Enterprise and Learning Committee

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Purpose

The Enterprise and Learning Committee has requested details across SSCs (Sector Skills Councils) of their activity and engagement with HEIs in Wales, the nature of the strategic engagement of HEIs with businesses in Wales and the subsequent impact on local and regional economies.

This paper is from e-skills UK, the employer-led Sector Skills Council for IT and Telecoms, campaigning to make the UK world class in technology skills.

The remit of e-skills UK is to unite employers, educators and government to:

Inform - ensuring that employers, education and government have access to world class market intelligence to support decision-making and investment;

Inspire - improving the image and attractiveness of technology careers;

Educate - helping to prepare young people for successful careers and lives in an increasingly technology-enabled world; and

Professionalise - supporting employers in the development of a world class workforce.

The paper sets out, as background, both the current profile and the future forecasts of economic and employment activity in the IT & Telecoms industry and workforce. It also identifies the work e-skills UK has undertaken to date with education providers, especially HEIs and sets out what e-skills UK's ambitions are for future collaboration in Wales.

The recommendations for further action also follow closely the aspirations and proposed activities with the HE sector set out in the e-skills UK Sector Skills Agreement for Wales.

Background

The IT & Telecoms skills landscape in Wales and across the UK more generally is changing rapidly, driven by technological innovation, the changing business environment and global competition. Many traditional entry level IT professional jobs are being sourced from outside the UK and competitive pressures mean that new entrants to the IT & Telecoms workforce must become more productive more quickly than in the past. The growth in IT & Telecoms employment in the UK is predominantly in high value professional roles which demand sophisticated skills in business, client relationships and project management, alongside deep technical competencies.

Within the IT & Telecoms workforce occupational roles change rapidly and it is difficult for people to understand career options and development routes. The current choices of young people do not support the future growth of the IT & Telecoms sector.

IT related Higher Education remains an important source of talent for the sector's labour force requirements and the vitality of this supply is essential to Wales.

The following points identify some of the future challenges facing the Welsh IT & Telecoms sector - a sector that is not only crucial to the Welsh economy in its own right but also as an enabler for most other sectors of the economy. There are significant opportunities where educational supply, and in particular HE, can provide critical interventions to fix the issues identified.

e-skills UK research (Technology Counts Wales: IT & Telecoms Insights 2008, e-skills UK - publishing date July 2008) shows that:-

The IT sector has been the fastest growing sector in the Welsh economy between 1994 and 2004 with output (GDP) growing at an annual average of 10.1%. Between 2004 and 2014, output growth is forecast to slow but, at 5.6% per annum will still be significantly above the Welsh average (2.1%).

(The Sector Skills Almanac Wales 2008, SSDA, 2008)

Additionally in Wales IT industry employment is expected to grow by 2.5% per annum over the coming decade, four times faster than the average employment growth.

Recruitment demand for IT & Telecoms professional job roles in Wales will require an average of 3,200 new entrants a year through to 2012, the majority of whom will fill increasingly complex and high added value roles.

62% of IT & Telecoms professionals in Wales hold a qualification at undergraduate level (Level 4) or higher. The strong preference of employers of IT & Telecoms staff is to recruit experienced people and where recruitment is from education, graduates.

The IT & Telecoms workforce in Wales suffers from severe gender imbalance, comprising only 15% women.

There has been a massive drop off in the uptake of computing degrees over the last five years; UK applicants have dropped by 50%, down to 13,500 people by 2006.

In Wales in 2005, 510 new graduates entered the IT workforce within six months of graduation of which 46% were from Computing or Telecoms degrees and 54% from other degree disciplines.

Work undertaken to date by e-skills UK and recommendations for future action.

Within e-skills UK's Sector Skills Agreement for Wales there are three objectives to ensure employer demand in the IT & Telecoms sector is met, namely:

Objective 1 - To galvanise the attitudes and aspirations of those in education to enter a career in the IT & Telecoms sector.

HEIs, in partnership with employers, can play an important role in working with schools to encourage young people to study IT.

For example Trinity College Carmarthen and the University of Wales Newport have supported the Computer Clubs for Girls (CC4G) programme in Gwent and Pembrokeshire respectively and in addition Cardiff, Swansea, Glamorgan and NEWI computer science departments have all stated that they interested in supporting the clubs.

CC4G was devised and supported by e-skills employer fora across the UK in order to help address the imbalance of women in the IT workforce. This programme was piloted in Wales and first year funding was given by Welsh Assembly Government to schools that wished to pilot the clubs in 2007/2008. The clubs allow girls to access free computer software and apply it in a context that suits their interests. The ethos of roll out in Wales was to include stakeholders in supporting the clubs. To this end HEIs are invited to support clubs in their areas.

Recommendation 1

e-skills UK will encourage continued HEI engagement with CC4G over the next three years. In addition HEIs could consider running employer supported workshops for school pupils.

Objective 2 - To ensure that undergraduate programmes are fit for purpose

Collaboration between employers and HEIs can inform undergraduate curricula so that it both meets the needs of business and the Welsh economy.

For example the ITMB - Information Technology Management for Business Degree has been developed by e-skills UK, employers and HEIs in order to address the needs of employers to recruit graduates with the right skills. The aim of the degree is to ensure graduates on completion of their degrees have the skills and attributes that employers require. The new degree is setting new standards in attaining best of breed results in terms of high achieving students, appealing to women as well as men, and improving degree completion rates and student employability.

In the light of employment growth dynamics in Wales, there will be a need for increasing emphasis on courses that bring together business schools and computer science departments.

Recommendation 2

The e-skills UK IT & Telecoms employer forum for Wales strongly supports the introduction of this undergraduate degree programme in Wales

Working with HEFCW and Welsh Assembly Government e-skills UK is seeking funding to pilot the ITMB degree course with two Welsh Universities to recruit students for a 2009 start.

Objective 3 - To develop HE programmes that could contribute to the continual improvement of skills of those within the IT & Telecoms workforce.

With a high percentage of graduates in the IT & Telecoms workforce, CPD (continuing professional development) of this workforce is at the higher skills levels. The vast majority of the training required is currently delivered by private providers. There is opportunity for collaboration across HEIs and employers to develop courses that would not only support the up-skilling of the existing workforce but also provide a cost effective solution for employers, particularly SMEs.

Recommendation 3

The Welsh Assembly Government could consider supporting HEIs and SSCs with programme funding to develop relevant CPD short courses.

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