

# Sector Skills Councils: Working in Wales for Wales

Thematic Report 2: Higher Level Skills

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# 1. Introduction

In 2010 the Alliance of Sector Skills Councils (the Alliance) published a review of all Sector Skills Assessments (SSAs) produced by Sector Skills Councils (SSCs) for each of the four Home Nations. This review identified a number of cross-sector skills issues; the top three issues being: the increasing need for technical skills; higher level skills, and using leadership and management skills to improve overall business performance. This report is the second of a suite of three being published by the Alliance to highlight higher level skills issues in Wales.

The purpose of this report is to make stakeholders and decision makers in Wales aware of higher level skills needs as highlighted within Wales SSA reports; specifically those relating to the priority sectors identified in the Economic Renewal Programme (ERP).

The first report considers technical skills, while the third will look at management and leadership skills.

## 1.1. Sector Skills Councils

SSCs are recognised by governments throughout the UK as independent, employer-led organisations which ensure that the skills system is driven by employers' needs.

SSCs exist to boost the skills and productivity of their sector's workforce. A central part of this process is the production of sectoral Labour Market Intelligence (LMI) which provides the evidence base for skills development. SSC LMI is used to influence policy and strategies, help employers identify current and future skills needs and to guide each SSC's own strategies and action plans.

The sector, or group of industries, covered by each SSC is strictly defined, but extensive collaboration takes place on cross-sector priorities. Details of each SSC can be found on the Alliance's website<sup>1</sup>.

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<sup>1</sup> [http://www.sscalliance.org/Home-Public/SectorSkillsCouncils/SSC\\_Contacts.aspx](http://www.sscalliance.org/Home-Public/SectorSkillsCouncils/SSC_Contacts.aspx)

## 1.2. The Alliance of Sector Skills Councils

The Alliance represents, promotes and supports the work of the 22 SSCs across the UK. Established in 2008, the Alliance is the collective voice of SSCs and has the unique role of positioning them within the UK skills system.

One of the central roles of the Alliance is to facilitate collaborative and cross-sector activity across the SSC network. This report is an example such activity.

In Wales, cross-sector research and LMI is facilitated by the Alliance's Wales LMI Group. Made up of Wales Managers and researchers, this group works to ensure that Wales-specific issues are addressed as far as is practical. The group takes its direction from an action plan which the Alliance annually agrees with the Department of Children, Education, Lifelong learning and Skills (DCELLS). The group meets quarterly to review progress, receive relevant reports and to give such direction as may be required.

## 1.3. Sector Skills Assessments

Currently, SSCs are required to produce annually an SSA report for their sector in each of the Home Nations. Described by the UK Commission for Employment and Skills as being “high quality, robust, authoritative examinations of sector skill needs across the UK”, each SSA provides details of the drivers of skills demands; current skills needs; and what lies ahead.

## 1.4. Report structure

Each SSC contributed to the production of this report by submitting evidence of higher level skills deficiencies within their sector in Wales. Specifically SSCs were asked to contribute a one-page summary answering three questions:

1. What are the drivers of higher level skills in your sector?
2. What are the specific higher level skills needs and occupations in your sector?
3. What action is your SSC taking/planning to take/would like to take in order to address these higher level skills issues in your sector in Wales?

This information has been collated and analysed to provide an overall picture of the current and future needs for higher level skills across the whole Wales workforce. The individual SSC contributions are given in Appendix A.

## 2. Why higher level skills?

As noted in section above, the Alliance in 2010 carried out a review of the 2009 Sector Skills Assessment reports to identify common cross sectoral themes. Collectively the 23 (as there were then) SSCs ranked the development of higher level skills as one of their employers' three most important skills priorities.

In the corresponding report on technical skills it was observed that technical skills are largely associated with the delivery of products and services. By contrast, higher level skills are generally associated with the development of new ideas, products and services needed to meet the expectations of customers and the requirements of legislation.

Changes in skills levels over the last 10 years demonstrate the increasing need for higher level skills. The overall proportion of the workforce in Wales with NVQ Level 4 plus qualifications<sup>2</sup> increased from 25% to 36% over this time period, while the proportion of employees with no qualifications reduced from 14% to 9%. This trend towards a greater proportion of higher level skills, linked to the growth of higher value-added products, will continue over the next 10 years.

However, it is important to identify which higher level skills carry the greatest economic value for individuals, organisations and Wales itself. Welsh Government (WG) note in the Economic Renewal Programme report<sup>3</sup> (ERP) that it is not practical to predict in detail jobs and skills of the future; the best option is to establish a broad skills base with a strong technology element that can adapt to new circumstances and opportunities. The challenge is to understand what kind of initial skills base will optimally support the development of the future high level skills that, in turn, will catalyse economic success.

Every SSC highlighted the increasing role of technology in delivering the goods and services that society requires. In their evidence they have identified in detail current and short-term future skills gaps and shortages. Like WG, SSCs cannot predict detailed skills needs years ahead. Like WG they believe in the development of a flexible, technically capable workforce that can readily adapt to new technology and circumstances, but they are not able to predict exact skills needs years ahead.

Science Technology Engineering and Maths (STEM) learning is a key element for such a workforce and there is early evidence that after some years of decline, some STEM subjects are becoming more popular choices for students. However, the imminent increase in university tuition fees could act as a barrier for some young people.

As noted in the technical skills report, technical positions are a viable stepping stone to higher level achievements and roles. Vocational pathways could offer many young people an alternative to entering higher education; replacing considerable student debt with an income and the opportunity to gain invaluable work experience while also learning). An individual aged 20 or 21 on such a learning pathway would be in a good position to take advantage of options, such as Foundation Degrees, Higher Apprenticeships and Apprenticeships to gain level 3-5 qualifications.

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<sup>2</sup> NVQ Level 4+ or equivalent. Source: Semta estimates from LFS (ONS 2000 and 2009).

<sup>3</sup> <http://wales.gov.uk/topics/businessandconomy/help/economicrenewal/?lang=en>

## 2.1. Drivers of higher level skills

The following drivers of higher level skills in Wales were identified by SSCs:

### Globalisation

Globalisation was highlighted as a key driver of higher level skills needs by five SSCs: Creative and Cultural Skills, e-skills UK, IMI, Improve and Skillset's Creative Media footprint. Creative and Cultural Skills and e-skills UK both noted the increasing usage of digital technology as an enabler of globalisation. e-skills UK also note that high quality Information Technology and the associated underpinning global infrastructure are critical to the development of global markets. Improve and Skillset (Fashion & Textiles) both cited the ability to relocate production to areas of lower cost labour as a benefit of globalisation.

Globalisation can be an opportunity or a threat, giving access to wider markets but conversely allowing increased competition from foreign competitors. SSCs saw increasing the supply and quality of higher level skills as key to improving the global competitiveness of businesses in Wales.

### Policy, Legislation and Regulation

In Wales, legislation and regulation comes from governments (e.g. Welsh Government (WG), the UK Government and the European Union (EU)) or their agencies, such as the Health and Safety Executive. In certain industries economic regulators ensure that they operate in the interests of customers and the wider community.

New technologies and ways of working are needed to meet increasingly strict environmental standards and failure to comply with legislation and regulation can lead to fines, imprisonment and reputational damage. To avoid such risks, businesses need to have the appropriate high level skills available to ensure understanding of, and compliance with, legislative requirements.

Asset Skills, ConstructionSkills, Energy & Utility Skills, Go Skills, People 1<sup>st</sup>, SkillsActive, Skills for Health, Skills for Justice and Skillset (Creative Media) all noted public policy, whether at a European, UK or Wales level, as drivers of the need for higher level skills. One of the difficulties for industry when responding to government policy initiatives is the often short timescales involved. Given that it can take a number of years to develop a graduate into a fully proficient member of the workforce, this can lead employers to have short-term skills shortages and gaps while they “ramp up” their skilled workforce in response to the policy.

Asset Skills, Cogent, ConstructionSkills, Energy & Utility Skills, Improve, Lantra, Semta, Skills for Care and Development, and Skills for Justice all highlight environmental legislation as a key driver of higher level skills, with many of the remaining SSCs also referring to it.

The financial services industry is very heavily regulated and the Financial Skills Partnership (the financial services SSC) notes a need for technically competent employees in the areas of Financial Services Authority (FSA) Regulatory compliance, complying with the requirements of the FSA Retail Distribution Review and in making returns to HMRC and the FSA.

Many SSCs did not explicitly mention Health and Safety as a skills driver as it is regarded as a matter of “business as usual”, although highly skilled individuals are needed to interpret the legal standards and put in place business processes to ensure compliance.

### Technology

The increasing use of technology to boost productivity is a constant theme across the sectors. Examples include the use of mobile phones to make purchases, the use of online systems to enable consumers to research products and services and the large scale technical developments needed to meet the challenges of the low carbon agenda. Each of these will enable goods and services to be delivered in a more cost effective manner.

The productivity promise of a given technology will only be realised if there are suitable skilled individuals to utilise it in the intended manner.

e-skills UK, the SSC for business and information technology, has a key role to play. The skills it is responsible for are used in virtually the whole of the Wales economy and are a key contributor to improving the performance of Welsh businesses at every level. Research in 2010 by e-skills UK estimated that improving the uptake of IT could boost the Welsh economy by as much as £1.1 billion over the next five years.

In utility services (EU Skills) and telecoms (e-skills UK) the key need is to maintain the skills base needed to operate, service, expand and upgrade existing infrastructure, at the same time as meeting the demands of the new technologies required to meet growing customer expectations and market and political pressures.

In manufacturing, process advancements will lead to increased skills gaps and stimulate a requirement for significant workforce development and increase the need for higher level technical skills.

The National Strategic Skills Audit for Wales (2011, volume 2, p54) notes that technology is not impacting negatively on higher skilled jobs. The substitution of technology/computers for human labour tends to occur in skilled but routine jobs, not where higher skills are required or even in unskilled roles.

### Productivity

Much of the discussion about improving productivity revolves around skills rather than qualifications. Evidence from UKCES<sup>4</sup> shows a rise in the number of over-qualified individuals in employment (e.g. graduates working in a non-graduate roles).

The key policy challenge will be to influence educational choices towards (i) more economically valuable subjects and qualifications and (ii) non-traditional career and learning pathways. Achieving parity in reputation between vocational and academic educational pathways in the eyes of young people and their main influencers (e.g. teachers, parents, etc.) will be central to this.

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<sup>4</sup> Ambition 2020: World Class Skills and Jobs for the UK, 2009

Semta point out that to maintain global competitiveness, greater skills development and productivity improvements are needed, particularly in SMEs. Not only are SMEs a vital input into the domestic market, they are increasingly export driven, with 28% of SMEs in Semta's sectors mainly selling their products to international markets. In terms of global importance, the UK was the seventh largest exporter of high- and medium-high technology manufactured goods in 2008.

### The environment

Operating in a more sustainable manner is a key issue for many businesses which have implications for the skills profile of a sector's workforce. However, many "green" issues will be addressed by re-skilling rather than creating new jobs. This approach was a key theme of the 2009 Low Carbon Cluster SSA report<sup>5</sup> undertaken by a consortium of SSCs. In advanced manufacturing; sectors that use advanced materials such as composites, including aerospace and low carbon (electric/hybrid vehicles), there is a need for greater higher level design skills in terms of both low carbon design and design for reuse and recycling.

Many SSCs identified the need for a "green" mindset among senior staff so that operating in a sustainable manner becomes business as usual.

### The economy

The overall health of the Wales economy can have indirect, but nevertheless significant, impact on skills in many sectors. This particularly applies to those industries which rely on discretionary consumer spending such as Skillsmart Retail and People 1<sup>st</sup>, who between them cover some 235,000 employees in Wales. As the recession reduces disposable incomes, demand for goods and services in a number of sectors has correspondingly fallen.

Consequently, many employers are either reducing their workforce levels or restructuring in a way that requires existing employees to perform new or additional functions, thus requiring new or updated skills.

### Social

The rising expectation of consumers was cited by many SSCs as a key skills driver. Examples include the desire for aesthetically perfect foods and cars with more features. This in turn drives the need for ever more skilled individuals to design, create and deliver the products and services being demanded.

The age profile of the population of Wales is changing, with more older people and fewer younger people. Many employers are concerned that the retirement of the 1960's 'baby boom' generation could see them lose significant proportions of their experienced staff, along with the knowledge and skills that they have built up. Although these retirements appear to offer employment opportunities for younger people, they will need years of training and on-the-job experience to match the skills of those that they are replacing.

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<sup>5</sup> Low carbon Cluster Sector Skills Assessment Report 2009

Conversely, the proportion of young people in the population is falling. ONS data show that by 2020 there will be around 14% fewer 18-21 year-olds in the population compared to 2000<sup>6</sup>; so it is crucial that opportunities exist to up-skill and re-skill existing members of the working age population.

The final challenge is that young people generally prefer to be consumers of technology rather than producers of technology. This was clearly demonstrated in the research by Oslo University<sup>7</sup> which reported that the more developed a country the less interested its young people were in science. Unless this situation can be resolved in Wales future generations will be unable to take advantage of the increasingly technical high value jobs of the future.

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<sup>6</sup> [http://www.statistics.gov.uk/populationestimates/flash\\_pyramid/default.htm](http://www.statistics.gov.uk/populationestimates/flash_pyramid/default.htm)

<sup>7</sup> ROSE: The Relevance of Science Education (ongoing)

### 3. Economic Renewal Programme

WG's 2010 report *Economic Renewal: A new direction* speaks of wanting a strong economy “not as an end in itself, but for the integral contribution it can make to the quality of life and the economic, social and environmental wellbeing of people and communities in Wales”.

It goes on to say that “whilst the Government itself makes a significant and direct contribution to the economy in terms of innovation, employment, procurement and capital investment, it cannot create jobs and prosperity in the wider economy. However, it can provide the conditions and framework to enable the private sector to flourish”.

To deliver against these statements WG sets out five priorities:

1. Investing in high quality and sustainable infrastructure
2. Making Wales a more attractive place to do business
3. Broadening and deepening the skills base
4. Encouraging innovation
5. Targeting the business support we need to offer

They have also noted six priority sectors to which they will offer broad support:

1. ICT
2. Energy and environment
3. Advanced materials and manufacturing
4. Creative industries
5. Life sciences
6. Financial and professional services

Minister for Business, Enterprise, Technology and Science Edwina Hart has confirmed she is considering expanding on the current six key sector approach to business support.

In her first interview since taking up her role in the new Labour administration - having been Health Minister in the previous coalition Government - she said that she could potentially add construction, tourism and agriculture to the sector support portfolio.

### 3.1. Skills issues in the ERP priority sectors

The following are the high level skills and occupational issues reported by SSCs for each ERP priority sector.

### 3.2. ICT

It is clear from the table below just how important ICT is to employers with every SSC noting its potential or actual contribution to improving the performance of their sector. This places e-skills UK, the Sector Skills Council for IT and Business, in the possibly unique position of products and services from their sector being business critical across a large proportion of the Welsh economy.

The specific higher level skills issues highlighted by SSCs are given in Table 1.

Table 1: ICT Skills Needs

Skills area	Specific skills needs
ICT Sector	<ul style="list-style-type: none"> <li>• Software Professionals</li> <li>• IT Strategy &amp; Planning Professionals and ICT Managers.</li> <li>• IT project management</li> <li>• Systems architecture</li> <li>• Business process and change management</li> <li>• Security, risk management</li> <li>• Analytics and web / internet development</li> </ul>
Supporting skills	<ul style="list-style-type: none"> <li>• Interpersonal and business-oriented skills together with core technical competencies.</li> </ul>
Industry specific ICT	<ul style="list-style-type: none"> <li>• e-learning solution</li> <li>• Advanced ICT for developing web content and electronic media</li> <li>• Website development skills.</li> <li>• High level digital skills in visual effects, programming</li> <li>• Computer science and creative skills in game art and animation</li> <li>• Computer Aided Design</li> <li>• Online retailing</li> </ul>

### 3.3. Energy and environment

The extent to which new jobs will be created in the low carbon economy is debatable. However, evidence from SSCs points to the majority of skills issues being brought about as a result of existing roles having to adapt to changing demands. However, there are also many job opportunities being created in the conventional energy industry, principally by the need to replace retiring staff.

The specific skills needs highlighted by SSCs are given in Table 2.

Table 2: Energy and Environment skills

Skills area	Specific skills needs
Energy & Environment Sector	<ul style="list-style-type: none"> <li>• Low carbon power generation infrastructure development</li> <li>• Electrical engineers</li> <li>• Commercial managers</li> <li>• Environment impact assessors</li> <li>• Ecologists</li> <li>• Hydro-dynamic modelling</li> <li>• Aerodynamic mechanical engineers</li> <li>• Hydrographic surveyors</li> <li>• Environmental consultants</li> <li>• Subsea designers</li> <li>• Anaerobic digestion</li> </ul>
Industry specific Energy and Environment	<ul style="list-style-type: none"> <li>• Energy management and environmental auditing</li> <li>• Optimising logistics operations</li> </ul>

### 3.4. Advanced materials and manufacturing

Advanced manufacturing is another key enabling industry. In addition to the employment it offers its products and services are important in meeting the aspirations of consumers for increasingly sophisticated goods and services at ever lower prices.

Many environmental solutions rely on advanced materials. ConstructionSkills note the use of energy efficient materials in construction and in refurbishments, and hence the need for high level skills associated with specifying and sourcing such materials. Similarly wind turbines rely on advanced composites and high level skills are needed in their development.

The specific skills needs highlighted by SSCs are given in Table 3.

Table 3: Advanced Materials and manufacturing

Skills area	Specific skills needs
<b>Advanced materials and Manufacturing Sector</b>	<ul style="list-style-type: none"> <li>• Use of advanced materials and processes in aerospace and vehicle manufacture and manufacture of medical devices.</li> <li>• Specifying CAD/CAM architectures</li> <li>• Materials requirements planning (MRP)</li> <li>• Higher level technicians</li> </ul>
<b>Industry specific Advanced materials and Manufacturing</b>	<ul style="list-style-type: none"> <li>• Specifying and sourcing advanced materials</li> <li>• Development of leading-edge technologies: photonics, printed electronics, composites, nanotechnology, biotechnology, etc.</li> </ul>

### 3.5. Creative industries

Both of the creative Industries SSCs, Creative and Cultural Skills and Skillset, note that many of the key high level skills required are those of business rather than the creative process.

The specific high level skills needs highlighted by SSCs are given in Table 4.

Table 4: Creative Industries high level skills needs

Skills area	Specific skills needs
<b>Creative Industries Sector - Business Skills</b>	<ul style="list-style-type: none"> <li>• Management and leadership,</li> <li>• Financial management</li> <li>• Income generation and business development</li> <li>• Monetising creative content</li> <li>• Marketing and communication</li> <li>• Customer service</li> <li>• Higher level business skills for Senior Executives</li> <li>• Executive Producers and senior production talent</li> <li>• Co-production and International co-operation strategies</li> <li>• Experienced directors in TV drama and documentary</li> <li>• Production Managers with high level budgeting and researching skills.</li> <li>• Business analysts and behavioural scientists</li> </ul>
<b>Creative Industries Sector - Technical Skills</b>	<ul style="list-style-type: none"> <li>• Developing content for multi-platforms</li> <li>• Programming and computer science</li> <li>• Creative skills in games animation and visual effects</li> <li>• Engineering skills</li> </ul>

### 3.6. Life sciences

WG defines Life Sciences as encompassing pharmaceutical, biotechnology and medical technology businesses, with wide ranging activities including research, testing, manufacture and the provision of specialist services. Cogent is the lead SSC in this cluster but Semta having a key supporting role.

The skills needs highlighted by SSCs are given in Table 5.

**Table 5: Life Sciences skills needs**

Skills area	Specific skills needs
Life Sciences Sector	<ul style="list-style-type: none"> <li>• Biology</li> <li>• Chemistry (medicinal and analytical)</li> <li>• Bio-chemistry</li> <li>• Pharmaceutical</li> <li>• Toxicology</li> <li>• Microbiology</li> <li>• In vivo sciences - physiology, pharmacology, toxicology, pathology</li> <li>• Clinical research</li> <li>• Engineering</li> </ul>

### 3.7. Financial and professional services

In the financial services, traditional retail banking has been joined by growth in insurance, asset management, funds management and pensions firms. WG characterises this sector as being innovative with home-grown, household names competing with blue chip, multi-national companies.

It is clear from the negative effects of the recent banking crash that a stable and effective financial service sector is needed to provide the finance that businesses need to invest in growth and individuals need for mortgages and personal loans. As with other sectors and clusters, effective delivery and productivity is driven by a range of technical roles.

The specific skills needs highlighted by SSCs are given in Table 6.

**Table 6: Financial and Professional Services skills needs**

Skills area	Specific skills needs
Financial and Professional Services Sector	<ul style="list-style-type: none"> <li>• Translating higher technical knowledge into client understanding</li> <li>• Client-focused verbal and written communications.</li> </ul>

### 3.8. SSCs & ERP Priorities

This section gives a broad view of how SSC activities relate to the ERP priorities while also giving a more detailed view of the types of higher level skills that SSCs regard as being important in Wales. The table below summarises the involvement of SSCs against cluster priorities set out in the ERP.

Table 7: SSCs vs. ERP

Key L = Lead role C = Part of appropriate cluster I = Has an overall interest P = Has a specific, partial interest	ICT	Energy and environment	Advanced materials and manufacturing	Creative industries	Life sciences	Financial and professional services
Asset Skills	P	C	P	P		I
Cogent SSC	I	C	C	P	L	
ConstructionSkills	P	C	P	P		I
Creative and Cultural Skills	C	P	P	C		I
e-skills UK	L	P	P	C		P
Energy & Utility Skills	I	L	I	P	P	P
Financial Skills Partnership	I	P		P		L
GoSkills	I	C	P	P		I
IMI	I	P	P	P		I
Improve	I	P	C	P		I
Lantra	I	C	P	P	I	I
People 1 <sup>st</sup>	I	P		I		I
Proskills	I	C	C	P		I
Semta	I	C	L	P	C	I
SkillsActive	P	P		P	I	I
Skills for Care & Development	I	I	P	P	I	
Skills for Health	I	I	P	P	C	
Skills for Justice	I	P		P		I
Skills for Logistics	I	C	P	P		I
Skillset (Creative Media)	C	P		L		I
Skillset (Fashion and Textiles)	I	C	C	C	I	I
SkillsSmart Retail	I	P	P	P	I	I
Summit Skills	I	C	P	P		I

Clearly every SSC has at least some role to play in ensuring the success of the six priority clusters, with most SSCs having at least one of their sub-sectors referred to by name in the ERP report.

## 4. SSC Interventions - helping solve the problem

In their contributions to this report SSCs highlighted 81 separate major high level skills interventions that they have initiated or brokered in Wales. These interventions are the visible deliverables of SSC activities.

The two largest categories of intervention are ‘Skills Development’ and ‘Qualifications Development’. This shows that over half of SSC interventions are targeted at ensuring employers and learners have access to high quality skills development opportunities and qualifications.

This is consistent with, and supportive of, the ERP priority of ‘broadening and deepening the skills base’, while contributing to priorities such as ‘Making Wales a more attractive place to do business’, ‘Investing in a High Quality and Sustainable Infrastructure’ and ‘Encouraging Innovation’.

Specific examples of interventions include:

- Asset Skills developing Energy advisor L3-4 qualifications and working on the BEST programme with Cardiff University
- ConstructionSkills piloting a leadership and management programme and promoting CPD through HEI links
- e-skills UK offering internships and professional development programmes
- Improve developing a Masters Degree in Food Science.
- People 1st developing a mentoring programme for senior level chefs
- Semta developing science/laboratory qualifications, aeronautic pathways for software and maintenance engineers, and a marine technician pathway.
- SkillsActive obtaining over £40M in ESF funding for Work Based Learning and foundation degrees.
- Skills for Care and Development developing the new Social Worker career pathway
- Skillset are funding a number of high level skills interventions in their Creative media industries and rolling out the Manufacturing Alliance Toolkit in the Fashion and Textile industries.

The third largest category is that of ‘Supporting Activity’ with around 23% of total interventions. This catchall heading covers a range of activities such as Creative and Cultural Skills working with WG ministers to develop a Wales Digital Skills Strategy.

Other examples of Supporting Activity include EU Skills developing an on-line database to match qualifications and EU Skills recognised training programmes to job specifications; Lantra facilitating engagement between university academics, industry and levy companies with a specific focus on innovation and technological change; Proskills working with Swansea Metropolitan University to establish a glass cluster for Wales; and, Skillset running a number of Enterprise workshops within Wales for Fashion and Textiles employers.

Supporting Activity interventions are consistent with, and supportive of the ERP priority of ‘Broadening and deepening the skills base’. Equally it can be argued that interventions such

as the Sema/Toyota initiative make Wales a more attractive location for firms associated with the motor industry (ERP: *Making Wales a more attractive place to do business*).

# 5. Conclusions

One of the key findings from this work is the large number of specific higher level job roles highlighted by SSCs as being important to their employers and in demand. Even in a summarised form, SSC list some 106 individual higher level skills that employers regard as critical to their business and that are not readily available. In some cases the headline skills set breaks down into a number specialities, each of which has a different training and development route. These high level skills are vital in developing new products and services in response to market and legislative demands.

Each role represents an employment opportunity, either for a workless individual or one wishing to progress and develop.

Therefore, development and career pathways (including funding streams) need to be flexible enough to accommodate the needs of both new entrants to the labour market and those already in labour market and looking to change careers and/or sectors. This is particularly important when enabling sector-specific solutions, as the skills needs and related solutions of one sector may not be appropriate for other sectors.

In spite of rising unemployment, anecdotal evidence suggests that employers are still finding it difficult to find the skilled workers that they need<sup>8</sup>. This is evidenced by those SSCs that have recently submitted evidence to the Migration Advisory Committee (MAC) on the need to recruit skilled workers from outside the European Economic Area. The SSCs that made submissions to the MAC were Energy & Utility Skills, GoSkills and Skillset.

Employers are willing to train their workforce in the job specific higher level skills that they require but they note that such training will only be properly effective where the trainee has sufficient science and technology gained from their previous learning. They also note that they value individuals with a sound technical understanding of their industry as candidates for developing higher level skills.

The challenge is to find ways of equipping individuals of all ages and backgrounds in Wales with the higher level skills that they require to take advantage of the range of roles on offer.

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<sup>8</sup> National Employer Skills Survey 2009

## 6. Appendix A - SSC Contributions

### Asset Skills

Asset Skills is the Sector Skills Council for facilities management, housing, property, planning, cleaning and parking.

#### What are the main drivers of high-level skills in your sector?

- Within the Asset Skills footprint in Wales a high proportion of staff within Professional (77%) and Associate Professional (63%) occupations are qualified to Level 4 and above, as are a significant number of Managers and senior officials (53%).
- The need for higher level skills is driven by certain occupations. Within the property industry for example nearly all Town planners (97%) and the majority of chartered surveyors (80%) in the UK are qualified to Level 4 and above.
- Regulation around low carbon commitments is a significant driver of higher level skills in the Asset Skills footprint with roles emerging in the property industry in particular around energy assessors and advisors. It is possible to gain qualifications in air conditioning inspection and non-domestic energy assessment up to Level 4 for example, which is significant when considering that in Wales there is a commitment to reduce greenhouse gas emissions by 3% from 2011.

#### What are the specific higher-level skills/occupational needs?

- There is a requirement for higher level skills across a number of different Asset Skills occupations, such as Town planners, chartered surveyors and housing officers. In all these occupations the majority of employees across the UK are qualified to Level 4 or above.
- Requirements around low carbon commitments are likely to create a need for skills around energy management and, more specifically, within energy advisor roles.
- To ascertain some of the future needs with regard to low carbon / sustainability skills, Asset Skills is working with Cardiff University Welsh School of Architecture on the development and delivery of an ESF funded project (BEST - Built Environment and Sustainability Training) as a joint sponsor specializing in the cross cutting theme of existing build and related skills needs in terms of on/off site construction, energy, waste and water.

#### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- Asset Skills SPFP project in collaboration with Construction, EU and Summit Skills to develop and deliver the new Energy Adviser (Non-Domestic) Level 3/4 qualifications will meet the skills need for commercial energy advice.
- Asset Skills' planned work with Cardiff University Welsh School of Architecture on the development and delivery of the BEST project as a joint sponsor will result in the development of training for the facilities management and housing industries in response to initial research with employers around the low carbon / sustainability agenda.

### Cogent

- Cogent is the Sector Skills Council for the Chemicals, Pharmaceuticals, Nuclear, Oil and Gas, Petroleum and Polymer industries.
- Nuclear, Petroleum, Polymer, Chemical and Pharmaceuticals industries are strategically important to Wales and collectively represent 5% of employees and 6% of the sector's employers in the UK.
- The nuclear industry is localised in the North West with two facilities. In Gwynedd, Trawsfynydd Power Station is a decommissioned reactor; and in Anglesey, Wylfa Power Station is currently licenced to operate until 2012. Nuclear generation in Wales supplies the equivalent of 40% of the nation's electricity needs.
- Polymer and Chemicals companies cluster in the south of Wales around Cardiff, Swansea and Newport, and in the north around Wrexham. Petroleum refineries are located at Milford Haven and Pembroke. Waterson hosts an oil storage and jetty facility, with two new additional Liquefied Natural Gas (LNG) facilities under construction.
- In the key strategic areas of Pharmaceuticals, Medical Technology and Biotechnology (that is Life Sciences) Wales is home to 8% of UK employers.

#### What are the main drivers of higher level skills in your sector?

- The main drivers, at a general level, are new and emerging technologies, and the high degree of safety regulation that characterises the Cogent footprint.
- In October 2010, the government published a revised draft National Policy Statement (NPS) for nuclear, listing eight sites as potential locations for civil new build, including at Wylfa on Anglesey. This raises a further specific and economically important driver that now depends on planning, regulation and investment decisions.

#### What are the specific higher level skills/occupational needs?

A range of engineering and project management skills are required. They include: Geotechnical Engineering, High Integrity Welding, Planners and Estimators, Design and Manufacturing Engineering and Control Engineering.

#### What action is your SSC taking/planning to take/would like to take in order to address these higher level skills issues in your sector in Wales?

- Implications and recommendations for nuclear new build at Wylfa on Anglesey will be specifically considered in the *Illuminations* nuclear report to be published by Cogent in the first quarter of 2012. This will assess the regional issues including the engagement of the local supply chain and training providers.
- Development of the process industry chain benefits in Wales, as elsewhere, from the expansion of the Gold Standard competency framework.

## ConstructionSkills

ConstructionSkills are the Sector Skills Council for the construction industry.

### What are the main drivers of high-level skills in your sector?

- Legal: Environmental/Sustainability legislation and targets, Welsh Assembly Measures, Welsh Assembly Legislative Competency Orders, Health and Safety legislation.
- Environmental: Waste, Planning/Zero carbon targets, Climate change.
- Technological: Modern methods of construction, Energy infrastructure, Low - zero carbon technology, Offsite manufacture.
- Economic: Public deficit, availability of finance, energy prices, recession.
- Political: Welsh policy e.g. One Wales, Welsh Assembly election in 2011, National Policy Statements, e.g. Energy, Housing Policy, possible introduction of tuition fees.
- Social: Rising unemployment, ageing workforce, housing shortage, image construction industry, immigration/migration.

### What are the specific higher-level skills/occupational needs?

High quality leadership and management skills and low carbon design related skills will be important. Some sectors and occupations are likely to have significant skills gaps, shortages or possibly both:

- Construction Managers and Supervisors (all sectors - skills gap);
- Architects (all sectors - skills gap); low carbon design skills and material specification.
- Installation of solid wall insulation (Housing R&M - skills shortage); improving the energy efficiency of existing housing
- Installation of micro-generation measures (Housing R&M and new build - skills gap and shortage);
- Building low carbon power generation (Infrastructure - skills shortage and gap). Also skills gaps in nuclear power construction.

### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

ConstructionSkills in association with its stakeholders has a Skills Action Plan for Wales, which is submitted to Welsh Assembly Government quarterly. Activities detailed include:

- Pilot Management and Leadership projects through DCELLS;
- develop stronger partnerships between HEIs and CSkills; work with industry and professional bodies to identify priorities for HE qualification development;
- promote CPD and upskilling through links with HE;
- implement Professional Services in the Construction sector action plan;
- promote NCC courses and the Working Well Together programme;
- arrange WCSG feedback on H&S strategy;
- fund and deliver the SPF delivering low carbon project;

- promote Construct Wales to encourage rethinking of supply chain construction principles;
- support the BEST project by encouraging industry interaction with HE;
- identify and develop key low carbon/sustainability stakeholders

### Creative and Cultural Skills

Creative & Cultural Skills is the Sector Skills Council for Craft, Cultural Heritage, Design, Literature, Music, Performing, and Visual Arts.

#### What are the main drivers of high-level skills in your sector?

- Globalisation: Increasing levels and standards of global competition.
- Technology: Increased use of digital technology in business<sup>9</sup>.
- Growth: The creative industries have been identified by the UKCES<sup>10</sup> as an emerging growth sector to be investigated further as such.
- Skills mismatches: 60% of jobs in the creative and cultural industries are classed as 'associate professional or technical', i.e. specialist skilled roles yet many Individuals within these industries have at least one degree. In spite of this the rate of skills shortages and gaps is significant

#### What are the specific higher-level skills/occupational needs?

- Management and leadership skills
- Financial management skills
- Income generation and business development skills
- Marketing and communication skills
- Customer service skills
- Digital skills

#### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- Worked in partnership with Skillset and e-skills UK to develop digital strategies and lobby Ministers around the Creative Industries Review
- Six monthly meetings with DCELLS Head of Sector Qualification Strategies and Reform SQS Action Plan for Wales updated on the Action Plan database
- NOS development process and consultation activity agreed with DCELLS Qualification and Learning Group. Evidence of consultation in Wales submitted at the end of each NOS project
- Principal Learning in Creative & Media Qualification implemented from September 2010
- Regular bulletins sent to SSC point of contact & careers advisor network regarding apprentice posts, attendance of Careers Wales events, expression of interest sent to

<sup>9</sup> BIS (2009) Digital Britain Final Report.

<sup>10</sup> UKCES (2009) Skills for Jobs: Today and Tomorrow – The National Skills Audit for England 2010.

partake in Apprentice matching service pilot, meeting held with CareersWales senior managers about initiatives and Creative Choices web tool.

### e-skills UK

e-skills UK is the Sector Skills Council for Business and Information Technology.

#### What are the main drivers of high-level skills in your sector?

- Workforce growth: employment in IT & Telecoms professional occupations is forecast to grow at 1.13% per annum to 2019; four times the Wales average. The workforce is highly skilled with 44% of IT & Telecoms professionals working in Wales already holding a degree level qualification. Growth will drive the demand for higher level skills
- Globalisation: The world is changing at an unprecedented pace. Globalisation, technological advances and the growth of emerging economies present intense challenges to all sectors of the economy. Technology systems provide effective access to global markets, fundamentally changing the products and services that organisations offer and the way they need to operate.
- Global outsourcing may limit entry level opportunities in the UK. However the collective benefits of lower development and delivery costs are expected to improve the affordability of technology solutions and increase the overall demand for higher level skills.

#### What are the specific higher-level skills/occupational needs?

- Strongest growth is in high skill areas of Software Professionals, IT Strategy & Planning Professionals and ICT Managers but with a more rounded and highly developed skillsets incorporating interpersonal and business-oriented skills together with core technical competencies.
- There is an increasing need for customer, consumer and business-oriented skills as well as sophisticated technical competencies.
- High level security and data protection skills to enable them to develop integrate and maintain security solutions across many different systems and applications.

#### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

The sector solutions supporting the development of higher level skills for the IT & Telecoms sector in Wales include:

- The Information Technology Management for Business (ITMB) degree piloted by the University of Glamorgan who adapted their curriculum to meet the ITMB criteria.
- e-skills Internships are being rolled out in partnership with Welsh HEIs.
- Working with HE Sector in Wales to promote Higher MAs and develop foundation degrees.
- The e-skills professional programme is also available to employers in Wales to fast track new recruits hoping to move into high value areas such as project management, change management, business analysis or solution design.
- In Wales we would like to create a self-sustaining Skills Academy for IT geared towards the needs of employers particularly in delivering the higher level skills needs of the workforce.

## Energy and Utility Skills

Energy & Utility Skills (EU Skills) is the Sector Skills Council for the gas, power, waste management and water industries.

### What are the main drivers of high-level skills in your sector?

- EU, UK and Welsh energy policies (e.g. low carbon transition plan). Carbon reduction targets and sustainable energy production policies are key drivers of higher level skills.
- UK and Welsh waste policies (e.g. the waste strategy). Waste reduction and resource management policies are key drivers of technical skills. Towards Zero Waste sets out Wales' plans for resource management and its plans for upskilling the waste management workforce to manage waste as a resource that can be beneficially utilised.
- A significant proportions of the engineering workforce due to retire over the coming years, replacing these skills and experience will be a significant challenge for the sector.
- Infrastructure replacement, renewal and expansion plans are a significant driver of higher level skills across the utilities.

### What are the specific higher-level skills/occupational needs?

- In the power generation industry: civil engineers, mechanical engineers, electrical engineers, Control & Instrumentation Engineer and control engineers are needed.
- In the power transmission and distribution industry: electrical engineers, power system engineers, design engineers, commissioning engineers and project/proposal engineers.
- Onshore wind: project managers/developers, electrical engineers and ornithologists. Offshore wind: commercial managers, environment impact assessors, ecologists.
- Wave & tidal: hydro-dynamic modelling, aerodynamic mechanical engineers, hydrographic surveyors, environmental consultants, subsea designers, ecologists.
- Waste management: engineers and scientists related to waste treatment and energy from waste processes.

### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- EU Skills is working with Careers Wales to develop upskilling and progression pathways, with Welsh employer case studies, in order to appeal to and attract potential employees to the energy and utility sector.
- EU Skills is developing an on-line database to match qualifications and EU Skills-recognised training programmes to job specifications used by employers. This will allow individuals and employers to plan their upskilling requirements in an appropriate manner.
- EU Skills is continuing to engage with Welsh employers so that the Workforce Planning Model is able to provide the most accurate workforce skills data available for higher level skill sets. This data will underpin the industry's skills strategies going forward.
- EU Skills is engaging with HEFCW and HEIs across Wales at a strategic level to ensure their understanding of the higher level skills needs of the sector.
- EU Skills is further developing its Competence Management System for the waste management and water industries.

### GoSkills

GoSkills is the Sector Skills Council for passenger transport.

#### What are the main drivers of high-level skills in your sector?

- New vehicle motive power/propulsion systems technology.
- EU/UK/Welsh transport legislation/regulation.
- UK-wide transport policy initiatives e.g. proposed electrification of the Great Western Mainline between London and South Wales.

#### What are the specific higher-level skills/occupational needs?

- Rail engineering, construction and infrastructure professionals.
- Transport planning, procurement skills and related occupations.
- Airline pilots and flight engineers

#### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- Review of higher-level provision for the sector in Wales.
- Work with training providers to extend the training offer to the sector. There is limited provision for the sector and we need to grow training provision in Wales.

## Improve Ltd

Improve Ltd is the Sector Skills Council for the Food and Drink Manufacturing and Processing (FDMP) industries.

### What are the main drivers of high-level skills in your sector?

- Regulation and compliance: The regulation of food is a key element of the government's agenda; essentially the focus has been about the quality and safety of the food.
- Environmental pressures: Greater regulation is anticipated as food production and consumption in the UK and world-wide are significant and growing contributors to climate change.
- Compliance with client requirements: Food and Drink Manufacturing and Processing (FDMP) businesses supplying the multiple retailers must ensure compliance with each of the separate auditing system used by the multiples concerned.
- Technology: radio-frequency identification (RFID); genetics and designer genotypes; new or novel products e.g. chilled ready meals, smoothies; high pressure processing (HPP); tetrapaks, nanotechnology and modified atmosphere; increasing consumer choice e.g. online shopping.
- Globalisation and market power - Companies are relocating outside of the UK due to cost advantages.
- Consumer demands: The FDMP industry is almost totally demand-led, influenced by a range of social, demographic and health factors and dominated by consumer choice and market price.

### What are the specific higher-level skills/occupational needs?

- Food Science Technicians: While nominally technicians FSTs are a key source of higher level skills, particularly in quality assurance and new product development.
- Managerial skills: Managers with Industry specific experience; higher level management skills, including business strategy; technical skills, such as marketing, sales and website development.

### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- Wales Food Supply Chain project: harmonising the approach to skills development across the whole food supply chain. The main outcome of the project will be enhanced and coordinated access to provision, relevant and in line with current and future employer needs.
- Foundation Degree(s): Supporting the UWIC funding application to develop a FD in Food Science & Technology and is in discussion with Trinity University to develop a FD for the Food Supply Chain.
- Food Industry Skills Project: Developed a Masters Degree in Food Science that will address the current shortage of food scientists in the industry. This is ready for launch in 2011.

- KITE: A 'knowledge transfer' programme funded by WG and giving SME's in the food industry access to 'subsidised 'food scientists' via the Food Industry Centre.

### Lantra

Lantra is the UK's Sector Skills Council for land-based and environmental industries.

#### What are the main drivers of high-level skills in your sector?

- Technological change and knowledge transfer, climate change, food safety and security, animal health and welfare, low carbon technologies and life sciences
- Introduction of environmentally sustainable farming practices
- Anaerobic digestion/bio-energy is likely to become more popular
- Cloning of animals and in particular the breeding from their offspring
- The impact of new technologies from the introduction of computers and robotics to genetic engineering
- Increasing business efficiency through technical means
- Precision farming - use of Global Positioning Satellites (GPS), soil mapping, yield mapping, variable rate fertilisers
- New methods of crop protection/disease control

#### What are the specific higher-level skills/occupational needs?

- Knowledge and Technology transfer research into new methods and processes, for example, anaerobic digestion and genetic modification
- Higher level technical skills for new production methods
- Need more agricultural engineers
- Harvesting energy through micro generation on farms (water/solar/wind/anaerobic digestion)

#### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- Facilitated engagement between university academics, industry and levy companies with a specific focus on innovation and technological change
- Supported Farming Connect programmes which offer technology transfer advice on climate change and low carbon techniques
- Learning and Skills Improvement Service (formerly LLUK)
- The Learning and Skills Improvement Service is the sector-owned body that aims to accelerate the drive for excellence in the learning and skills sector.

### What are the main drivers of high-level skills in your sector?

- Policies relating to new ways of delivering learning, guidance or information (e.g. For our Future (2009); Careers Wales: A Review in an International Perspective (2009); Libraries for Life: Delivering a Modern Library Service for Wales (2008) and in Archives for the 21st Century (2009))
- Policies relating to technological drivers (e.g. Cymru Ar-lein: Online for a Better Wales; the Libraries for Life programme (2008c); Archives for the 21st Century (2009))
- The Welsh Assembly Government's strategy for raising standards of literacy and numeracy in Wales, Words Talk - Numbers Count (2005) is the Assembly's second Basic Skills strategy and takes forward the agenda set in The Learning Country and has the same fundamental aims as the first strategy
- Demand for bilingualism and Welsh language as seen in Iaith Pawb (2003); the Proposed Welsh Language Measure (2010); Welsh-medium Education Strategy (2010)

### What are the specific higher-level skills/occupational needs?

- Skills relating to the utilisation of e-technology: skills to deliver learning and information to a diverse audience by making use of e-technology; social media; VLEs. For teachers, this is the new world of digital pedagogy where staff must learn to use new modes of e-teaching in order to access a vast number of learners who may be from diverse backgrounds and remotely based.
- Related to this, the demand for advanced ICT skills is also on the rise, with employers demanding that their staff possess knowledge of ICT in relation to web content and doing things using electronic media. The overarching need is for a workforce that is agile enough to learn how to make use of new technology in classrooms, libraries, work based training and all other purposes
- Basic skills of literacy and numeracy as well as ICT skills
- Welsh language skills
- Commissioning skills - specifying and obtaining the correct service is a vital skill, especially when drawing on reduced public funding
- Learning coaching skills - it is anticipated that the role of Learning Coach will increase

### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

See above

## People 1st

People 1st is the Sector Skills Council for hospitality, leisure, travel and tourism

### What are the main drivers of high-level skills in your sector?

- Migration policy: impact on the demand for skilled chefs, increasing need to recruit more from local labour pools and/or deskill operations
- Food Tourism Strategy: the increased focus on 'food tourism' and the promotion and availability of restaurants serving local produce is set to increase.

### What are the specific higher-level skills/occupational needs?

Skills required for senior level chefs (at level 4 Head Chef/Executive Chef) include:

- Food costing
- Storage management
- Food safety management
- People management
- Financial management.

### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- People 1st are working with three other Sector Skills Councils<sup>11</sup> to identify the specific skills required across the food chain in the Plough to Plate project.
- Food tourism presents an opportunity for Wales, but at the same time, it will place more emphasis on up-skilling current chefs. Currently, this is more likely to be undertaken informally, without any structured approach.
- Introduction of the Apprenticeship in Professional Cookery within a simplified entry pathway has reinforced clear entry routes, but it will take a number of years before their impact can be assessed.
- People 1st are carrying out research to develop clear progression routes for chefs within Wales and the Pathways to Apprenticeship programme will help to stimulate demand.
- People 1st have secured funding to pilot the Triple A Programme, a unique training and mentoring programme aimed at senior level chefs
- People 1<sup>st</sup> are producing learning resources designed to help chefs develop and deliver traditional Welsh food and recipes.

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<sup>11</sup> Lantra (land based sector), Skillsmart Retail (retail) and Improve (food manufacturing)

## Proskills

Proskills UK is the Sector Skills Council for the Process and Manufacturing Sector.

### What are the main drivers of high-level skills in your sector?

- Technology: Advancing technology means that many traditional roles are beginning to combine, and there are no longer clear occupational boundaries between (for example) technical and managerial roles in many (especially small) companies.
- Product design and development: especially around environmental impact
- Energy and Efficiency: improving process and product quality are helping companies to remain competitive locally, nationally, and globally. This requires skills at all levels
- Energy: rising prices will require greater efficiencies in process and quality controls and product development at all levels for companies to remain profitable
- Health and Safety: is a priority across the sector, and in many industries, competency must be proved continually through qualifications at all levels
- Aging workforce

### What are the specific higher-level skills/occupational needs?

- Higher-level STEM skills for R&D, process efficiency, sector-specific applications of generic skills (such as engineering)
- It is important to note that many of the higher level technical skills are very specialised, and as such uptake of provision in these areas will not be huge. However, the skills are vital to the survival of the companies in question, and it will be essential to maintain nationally-recognised provision and support.
- The ability to use units of generic skills in (e.g.) customer service or management to complement technical skills.

### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- Facilitated engagement between university academics and industry via the Print and Coatings Forum at Swansea University.
- Working in partnership with Cardiff University on an ESF supported project linked to the development and delivery of low carbon and sustainability provision for the built environment sector.
- On-going research and evaluation of the sector to improve skills and education provision that reflects business priorities.

### Semta

Semta is the Sector Skills Council for Science, Engineering and Manufacturing Technologies

#### What are the main drivers of high-level skills in your sector?

- The introduction of new technologies or equipment
- Development of new products and services
- New legislative or regulatory requirements
- Introduction of new working practices

#### What are the specific higher-level skills/occupational needs?

- In engineering: Professional engineers (all disciplines) and technician skills: design engineers, material scientists, higher level technicians.
- In Science Industries: range of scientific roles, research scientists, technicians, quality control.

#### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- Higher Apprenticeship in Engineering Technology: the pathway is recognised as meeting most of the professional requirements of Incorporated Engineer, is funded in Wales and is accredited by Professional Institutions offering learners the apprenticeship outcome of Professional Registration as Chartered Engineer.
- Practical laboratory skills are a key sector issue. In response a new qualification in laboratory science in scientific manufacturing was created and the Laboratory and Associated Technological Activities qualification updated.
- In response to the Marine Sector Strategy Group request a marine technician pathway has been developed for the marine NVQ level 3.
- Pathways developed for aeronautical software in the Aeronautical NVQ level 3 and for maintenance engineers in aeronautical engineering NVQ level 3.

## SkillsActive

SkillsActive is the Sector Skills Council for Active Leisure, Learning and Well-being, comprising Sport and Recreation, Health and Fitness, Playwork, The Outdoors and Caravans.

### What are the main drivers of high-level skills in your sector?

- The primary drivers of higher level roles are consumer trends, government policy, legislation and funding. Secondary drivers (globalisation and technology) also impact on the sector.
- For sport, fitness and the outdoors, healthy living and the desire to keep fit are key consumer and government policy drivers.
- For the caravan subsector, tourism, the exchange rates, the trend to “staycation” rather than holiday abroad are all key drivers. However rising consumer expectations require more sophisticated offerings which in turn require more high skilled staff.

### What are the specific higher-level skills/occupational needs?

- There has been an increase in the number of undergraduates taking sport science degrees over recent years, without a corresponding increase in graduate level jobs leading to an oversupply of degree qualified candidates who do not have the right skills for available jobs.
- Leisure related posts however were considered far more difficult to recruit for.
- Across the UK, one in two leavers (52%) from SkillsActive relevant courses did not require the qualification they achieved to get the job. Only in 14% of appointments was the qualification a formal requirement for the post in the sector. This compares to 40% of appointments having a formal requirement in the peer group of qualifications.
- Specific skill needs identified by employers include qualifications such as foundation degrees for senior practitioners.

### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- SkillsActive regularly meets with Universities, and subject centres like BASES.
- Glamorgan University, on behalf of the HE sector in Wales, has been awarded funding from the European Social Fund (ESF) to deliver two large-scale programmes. The first covers Foundation Degrees and the second, Work-based Learning.
- HEIs in Wales are currently in the process of bidding to this fund and SSCs have been invited to evaluate their project proposals.
- In relation to Work Based Learning, the aim of this programme is for HEIs in Wales to provide for learners currently in employment.
- Both the above programmes are closely aligned to meeting the higher-level skills needs of the Welsh Assembly Governments’ priority economic sectors. SkillsActive are part of the process.

### Skills for Care and Development

Skills for Care and Development is the Sector Skills Council for people working in early years, children and young people's services, & those working in social work and social care for children and adults.

#### What are the main drivers of high-level skills in your sector?

- The aging population and the use of assisted living technology to enable the elderly to carry on living at home
- The safeguarding of vulnerable people and children and young people is at the heart of all social care work and mandatory registration drives higher level skills needs
- Welsh language skills and the needs of service users for a service in Welsh is becoming an increasingly visible skills need in the sector.
- Mandatory registration, initially of social workers and social worker students.
- The Integrated Family Support Services (IFSS) model.

#### What are the specific higher-level skills/occupational needs?

- The primary focus for the changes in this area is to: "Increase the skills of the work force by providing them with training, supervision and support in order to deliver high quality services to some of the most vulnerable families in Wales."
- New Social Work Career Pathway: The Stronger Families consultation explored ideas for a new career structure. It included the creation of a new professional title - Consultant Social Worker - to encourage and reward those who wish to continue working directly with people who use services, and their families.
- The proposed career pathway is intended to strengthen the retention of experienced social workers in frontline roles. It is also designed to ensure that social workers have the necessary knowledge and skills, and access to learning and support, to help them deliver high-quality services at all stages of their careers. The career pathway caters for newly-qualified social workers, as well as experienced practitioners, and the development of new roles such as the Consultant Social Worker.

#### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- The Care Council (SfC&D) will have a lead role and in ensuring a high quality, continuous professional development opportunities for social workers.
- The Care Council (SfC&D) is also working with the Association of Directors of Social Services (ADSS) Cymru as part of a Social Work Numbers Planning Project and undertaking a Longitudinal Study of Social Work Graduates, as well as an Audit of Child Care and Family Teaching.

## Skills for Logistics

Skills for Logistics is the sector skills council for the freight logistics and wholesaling sector

### What are the main drivers of high-level skills in your sector?

- Technological advancements: There will be a shift from low to intermediate and higher skills across the sector, with a greater need for STEM qualifications.
- EU, UK and Welsh Carbon/energy Policies (environment): Carbon reduction targets and increasing cost of natural resources.
- Consumer demand: greater emphasis on the whole supply chain network means that planning and implantation of supply chain practices will be crucial to handle future demand.

### What are the specific higher-level skills/occupational needs?

- Green Skills' in all occupations: For example, managers will need strong monitoring, reporting and evaluation skills relating to fuel monitoring, carbon footprints etc.
- Planning and administrative skills: e.g. transport managers and traffic office staff will need these to ensure optimal working, and warehouse space needs to be utilized effectively
- Licensed individuals: Transport Managers CPC, ADR and Dangerous Goods Safety Advisor,
- Management and leadership: Improve productivity and direct capital investment.

### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- Development of Higher Apprenticeships in consultation with the sector in order to provide progression.
- We are working with the University of Glamorgan and others to undertake research to assess the demand for, and viability of, a driver simulator. This would upskill the driving workforce and would make a contribution towards the Welsh Assembly Governments targets for carbon reduction
- We are developing various CPD tools for employers from basic paper based delivery through to a high tech IT based development tool based on specific competencies for each of the job roles in our sector. The purpose of a number of delivery methods is to ensure the micro and SME businesses are not excluded.
- We are planning a collaborative project with GoSkills to improve the market penetration and impact of Wales based training providers and HE/FE. The outline plan is to improve their employer engagement skills and increase their impact by supporting them in offering services outside of their own portfolio especially support offered by the Welsh Assembly Government.

### Skillset (Creative media)

Skillset is the Sector Skills Council for Creative Media

#### What are the main drivers of higher level skills in your sector?

- Wales policies: The industry is being driven by the Welsh Assembly Review of the Creative Industries (March 2010), the Welsh Assembly's Economic Renewal Programme (2010) and the Hargreaves' review of the Creative Industries in Wales (2010).
- Innovation is a major driving force especially joining creativity and entrepreneurialism. Introduction of new technologies e.g. High Definition and 3D created skills gaps.
- Globalisation: Welsh Creative Media operates globally with many new opportunities.
- Growth in Welsh Television Production: the BBC has committed to doubling TV network production from Wales by 2016.

#### What are the specific higher-level skills/occupational needs?

The Creative Media Industries in Wales are characterised by a highly qualified workforce. General skills gaps include sales & marketing, multi-skilling, leadership & management, technical skills and Welsh language Skills. Specific examples of skills needed include:

- Visual Effects (VFX)
- Higher level business skills: amongst senior executives
- A shortage of experienced, talented Executive Producers and senior production talent
- Co-production and international co-operation strategies.
- Experienced Directors (TV drama and documentary) and - Production Managers - with high level budgeting and researching skills.
- Programming and computer science, and more creative skills in games art and animation in the computer games sector
- Engineering skills: in manufacture and broadcast the average age of an engineer is over 50.
- The Advertising sector has skills shortages in business analysts and behavioural scientists.
- Welsh language skills for employees and freelancers

#### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- The Skillset Academi+ Programme supported the Leadership for Creative Businesses scheme for senior executives in Broadcasting, Film and Video, Gaming and Software.
- Skillset's Talent Attraction Scheme, co-funded with Creative Business Wales backed by the BBC, ITV, Channel 4 and PACT set up to address a shortage of Executive Producers.
- Skillset Cymru is supporting a high level training programme for Series Producers called The Fast Track Scheme, delivered by DV Talent.
- The Skillset Cymru Training Framework commissioned Initialize Films to deliver the Market Leader Wales Programme to help companies strategise and implement their co-production and international co-operation strategies and Cyfle to deliver a Production Management course addressing budgeting and researching skills.

- Accredited the BA (Hons) Computer Animation and BA (Hons) Animation courses run by the University of Glamorgan.

### Skillset (Fashion and Textiles)

Skillset has responsibility for the fashion and Textiles subsector of Creative Media.

#### What are the main drivers of high-level skills in your sector?

- Globalisation: The sector in Wales has responded to global competition by outsourcing much of its manufacturing, particularly within clothing manufacture. Firms are now concentrating on higher valued added functions within manufacturing, design and wholesaling. Similarly traditional textile manufacturers are moving into technical textile markets such as automotive, aerospace and medical.
- Fast fashion: Firms have to be responsive to the demands of the customer and retailer. Supply chains now see cases of a lag of just 15 days between initial design and items being stocked in store.
- Sustainability agenda: EU legislation has impacted use of raw materials, transportation costs, waste and water use. Conversely employers use sustainable and ethical credentials to market their goods.
- Technological advances: Introduction of computer aided design manufacturing (CAD/CAM), advances in supply chain technology and employers selling directly from source using e-commerce.
- Sector image and an ageing workforce: Only the design sector is seen as attractive. F&T has an ageing workforce with many employees possessing difficult to replace tacit skills nearing retirement.
- The British Style: There is a premium for British produced goods and services in domestic and world markets. Firms are exploiting this demand for British and Welsh produced goods.

#### What are the specific higher-level skills/occupational needs?

- Production and Supply chain management: managing production operations and supply chains across national and international boundaries.
- Branding and marketing: to take advantage of the British style for Welsh produced fashion and textiles goods, branding and marketing skills will be of importance.
- STEM graduates and disciplines: there is a need for STEM graduates in many scientific and engineering occupations, who can produce these innovations.
- Design skills to allow for the development of innovative fashion and textiles products

#### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- The development of a course directory that highlights the available fashion and textiles training provision in Wales. Skillset are looking to run a number of Enterprise workshops within Wales for Fashion and Textiles employers.

- Rolling out the Manufacturing Alliance Toolkit that addresses the broader business skills issues facing manufacturers and designers within the sector.
- Skillset recently hosted a forum for Welsh fashion and textiles employers to identify and prioritise management and leadership issues in collaboration with the SSA findings to take forward.

### Skillsmart Retail

Skillsmart Retail is the sector Skills Council for retail

#### What are the main drivers of high-level skills in your sector?

The economy is the key driver for the sector. This drives consumer confidence and as a consequence their spending patterns. In response this drives retailers to change their behaviour to achieve greater productivity by:

- Sourcing goods at a better price which may mean changing suppliers, driving down factory gate prices or buying from the worldwide commodity markets e.g. coffee
- Investing in technology such as self-service tills, tap and go, phone 'apps', m-commerce,
- Operating through more, or possibly fewer, channels to market
- A second, but just as important, driver is that of customer expectations. Customers are more knowledgeable because of the internet and demand higher levels of service. This includes the very real issue of online goods delivery.

#### What are the specific higher-level skills/occupational needs?

- We have skills shortages for Garment and Food Technologists, Opticians, and Pharmacists.
- We have new skills being sought for occupations related to on line retailing specifically web analytics.

#### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

- Higher level occupations fall under the lead remit of other SSCs but we support the need for an increased emphasis on scientific study in schools. We have also supported the inclusion of these occupations in the MAC lists for immigration.
- We have now two centres in Wales that will be teaching the PLQ in Retail Business at level 3 from September 2012.
- We would like to see the National Retail Programme - the FD in Retailing - offered in Wales. This may be possible as the skills shops expand.

## Summit Skills

SummitSkills is the Sector Skills Council for the building services engineering sector.

### What are the main drivers of high-level skills in your sector?

- The Low Carbon Economy is currently the main driver for higher level skills in the building services engineering sector. There is an ever increasing development and demand for the utilisation of environmental and renewable technologies across all the industries within the sector.
- The delivery of mass market, low environmental impact buildings and energy efficient retro-fitted existing housing stock requires a new approach to sustainable energy provision through innovative environmental design.

### What are the specific higher-level skills/occupational needs?

The key higher level skills for the sector are:

- Architects
- Design engineers
- Design consultants
- Product design engineers
- Environmental systems design engineers

### What action is your SSC taking/planning to take/would like to take in order to address these higher-level skills issues in your sector in Wales?

In accordance with Summit Skills' Sector Qualifications Strategy (SQS) published in April 2008 and in collaboration with relevant HEI, CFE and Professional Institutions, we:

- identify demand for, raise awareness of, and review the provision of foundation degrees in the sector
- identify the demand for HNC/HND provision in Wales
- periodically review the relevant level 4-5 N/SVQs available in the sector and ensure they are flexible enough to meet the demands of the industry
- explore the possibility of having a higher level N/SVQ with core-generic imported management units and then various pathways to accommodate the range of skills throughout the sector
- are developing a higher apprenticeship equivalent to level 4+ skills
- undertake consultation with key industry organisations to consider developing a structured package for progressing staff in-house, to be used by companies in the sector which can then be utilised to contribute to professional recognition with a relevant professional institute and/or used as evidence against the requirements of a level 4/5 N/SVQ.