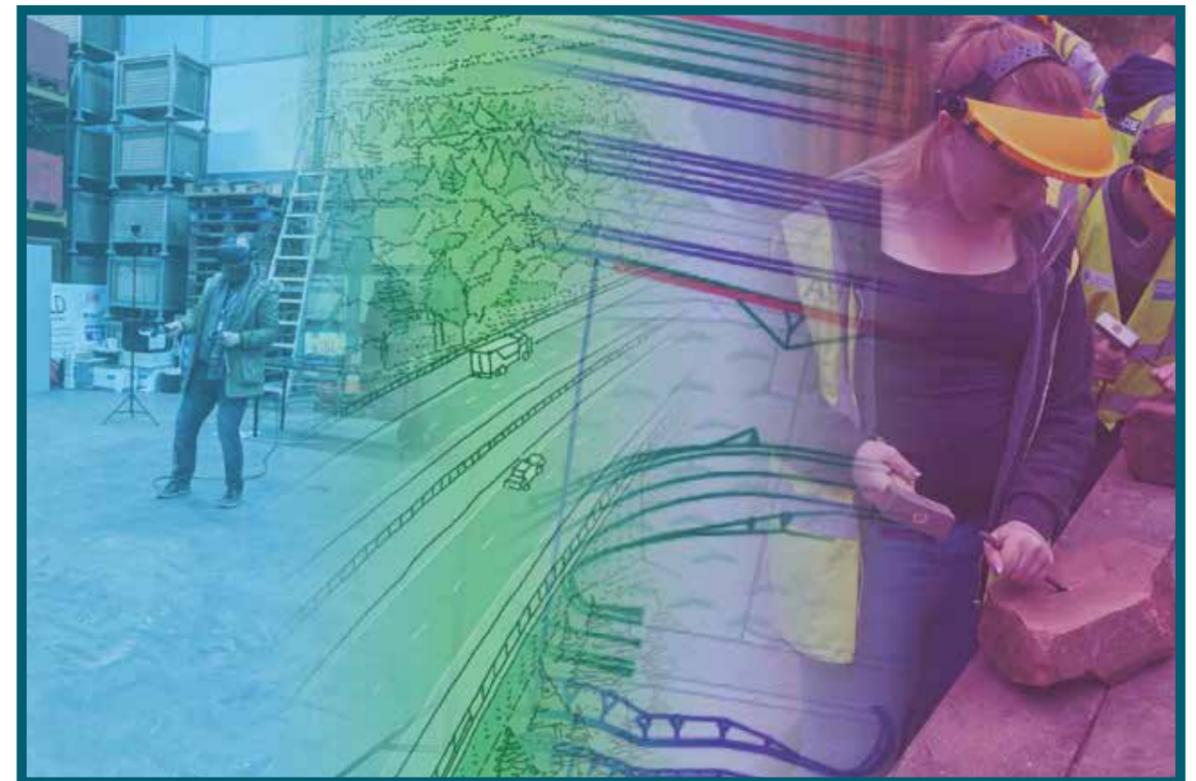
Some of the benefits for entrants were:

- Professional recognition across a wide network of professionals and organisations
- Recognition of their contribution to driving forward best practice
- Professional development
- Opportunity to inspire the future generation in STEM-related professions
- Opportunity to promote the industry they are working in.

Each of the entrants submitted a paper highlighting an example of innovation from a project they were professionally involved in. Entrants, from a wide range of professional areas, were asked to submit papers in areas such as a new idea, or a smarter, fairer, healthier, greener or safer way of doing the job.

The competition winners' full papers and additional details are contained in this conference pack.

Visit the Academy9 Innovation Papers Competition stand at the conference exhibition to meet the winners and discuss their innovative projects.



Digital Technology Area

JACOBS

**CONSTRUCTION
SCOTLAND
INNOVATION
CENTRE**

In the Digital Technology Area, the Construction Scotland Innovation Centre will be showcasing the latest in visualisation technology with the following partners:

- Jacobs Engineering who are working on the A9 Dualling Programme
- Immersive learning specialists - Digitalnauts
- Immersive digital entertainment and training experience provider - Articise
- Academic expertise from Robert Gordon's University and the Advance Forming Research Centre (AFRC).

Visualisation in Construction workshop

The Visualisation in Construction workshop, led by Jennifer Smart from the Construction Scotland Innovation Centre and members of the Jacobs team also forms the main part of our Digital Technology Area.

Construction Scotland Innovation Centre

Since launching in October 2014, our industry-led team have been linking together businesses, university experts and public sector providers to deliver transformational change in construction.

We can provide your business with a 'one-stop shop' for accessing a team of experts and public support as well as access to our Innovation Factory, the UK's first dedicated digital manufacturing, prototyping and future skills "centre of excellence".



Conference Programme - 19 March

1000 – 1200 Registration, refreshments and exhibition including Digital Technology Area (main foyer and Osprey Arena)

1200 – 1245 Lunch and exhibition (Osprey Arena)

1255 – 1300 Welcome – Willy Roe CBE (Auditorium)

1300 – 1315 Michelle Rennie, Director of Major Projects, Transport Scotland

1315 – 1405 Academy9 Panel (followed by Q&A)

- David Pollock - A9 Dualling, Academy9 Co-ordinator
- Christine Percival, MBE - The Knowledge Exchange Partnership
- Sarah Morgan - Education Liaison Officer, Jacobs
- Jessica Smith, Industry Professional, Atkins
- Ollie Bray - LEGO Foundation and former Headteacher at Kingussie High School

1415 – 1500 Workshops sessions – round one

No.	Title	Room
1	The Engineering Academy: A Vehicle for Widening Access to University and Driving Employer's Talent Pipelines	Auditorium
2	Creating an Action Plan for Industry-Education Collaboration	Peregrine 2
3	Developing the Young Workforce: Connecting Education with the World of Work	Spey Burger Restaurant
4	How Procurement Strategies can deliver for a Sustainable Scotland	Alvie, Morlich & Glenmore
5	New Industry in Scotland 2020: Attracting and Developing a Skilled Workforce	Strathspey
6	Visualisation in Construction	Osprey Arena

1510 – 1555 Workshop sessions – round two

No.	Title	Room
7	The Power of Industry and Education in Partnership	Auditorium
8	The Power of Mindset to Build Resilience and Embrace Challenge/Change	Peregrine 2
9	The Unique Commercial Advantage Young People brought to the Whereverly Platform	Alvie, Morlich & Glenmore
10	RAISE Programme: Driving Innovation in the STEM Education and Training Strategy	Spey Burger Restaurant
11	Approaches to Delivering Skills and Employment Programmes in Infrastructure	Strathspey
12	Visualisation in Construction	Osprey Arena

1610 – 1645 Keynote address – Rebekah Watson, Ambassador for Women in Aviation and Engineering

1645 – 1700 Close

Conference Networking Dinner

For those that have pre-ordered their place, we are hosting a conference networking dinner on Tuesday evening.

Date: Tuesday 19 March 2019

Time: 7pm – 10.30pm

Venue: Conference Centre: Peregrine 2 for arrival drinks and Peregrine 1 for dinner

Dress code: Smart casual

1900 – 1935 Arrival drinks

1935 – 1945 Call for dinner

1945 – 2000 Welcome - Willy Roe CBE

David Pollock, A9 Dualling Academy9 Co-ordinator, Transport Scotland

2000 – 2200 Three-course dinner and networking

2200 – 2220 After-dinner speaker: Calum MacSween



Calum retired from The Highland Council as Head of Education in 2013 after 36 years service, mainly in schools in Dumfries and Galloway and Highland. He was Regional Lead for the Youth and Philanthropy Initiative (YPI) run by The Wood Foundation between 2014 - 2018. Calum is currently a tutor at Head Teacher Leadership Academies (HTLAs) run by Columba 1400 at their two centres on Skye and at Loch Lomond.

2220 – 2230 Thanks – Willy Roe CBE

2230 – 2300 Event closes

2300 Dedicated late bar at Morlich Hotel for those who wish to continue networking

Conference Programme - 20 March

- 0900 – 0930 Registration, refreshments and exhibition (main foyer and Osprey Arena)
- 0940 – 0945 Welcome – Willy Roe CBE
- 0945 – 1030 Keynote address (followed by Q&A) – Ollie Bray, LEGO Foundation
- 1030 – 1105 Keynote address (followed by Q&A) - Kate Meyers, HS2
- 1115 – 1200 Workshop sessions – round three

No.	Title	Room
13	The Engineering Academy: A Vehicle for Widening Access to University and Driving Employer's Talent Pipelines	Auditorium
14	Creating an Action Plan for Industry-Education Collaboration	Peregrine 2
15	Developing the Young Workforce: Connecting Education with the World of Work	Peregrine 1
16	How Procurement Strategies can deliver for a Sustainable Scotland	Alvie, Morlich & Glenmore
17	New Industry in Scotland 2020: Attracting and Developing a Skilled Workforce	Strathspey
18	Visualisation in Construction	Osprey Arena

- 1200 – 1245 Lunch and exhibition (Osprey Arena)
- 1300 – 1320 Keynote address (followed by Q&A) – Aileen Hamilton, STEM Learning
- 1345 – 1430 Workshop sessions – round four

No.	Title	Room
19	The Power of Industry and Education in Partnership	Auditorium
20	The Power of Mindset to Build Resilience and Embrace Challenge/Change	Peregrine 2
21	The Unique Commercial Advantage Young People brought to the Whereverly Platform	Alvie, Morlich & Glenmore
22	RAISE Programme: Driving Innovation in the STEM Education and Training Strategy	Peregrine 1
23	Approaches to Delivering Skills and Employment Programmes in Infrastructure	Strathspey
24	Visualisation in Construction	Osprey Arena

- 1440 – 1500 Keynote address – Ian Menzies, Education Scotland
- 1500 – 1515 Conference round-up – Willy Roe CBE
- 1515 – 1700 Networking and exhibition with canapes (Osprey Arena)

Master of Ceremonies

Willy Roe CBE – Trustee of the British Council, Chair of Scotland Committee



Willy Roe is a Consultant in Economic and Community Development. He led one of the teams who facilitated community engagement in the design and development of the Cairngorms National Park. He is a previous Chair of Highlands and Islands Enterprise and of Skills Development Scotland. Willy is a Trustee of the British Council and Chair of its Scotland Committee. He is a frequent user of the A9 between his home in north-west Scotland and his work around the UK.

Plenary Speakers

Rebekah Watson – Ambassador for Women in Aviation and Engineering



As an ambassador for women in aviation and engineering, Rebekah has provided numerous talks, presentations, and discussions - using the platform to motivate and inspire others particularly with a focus on STEM related development. With a background in aircraft engineering, flying, operations, commercial, and management, Rebekah brings a comprehensive and unique perspective in growing, innovating and developing business needs in the aviation industry. Alongside working with Menzies Aviation, Rebekah has earned her Masters in Air Transport Operations and Management together with her first class Bachelor Honours degree in Aircraft Engineering, and was listed as Business Insider's "20 Women to Watch in Business Right Now". As a young professional, Rebekah actively encourages other young people into pursuing their goals and reaching their potential, focusing on how you drive your own success.

Ollie Bray – Global Director: Connecting Play and Education, the LEGO Foundation



Ollie Bray is currently Global Director: Connecting Play and Education at the LEGO Foundation where he leads on the Foundation's work related to education improvement through the use of technology and play.

Prior to joining the LEGO Foundation in November 2018 he was headteacher of Kingussie High School, Scotland. As headteacher he led and built the team that transformed Kingussie High from an underperforming school (2012) into an innovative 21st century Learning Environment. In 2018 Kingussie High School significantly outperformed its comparator school, the Highland average and national average in all measures.

As well as his school leadership and teaching experience, Ollie has been a senior policy advisor to government (digital learning strategy), Scotland's national advisor for emerging technologies in learning, and a non-executive director at Inverness College: University of the Highlands and Islands.

Kate Meyers – Head of Skills and Employment, HS2



Kate joined HS2 Ltd as Head of Skills and Employment in 2016 and leads the approach to skills, employment and education (SEE) for the £55bn programme. This work includes delivering the objectives of the SEE Strategy, ensuring the supply chain meet their skills and employment requirements, and leading the HS2 Education programme.

Prior to joining HS2 Ltd, Kate spent seven years at Crossrail Ltd. Initially she was responsible for engagement and communications on the skills agenda before moving over to lead the education programme. Kate was seconded to the Department of Transport in 2015 to work on the Transport and Infrastructure Skills Strategy.

Before Crossrail, Kate worked Transport for London and held a number of positions in the civil service.

Aileen Hamilton – Managing STEM Ambassador Hub West Scotland



Aileen manages the STEM Ambassador Hub in the West of Scotland, one of 19 hubs across the UK. Her hub enables over 2,800 keen volunteers from industry and academia to work with young people to inspire them into STEM subjects.

Aileen earned her Honours degree in Electrical and Electronic Engineering from Strathclyde University, and before joining STEM Learning, worked in industry as a hardware design engineer for over 10 years, designing solutions for connecting platforms, combining data and introducing new technologies.

This experience gave Aileen a keen awareness of the vast range of careers possible in the STEM world, which inspired her to make her move into education in 2001. She remains as passionate about encouraging young people into STEM as she did then.

Ian Menzies – Senior Education Officer, Education Scotland



Ian Menzies is a Senior Education Officer within Education Scotland, the Executive Agency of the Scottish Government that has responsibility for quality and improvement in Scottish Education. He leads on supporting the science curriculum for 3-18 year olds and contributes to the development of STEM approaches nationally to support the implementation of the STEM Education and Training Strategy. Ian originally trained as a Physics and Maths Teacher and spent time teaching in Zambia and Malawi as well as Scotland.

Workshop Presenters

The Engineering Academy – a vehicle for widening access to University and driving employer's talent pipelines

Alan Roseweir – University of Strathclyde, Associate Director Engineering Academy



Alan began his career through as apprenticeship, becoming qualified as an electrical engineer. Following nine years working in industry, Alan moved into further education in 1978.

Seventeen of Alan's 39 years of higher education experience have been spent in senior management roles, giving him extensive knowledge of the sector and all levels of curriculum, before taking up his current role of Associate Director for the Engineering Academy at the University of Strathclyde in 2013. Alan has frequently represented himself and education principalship at external events and partnership meetings both in this country and abroad.

Alan has also been involved, through various senior roles, with SQA and giving guidance on development of the Curriculum for Excellence Engineering Science Qualifications.

More recently, Alan was contracted by Skills Development Scotland to project manage development of the new Graduate Apprenticeship for Engineering.

Stewart McKinlay – Associate Director, Engineering Academy at the University of Strathclyde



Stewart began his engineering career in Aberdeen, where he quickly developed and progressed to a role as a general manager with a £100m turnover responsibility. Following this Stewart undertook both further engineering roles, and also incorporated training-focused roles which led to being Chair of the Scottish Association for Engineering Education.

Stewart currently sits on the Steering Board of Equate Scotland, the Skills Development Scotland Engineering Skills Leadership Group, and the National Manufacturing Institute for Scotland skills workstream.

His role with the Engineering Academy at the University of Strathclyde supports employer's talent pipelines and the widening access agenda, and he has been intimately involved in the development of the Engineering Graduate Apprenticeship framework.

Creating an Action Plan for Industry-Education Collaboration

Christine Percival MBE – The Knowledge Exchange Partnership



Christine has more than 40 years of experience in education, with over 20 of those spent at the University of Strathclyde, where Christine developed developed “Challenge in Learning” - a powerful mode of thinking that believes everyone should be challenged at all stages of life to develop and progress.

In 2010-11 she established her own company (The Knowledge Exchange Partnership Ltd.) The company was active in developing CPD for education professionals in a number of local authorities. In 2013 KEEP was appointed as education consultants to Transport Scotland's Queensferry Crossing, which then paved the way for creating a framework in 2015 for an educational programme called Academy9.

This work in developing ways to bring together education and infrastructure professionals to deliver a new and exciting approach to STEM learning has set a new benchmark for other infrastructure investment projects.

Developing the Young Workforce: Connecting Education with the World of Work

Klaus Mayer – Senior Education Officer, DYW, Education Scotland



Graduating from Glasgow University (BD) and University of Paisley (PGDE) Klaus held the position of Principal Teacher for Modern Languages Religious and Moral Education in East Ayrshire before taking up a post as Development Officer with Learning and Teaching Scotland. As part of the Developing Global Citizens team he lead on key initiatives such as resilience education and 'Game on Scotland', the Education Programme for the Commonwealth Games. In 2014 Klaus joined the Developing the Young Workforce (DYW) programme at its inception and has key responsibility of the implementation of DYW at Education Scotland.

Mandy Toogood – Education Officer, DYW, Education Scotland



With a background in community learning and development (CLD), Mandy has held a variety of positions across this sector both in local authorities and the third sector. As part of the CLD team she has led on aspects of supporting policy and improvement in CLD with a particular focus on youth work. More recently she has been responsible for supporting capacity building for the DYW programme including supporting the development of education and employer partnerships, working closely with a National DYW network which includes local authority leads, regional employer group leads and college leads.

How Procurement Strategies can deliver for a Sustainable Scotland

John Macintyre CEng MICE – Transport Scotland



John is a chartered civil engineer with 25 years post-graduate experience. Beginning his career with Scottish Water, he moved to Transport Scotland in 2005, where he has held a number of project management roles on trunk road design schemes. Responsible for managing design, assessment, promotion, governance, finance, reporting and health and safety elements for key project, John represented Transport Scotland's interests and corresponded with statutory stakeholders, landowners and local action groups.

John was appointed Head of the Procurement Team in Transport Scotland's Major Projects directorate in June 2018. Results from his team's advice include delivery of a wide range of community benefits, provision of opportunities for small and medium-sized enterprises, supported businesses, a commitment to using project bank accounts for works contracts greater than £10 million, as well as updates to governance procedures. John and his team ensure that Transport Scotland's exemplar record of successful procurement is maintained.

John Andrew – Transport Scotland



A civil engineer with over 40 years of experience, John holds extensive experience in senior roles for private engineering contractors, leading on a number of key infrastructure projects across Scotland and Ireland.

John is a Project Manager in Transport Scotland's Major Projects Directorate. He is responsible for the development of a specific corporate community benefits approach to ensure that all procurement activities comply with the requirements of the Procurement Reform (Scotland)

Act 2014. This approach will be rolled out for use in all procurement, design and contract management processes in early 2019 and will consist of a toolkit to assist with the promotion of community benefits activities together with a process to capture the output for use in the annual Transport Scotland Procurement Report.

New industry in Scotland 2020: Attracting and Developing a Skilled Workforce

Tony Elliot – Group HR Director Robertson Group & Head of CITB Scotland



Tony is currently the Group HR Director for Robertson Group, one of the UKs largest privately owned construction and infrastructure services companies. A senior HR professional with extensive strategic experience in blue chip financial services, construction and manufacturing organisations working with teams in the UK and overseas. Focussed on the development of people and the growing of skillsets within our industry, with over 25 years of experience in the people and learning fields.

Chair of the new Construction Industry Training Board (CITB) Scottish Nation Council, driving the construction skills agenda across Scotland. A member of several senior level bodies, including The Scottish Apprenticeship Advisory Board (EEG), The Scottish HR Leadership Group and the CIPD Scottish HR Leaders forum.

Grahame Barn – CEO CECA Scotland



Grahame is the Chief Executive of the Civil Engineering Contractors Association (CECA) Scotland, an organisation which represents 102 contractors across Scotland.

Grahame participates in a number of committees and boards for the industry, including Site Safe Scotland, the Scottish Parliament Cross-Party Group on Construction, the Industry Leadership Group of Construction Scotland, and various CITB committees. As an advocate for the industry, in his role, Grahame regularly meets with key clients and politicians in a

structured engagement programme to influence thinking and decision-making around infrastructure and civil engineering in Scotland. This is alongside engaging with the Scottish Government, local authorities, major public sector clients and other agencies to achieve a fairer, more balanced procurement process, and Grahame also has an active interest and involvement in training and development.

The Power of Industry and Education in Partnership

Maureen Douglas – Forster Group



Maureen is responsible for people, safety and systems at Forster Group, and her role sees her continually develop the business and support the wider industry in tackling the construction industry's greatest challenge – attracting, employing and training a workforce that reflects society.

One such project was The Forster Skills Academy, based at the Construction Learning Centre situated on Brechin Community Campus.

Maureen's other commitments include involvement at the Scottish Apprenticeship Advisory Board, the Scottish Parliament Cross-Party Construction Group, various roles at CITB and Homes for Scotland. She is a Chartered Fellow of the Institute of Personal Development and a Member of the Institute of Directors.

Archie Bathgate – Brechin Academy



Following his education, Archie worked in variety of jobs ranging from being a Caulker Burner in the shipyards, to becoming a Baptist Minister.

Archie moved into education in 1994, and found his true vocation. He took up his post as Head Teacher of Brechin High School in February 2014, and his role also encompasses the leadership of the Brechin Community Campus.

The Power of Mindset to Build Resilience and Embrace Challenge/Change

Sonia Grant – Mindset UK



Sonia Grant is an experienced educator, trainer, coach and facilitator who is committed to supporting and motivating people to achieve the very best they can. She has worked in education for over 30 years in various roles and since 2012 she been developing growth mindset and resilience projects in schools and colleges across the UK. She has worked in businesses as a trainer, facilitator and coach to help develop a resilient and confident workforce. Sonia has been working in collaboration with the Knowledge Exchange Partnership for the last two

years in developing the concept of mindset across all levels of Academy9.

The Unique Commercial Advantage Young People brought to the Whereverly Platform

Iain McNeill – Whereverly



Iain is the managing director of Whereverly and an experienced digital strategist.

Whereverly is a digital tourism app platform which brings together local culture and tourism. Whereverly seeks to help tourists to not just 'visit' a local place but feel like they 'belong'.

Iain has experience of building high performance teams and leading the strategic direction of digital enterprises. In his career he was responsible for delivering award winning digital strategies for the Scottish Government, RBS, Honda, Cisco Systems and 20th Century Fox.

Iain is committed to making Whereverly an enterprise with social purpose, longevity and legacy.

Giancarlo Fedeli – The Moffat Centre for Travel and Tourism Business Development



Giancarlo is a Research Associate at the Moffat Centre for Travel and Tourism Business Development - the UK's largest university-based consultancy and research centre for tourism and travel market research, based at Glasgow Caledonian University (GCU).

Giancarlo provides consultancy and research to both private and public operators in the area of tourism & leisure, namely: business development, economic impact and feasibility studies, marketing research, EU projects. Clients include: VisitScotland, Glasgow Chamber of Commerce, Scottish Local Authorities, Destination Management Organisations, visitor attractions and renewable energy and engineering companies among others. Giancarlo is also undertaking a PhD in E-marketing of the Visitor Attraction sector in Scotland, with the aim of supporting businesses growth and informing the local tourism industry. He regularly gives lectures at GCU and presents his research at national and international events and conference.

RAiSE Programme: Driving Innovation in the STEM Education and Training Strategy

Ian Menzies – Education Scotland



Ian Menzies is a Senior Education Officer within Education Scotland, the executive agency of the Scottish Government that has responsibility for quality and improvement in Scottish education. He leads on supporting the science curriculum for 3-18 year olds and contributes to the development of STEM approaches nationally to support the implementation of the STEM education and training strategy. Ian originally trained as a physics and maths teacher and spent time teaching in Zambia and Malawi as well as Scotland.

Gayle Duffus – Education Officer – Primary Science



Gayle is the National Education Officer for Raising Aspirations in Science Education (RAiSE). RAiSE improves the teaching and delivery of science in primary schools by increasing teachers' skills, confidence and networks. Twelve local authorities in Scotland have benefitted from the appointment of a local RAiSE primary science development officer.

She is employed by The Wood Foundation and seconded to Education Scotland to lead this pilot programme. Her role is to offer strategic support and coordination of the national programme and within this, to work in partnership with participating local authorities to develop the ambitions of the programme within a local context.

Gayle has a background in education having held several posts within secondary schools. She has also been a member of the qualification design and verification teams within SQA.

Approaches to Delivering Skills and Employment Programmes in Infrastructure

Scott Young – Head of Skills and Employment, Major Programmes and Projects Group, Jacobs



Scott is a skills specialist working across Jacobs' major programmes portfolio. He has advised a number of major infrastructure projects on their approach to skills and employment across the utilities, nuclear and transportation sectors. Most recently he was Head of Skills at Employment at Tideway, the company behind the £4.2bn Thames Tideway Tunnel project. There, he was responsible for leading the project's approach to maximise local employment, apprenticeships and promoting STEM education and careers. He is also currently working on the renewal and restoration of the Palace of Westminster and the Wylfa Newydd nuclear power station on Anglesey.

Visualisation in Construction

Jennifer Smart – Business Relationship Manager at Construction Scotland Innovation Centre



Jennifer is a business relationship manager at the Construction Scotland Innovation Centre. She joined the team two years ago bringing 20 years of experience in the construction, utilities and facilities management marketplace. She is a qualified civil and environmental engineer with extensive experience in internal and external communications, relationship management and business development. Jennifer leads on the civil, infrastructure and environmental projects across Scotland. Jennifer is a creative individual who thrives on

supporting the development of innovative solutions to drive businesses forward and in turn creating a positive impact on the construction industry in Scotland.



Exhibitors

ATKINS mouchel

AMJV

AMJV brings together expertise from SNC-Lavalin's Atkins and WSP, two globally respected professional services consultancies. We have a combined staff in the UK of over 17,000 that we can draw on to work together and provide the most effective and sustainable solutions for our clients.

www.atkinsglobal.com/en-gb

www.wsp.com/en-GB

Balfour Beatty

Balfour Beatty is a leading international infrastructure group. With 28,000 employees, we provide innovative and efficient infrastructure that underpins our daily lives, supports communities and enables economic growth. We finance, develop, build and maintain complex infrastructure such as transportation, power and utility systems, social and commercial buildings.

www.balfourbeatty.com

Balfour Beatty



CECA Scotland / CITB

CECA Scotland is Scotland's sole trade association for the civil engineering sector. Our members range from multinationals to SMEs and work day-to-day to deliver, upgrade and maintain Scotland's transport and utility networks. Together, CECA Scotland members carry out up to 80 per cent of all civil engineering activity in Scotland.

www.cecascotland.co.uk



CITB supports the skills needs of the British construction sector. It's our job to work with industry to encourage training, which helps build a safe, professional and fully qualified workforce.

www.citb.co.uk



CFJV

CFJV is a joint venture comprising CH2M (now Jacobs) and Fairhurst. The joint venture is currently delivering major transportation infrastructure projects, such as the A82 and the Glen Garry to Kincaig section of the A9 Dualling Programme.

www.jacobs.com

www.fairhurst.co.uk



Education Scotland

Education Scotland is a Scottish Government executive agency charged with supporting quality and improvement in Scottish education and thereby securing the delivery of better learning experiences and outcomes for Scottish learners of all ages, including in early learning and childcare, school, college and community learning and development sectors.

www.education.gov.scot/



ICE Scotland

Our 8000 members are the people who design, build and maintain Scotland's infrastructure - civil engineers. They vary from apprentices to Fellows and work for public and private sectors as clients, consultants and contractors. Our activities include:

- Professional qualification
- Lifelong learning
- Promoting the profession (Awards)
- Policy and public affairs
- Inspiring the next generation of civil engineers with schools outreach

www.ice.org.uk



Jacobs

Jacobs leads the global professional services sector delivering solutions for a more connected, sustainable world. With \$15 billion in fiscal 2018 revenue and a talent force of over 80,000, Jacobs provides a spectrum of services including scientific, technical, professional, construction- and programme-management for business, industrial, commercial, government and infrastructure sectors.

www.jacobs.com



The Knowledge Exchange Partnership Ltd

The Knowledge Exchange Partnership Ltd is a company of experienced professionals offering expertise in Scottish/UK-wide education. As consultants to Transport Scotland's Queensferry Crossing and A9 Dualling Programme (Academy9), it promotes knowledge exchange between education and industry to create a legacy of achievement and desire for learning for all. Mindset UK is an associate partner.

www.keeplearning.org.uk



STEM Ambassadors

Three STEM Ambassador Hubs in Scotland are part of the STEM Learning UK Network and support volunteers from a range of backgrounds to inspire young people to pursue STEM studies and careers. Science Connects, based at Glasgow University is the West Hub and Aberdeen Science Centre represents the North Scotland Hub.

Aberdeen Science Centre www.aberdeensciencecentre.org

Science Connects www.scienceconnects.org.uk

STEM Learning www.stem.org.uk/stem-ambassadors



Building a Legacy 2019

Visit the Academy9 website: bit.ly/academy9