'We can see a castle from our classroom': Academy9 – an opportunity to deliver social value through archaeology along the A9 road corridor

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¹ About – Academy9 (glowscotland.org.uk)

Students road-testing potential careers in the infrastructure sector with the help of professionals (All photos: Transport Scotland) Over the last two years we have been fortunate enough to work alongside colleagues to deliver 'Academy9', an educational initiative from Transport Scotland linked to the A9 Perth to Inverness Dualling programme.¹ Social value is at the core of Academy9, with its commitment to enhancing community benefits by reaching out to young people along the A9 Dualling corridor through Science, Technology, Engineering and Maths (STEM)-related skills and experiences linked to road design and construction. Having a live infrastructure project on their doorsteps brings a unique opportunity for pupils to experience what jobs in the infrastructure sector could be like. With teams of engineers, surveyors, landscape architects, environmental scientists, ecologists and archaeologists in place to deliver the A9 Dualling programme, Academy9 provides opportunities for pupils to learn about STEM-related careers with real-life support and guidance from industry professionals.





Primary school pupils analyse lithics

Academy9 activities engage pupils of all ages. Events such as Early Birds (ages 6–7) and Roadshow (ages 8–9) provide a real-life insight into the jobs of an ecologist, geologist and engineer/construction worker for primary school pupils. As part of the Apprenticeship Academy event, secondary school pupils (ages 13–14) tackle their own infrastructure project in a team environment. The Next Steps Conference (ages 16–18) helps prepare young adults for life beyond school with skills and knowledge needed to gain employment.

HOW IS ARCHAEOLOGY INVOLVED?

It often comes as a surprise to teachers, and indeed other professionals, that archaeology should be considered a STEM subject. More accurately, archaeology can be described as a STEAM (A for Arts) subject², as it represents a

broader and more inclusive range of interests that link into science, technology, engineering and mathematics. Through this STEAM framework we are more able to show that. at its heart, archaeology is a multidisciplinary subject which weaves its way between humanities and sciences to understand past human lives and experiences. Within an Academy9 context we are therefore able to demonstrate archaeology as a viable career with relevant and diverse applications in contemporary society. Through archaeology, we also aim to capture and reflect the story of the A9 Dualling corridor by connecting pupils to their local historic environment and creating a greater sense of place.

For example, as part of the Apprenticeship Academy, secondary school pupils are tasked

² STEAM at Jacobs | Jacobs



Working with clay to reproduce pictish stones

with building a bridge. During its construction, the pupils must also take into account engineering designs, environmental constraints, sustainability and stakeholder management. As part of this, pupils take part in a workshop designed to introduce the concept of the historic environment as a key consideration within infrastructure schemes. A peat landscape was selected as the focal point because it is a type of local landscape familiar to pupils and one that is likely to be encountered by the A9 Dualling programme. Furthermore, it touches on a range of relevant themes, including carbon storage and climate change, complex ecological habitats and sensitive archaeological landscapes. In this scenario, pupils learn how peat deposits are formed over millennia and how humans have interacted with them over that time. From a science perspective they learn about gathering data in the field by collecting peat core samples for paleoenvironmental material and how past environments can be recreated through an analysis of ancient pollen and insects and through radiocarbon dating.

A particularly enjoyable element of the workshop is giving the pupils the space to apply the scientific knowledge they already have – in this case, the preservation of organic material within anaerobic conditions. Bog bodies preserved with clothing, tools and personal objects are, of course, a popular subject and a dynamic case study to describe this process. Armed with their newfound expertise, pupils move quickly beyond the initial 'ick' and into a critical line of thinking by asking questions and interpreting the evidence. From there they are encouraged to think like archaeologists by



Inspiring young students to think innovatively and broadly about how they can use their skills and interests for future works of social value

gathering data and building a narrative, telling the story of who that person was and how they lived, using the material remains available. When moving on to the bridge-building stage of the Apprenticeship Academy, the environment the pupils have to interact with as engineers has become more complex, but they now have the skills and curiosity to navigate and mitigate those challenges.

MAKING THE PAST RELEVANT

Personalising the past and making it relevant in contemporary society and to communities in general is a key component of archaeology and social value. Through Academy9 we have had the opportunity to help young people form a long-lasting relationship with and an active sense of stewardship towards their local historic environment; an important national

aim within Our Past, Our Future: The Strategy for Scotland's Historic Environment.³ We also have the power to highlight the diversity of the modern world of work and to inspire young people to think innovatively and broadly about how they can use their skills and interests.

As Transport Scotland states "We recognise the importance of social value within major infrastructure projects and actively integrate community benefits through our Archaeology Services Framework. In the Framework, contractors are required to provide specific proposals describing how social value will be secured through the delivery of community benefits such as:

- · Open days and site visits by schools
- Work placements
- Physical/multimedia digital exhibitions
- Active participation of local communities in investigations and post-excavation services

These activities all contribute to fulfilling our social value commitments by creating engagement programmes for local communities and schools."

With credit to Transport Scotland, the Academy9 team and all pupils engaging in Academy9 along the A9 road corridor.

KEY OUTCOMES/MESSAGES

- social value is at the core of Academy9, with its commitment to enhancing community benefits by reaching out to young people along the A9 Dualling corridor
- Academy9 provides opportunities for pupils to learn about STEM-related careers with real-life support and guidance from industry professionals
- archaeology can be described as
 a STEAM (A for Arts) subject, as it
 represents a broader and more inclusive
 range of interests that link into science,
 technology, engineering and mathematics
- storytelling, personalising the past and making it relevant in contemporary society and to communities in general is a key component of archaeology and social value
- archaeologists can use their unique perspective on time to stimulate further thought on climate change, pollution and sustainability
- the social benefit of archaeology and the sense of wellbeing it brings is tangible and immediate

³ Our Past, Our Future | Historic Environment | Scotland | History