

**Case study**

## Supplier skills team: Tomorrow's engineers

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When a group of apprentices took their places in college for the first time in September, they were pioneering a scheme that not only helps redress a major industry skills gap but also offers long-term potential for a professional career in civil engineering.

The eight apprentices are the first recruits to a programme provided by a consortium of consultancies on TfL's Engineering and Project Management Framework (EPMF) and supported by the GLA Supplier Skills Team.

Despite the recession London remains a successful city. It has an annual output of £251bn a year and is consistently recognised as the top place to do business. The success of London's economy has not however been shared by all residents; unemployment and low skills are a huge challenge for London. For example, the Capital has the lowest employment rate in the UK and more than half a million people with no qualifications. In contrast, recent research has identified emerging skills gaps, underrepresentation and an ageing workforce in the transportation and engineering sectors.

Responding to these challenges, the Mayor published proposals for the GLA group and its supply chains to provide at least 1,000 apprenticeships a year in his 2008 Economic Recovery Action Plan. Apprenticeships not only provide access to skilled employment but they also prepare businesses to recover from the recession with highly skilled and motivated staff.

Against this target, TfL has introduced innovative skills and employment requirements in many new contracts to ensure apprenticeship and training opportunities are made accessible to Londoners facing barriers to employment. This work is supported by a 'Supplier Skills Team' which proactively supports suppliers in meeting these requirements. On the EPMF, this approach has led to the development of a new civil engineering apprenticeship scheme.

In an industry which has historically relied heavily on graduates and school leavers with HNC qualifications, few further education courses exist and many young people lack the necessary maths skills. Although the Institution of Civil Engineers (ICE) introduced an apprentice framework in 2009, no colleges were providing it and the consultancies on their own would not have been able to supply the number of apprentices needed to fill a course.

**ARUP****CAPITA SYMONDS**

‘Young apprentices are key to the future prosperity of the capital and it is essential that we continue to invest in and build a skilled workforce to maintain our competitiveness.’

**Boris Johnson, Mayor of London**



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As a solution, a group of consultancies formed a consortium, using their collective demand to support a fully-funded further education class. Mott MacDonald took the lead, joined by Arup, Capita Symonds, Halcrow, Hyder Consulting and WSP UK Ltd.

Working with ICE, the National Apprenticeship Service and the Supplier Skills Team, they invited several London colleges to present proposals to deliver the course before selecting South Thames College. The consortium has worked closely with the college and the other bodies to develop the

qualification in time for the start of the 2010 academic year.

The first cohort of apprentices now spend a day a week in the classroom studying for the Edexcel BTEC Level 3 Diploma in Construction and the Built Environment and Level 3 Diploma in Civil Engineering. The rest of the week is spent in the office or on site in London, putting theory into practice on engineering projects. The three-year apprenticeship leads to the ICE EngTech qualification and the chance to progress to degree-level studies and full professional membership of ICE.



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This is an innovative programme that has succeeded in bringing together civil engineering consultancies from TfL's supply chain and other bodies in a partnership that meets skill requirements and provides young Londoners with training and employment.

Carole Teacher, Group Learning & Development Manager at Mott MacDonald, believes apprentices are an excellent way to develop engineers. 'Recruiting school leavers can create a loyal workforce and makes good

commercial sense,' she says. 'The fact that an apprentice can gain a professional EngTech ICE qualification, followed by an option to take a degree and eventually become fully qualified as a chartered engineer is another great benefit for us and the apprentices.'

'We see the civil engineering scheme spreading to all our main UK offices. In addition, along with other consortium members, we are keen to implement schemes for mechanical, electrical and building services technicians.'



### Learning and earning:

Training on 3D Studio Max as part of their engineering programme at South Thames College

