

SEMATA SUPPORTS SCIENCE SKILLS



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With an annual turnover of over £32 billion, the science industry is hugely important to the UK economy but its future growth may be limited by skills gaps.

DEMONSTRATING THE NEEDS OF SCIENCE EMPLOYERS

As we look to the UK's economic recovery, much emphasis has been placed on the importance of training investment and the value of transferable skills that are needed to secure the future of UK companies. According to the UK Science Industries (Bioscience) Report published by Sector Skills Council, Semta, the UK's 191,000 science employees produce an average of £76,500 Gross Value Added (GVA) – a figure vastly higher than the UK average of just £35,500 per employee. The data reiterates the important contribution the sector is making – and can make in the future – in rebalancing the UK economy.

The report reveals that science employers need to recruit 50,000 people between now and 2016. That is the estimated number required to cater for the sector's projected growth and to replace those retiring. The largest demand will be for people qualified to National Qualification Framework Level 4 and for managers.

Semta's research indicates a 14 per cent increase in employment over the last 12 months, with 48 per cent of employers recruiting during that period. The report also reveals that 31 per cent of graduates, postgraduates and doctorates taken over the last 12 months were recruited from outside the UK.

According to the Semta report, the introduction of new products and services, along with new technologies, are key drivers. Over the next few years they will call for new working practices which will increase the need for highly skilled employees. In addition, new legislative or regulatory requirements will require good management and leadership skills and flexibility within the workforce.

THE IMPACT OF THE POLITICAL AGENDA

Bearing in mind Semta's insight data, the new government strategy for skills and skills investment is vitally important to the sector and the 6,500 science employers we represent. We welcome many elements of the plans. In particular, the review

announced funds for 75,000 adult apprenticeship places per year, reiterating measures outlined in the last Comprehensive Spending Review. This is good news for the science sector, where new technical skills are crucial for growth and for filling skills gaps caused by retirements.

Ultimately, more places will assist in the provision of the additional skilled people that will be needed in the future to ensure the sector remains strong and continues to grow and compete on the global trade stage.

Other changes in the skills landscape, such as the rising cost of university courses, will serve to increase the key role of apprenticeships in ensuring businesses have the skills they need to succeed. This is particularly important given the high proportion of professionals (25 per cent) and managerial roles (23 per cent) working in the sector.

APPRENTICESHIPS IN ACTION

Our role is to stimulate businesses to invest in skills that make them more competitive. So part of our success comes from developing solutions that employers value because they give a real bottom line return.

Apprenticeships not only develop higher level skills, they also provide a healthy return on investment so Semta is helping drive growth in apprenticeship numbers by developing frameworks that meet the needs of employers. These frameworks set out all the elements individual apprenticeships should contain under the Government's new Specifications for Apprenticeship Standards for England and Wales (SASE/W), ensuring the quality and integrity of qualifications is upheld.

With employers and science sector stakeholders, Semta developed a Life Sciences Modern Apprenticeship in Scotland. Designed with career progression in mind, the Life Sciences Modern Apprenticeship Framework allows candidates to progress from Technician to Assistant Scientist through higher levels of working responsibility and educational achievement, up to a Science degree.

Introduced in Scotland last year, employers have already spoken out in praise of the new apprenticeship and the support they received from Semta. HR Director at BioReliance, Louise Rice commented:

"BioReliance are excited about the exceptional efforts and contribution made by Semta. We've seen significant progress and increased confidence addressing the life science educational gaps between academia, government and the commercial industry. This drive and support is so important for life science businesses and will allow us to continue to address skill gaps and the importance of science across the country."

The Life Sciences Modern Apprenticeship has the full support and endorsement of the Scottish Government. To date over 70 candidates have been registered and 26 organisations have employed apprentices, ranging from small to global companies and NHS to universities.

The success of the Life Sciences Modern Apprenticeship in Scotland has already led to the launch of an apprenticeship framework for Laboratory Technicians in England in partnership with Cogent, the Sector Skills Council for chemicals, nuclear, oil and gas, petroleum and polymers. In addition, Semta is working on a broader Science Apprenticeship to be launched in England this year.

Carolyn Mason, Semta UK Policy Implementation Manager, said: *“Semta is taking the lead in driving common working between stakeholders and partners to ensure that science employers get the most effective and efficient support. Our apprenticeship frameworks are a great example and cover the specific skills employers are asking for as well as building transferable competence.”*

SIMPLIFYING THE SKILLS LANDSCAPE

To simplify the skills landscape for its employers, Semta is leading a science cluster of Sector Skills Councils. What this means is that key organisations are brought together to plan and review activity across sectors using science, technology, engineering and mathematics skills. The science cluster is advised by a high powered STEM skills forum which includes representatives from industry, academia and government who agree and prioritise action proposals.

The Science Cluster has four key goals and areas of focus for activity:

1. Research/Labour Market Intelligence (LMI),
2. 14-19 STEM Education,
3. Higher Education,
4. Workforce Development.

In essence, the Science Cluster of Sector Skills Councils is active in representing the employer voice to those responsible for educational policy. Recent activities include working with awarding bodies to review draft GCSEs in Science, to ensure they are rigorous and more oriented to eventual future employment. Individual Sector Skills Councils are also encouraging a more practical, innovative style of teaching for the delivery of qualifications in their sectors.

A key function of the cluster is sharing good practice, and Semta is collecting data on members' current activities. This includes exploring ways in which Sector Skills Councils can work with STEMNET to recruit STEM ambassadors. Here, Semta is targeting newly-qualified apprentices and their employers by sending out STEMNET leaflets with apprenticeship certificates through leading awarding bodies such as EAL. Within the Science Cluster, Semta is driving work to ensure that Higher Education providers have accurate intelligence on employer demand and to increase the number of work placements, particularly among small and medium sized employers.

Understanding the sector's need for higher level skills Semta and Cogent are partnering on a Working Higher Project which is developing a Foundation Degree for Bioscience, leading to further academic and career progression opportunities.

HOW SEMTA CAN HELP YOU

Semta is supporting businesses and the Government, working with the National Apprenticeships Service and the Skills Funding Agency, to put businesses in its sectors at the forefront of a rebalanced economy.

Businesses working with Semta's National Skills Academy for Manufacturing have seen, on average, a 6:1 ratio of return on their skills investment. The National Skills Academy offers a wider range of quality approved programmes specifically designed to deliver real benefits to individuals and their companies. There are programmes and qualifications in Business Improvement Techniques (B-IT), Leadership and Management, Employability, Health and Safety and Technical skills. To support individuals there is an e-learning centre with over 1,000 courses ranging from How to Make Presentations, through to Environmental Legislation and Policy, to Six Stigma. The cost of e-learning modules starts at £5 - £10.

Huntingdon Life Sciences achieved immediate cost savings of £250,000 after implementing B-IT training with the National Skills Academy for Manufacturing. Over 150 employees targeted process improvements as part of their NVQ programme. They delivered bottom-line benefits through the rationalisation of laboratories, better organisation of storage, reduction of floor space and reduced inventory.

Changing standard operating procedures from paper to electronic format alone saved at least £50,000; the cost of archiving was reduced by 85%; rework was reduced, and 20% was taken out of QA auditing costs.

Jane Pearse, Director of Special Projects, said: *“I've never seen such empowerment as I've seen with B-IT. Staff are telling senior managers about the success of their projects, as they are now able to measure success and demonstrate savings. The sense of ownership has been superb. Lean is now firmly part of our culture.”*

Semta works with individual employers to identify and support their individual skills needs. There are four simple steps:

1. Make an appointment with one of our sector experts
2. With Semta's advice and guidance, create a plan which:
 - a. Addresses the skills needs of the individual business
 - b. Identifies sources of training to meet these needs
 - c. Helps them access any available funding to support the training
3. Implement the plan
4. Evaluate the success of the training and consider further skills needs.

To find out how employee skills training can boost your business, contact Semta Customer Services on 0845 643 9001, email customerservices@semta.org.uk or visit www.semta.org.uk

