Review of Post-16 Education and Vocational Training in Scotland



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1. Executive Summary

- 1 This Review has been carried out at a time when Scotland is facing a combination of tough challenges demographic changes, growing international business competition, technological developments, the drive to a low-carbon economy and big reductions in public spending for some years ahead. Against that background, the post-16 education and vocational training system is of critical importance to Scotland's ability to achieve sustainable economic success and social mobility.
- The report argues that the post-16 education and vocational training arrangements should be strengthened and better integrated with other parts of the education and employment systems. In addition, Scotland should commit to creating a truly coherent and high-performing system with the individual learner at its heart. A set of 12 key principles define what a learner-centred system would look like and what each of the principles implies. The system envisaged would:
 - Be easy to understand and navigate;
 - · Offer excellent insights on, and access to the world of work;
 - Operate coherently and collaboratively, with appropriate governance arrangements;
 - Operate in a transparent and accountable environment;
 - · Be market-led with strong employer engagement;
 - Be performance driven;
 - · Attract an ambitious and adaptive workforce;
 - Embrace innovation and creativity;
 - · Gain more from current and future technologies;
 - Respond to the diversity of opportunities and needs across Scotland;
 - Offer the country exceptional public value; and
 - Have strong international connections and impacts.
- Lack of transparency is an issue that affects the system at many levels and is impeding the achievement of peak performance. Employers and the wider community should have more influence over what colleges and other providers offer; there should be a system of quality labelling for all publicly-supported programmes; and this review calls for a new system to enable the performance of all learning providers to be publicly compared in a balanced way.
- A new funding model is needed to support the direction that post-16 education and vocational training policy should take in the next decade. Three parties benefit from an effective system individuals, employers and the nation.

Investment in the system should become a shared responsibility among these three groups, as it is now in the system of Modern Apprenticeships. Over time, the current distinctions between further and higher education, and between academic and vocational training are becoming blurred, as innovation, collaboration, flexibility and technology accelerate change. Scotland should anticipate these trends and design a comprehensive strategy and investment / funding system that will support this direction of travel. A system of Personal Development Accounts should be progressively introduced across the post-16 system to put the learner in the driving seat and to create greater flexibility and responsiveness in the system.

- The system that helps people prepare for work, acquire the skills they need, get a job and progress in employment is complex, elaborate and hard to navigate. Employment policy and services including the work of Jobcentre Plus are largely a reserved matter for the UK Government. Employability and training for employment are the partial responsibility of both the UK and Scottish Governments. Skills strategy, policy and delivery in the public sector are devolved responsibilities of the Scottish Government. There is a widely recognised need to design and build a more unified and robust employment and skills system to support economic inclusion and help advance sustainable economic growth. The Scottish and UK Governments should negotiate to achieve a more unified, coherent and devolved employment and skills system for Scotland.
- The economic shocks of the past 3 years, together with fresh recognition of the huge opportunities facing Scotland in the coming decade, are creating an environment in which outstanding business leadership is now critical to future growth. More businesses and other employers need to become deeply engaged with the education and training system to help shape its future. This needs to take place at national strategic level, at regional and sectoral level, and through local employer engagement with schools, colleges and other training and employability providers.
- The Scottish Government's strategy for the future of Career Information Advice and Guidance is built around 4 themes strengthening partnership, empowering people, supporting employers and modernising delivery. But the public sector no longer has a monopoly on the supply of these services, as a new generation of online services has now reached the market. The main drivers of change and innovation in both public and non-public services are consumers and markets, culture change, funding models and regulatory and quality assurance. Skills Development Scotland's next generation services, beginning with My World of Work, will bring significant benefits and provide 24/7 access to a wide range of existing and new resources.

- 8 Work experience, placement and internships are a growing feature of the education and employment landscape though they appear less developed in Scotland than in some other parts of the UK. There is strong growth in public/private partnerships in key industries and sectors, and of jointly funded programmes and services. This should be further developed in Scotland.
- Investing in the further growth and development of the workforce will be one of the keys to future economic adaptability and success. With 70% of the 2020 workforce already in work, this area of training and development is just as important as the next generation of apprentices. There are a number of barriers impeding progress in workforce development, including strategic leadership, roles and responsibilities, the funding system, and lack of co-ordination in employer engagement at national, regional and local level. The new public sector lead role of Skills Development Scotland in taking forward workforce development is welcome, but the key will be releasing employer leadership, commitment and investment.
- Achieving greater public value from investment in post-16 education and vocational training is an essential requirement of any and all of the changes recommended in the report of the review. Several areas have been identified for further exploration and action, including:
 - · Harnessing the power and potential of learning technologies;
 - Accelerating learning, teaching and apprenticeships;
 - Effective utilisation of assets and capacity;
 - Collaboration, mergers, acquisitions and shared services;
 - Low carbon and resource efficiency; and
 - Workforce development and Continuous Professional Development.

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2. Recommendations

- 1 The Scottish Government should take the lead, and seek a broad consensus, to create a truly coherent system of post-16 education and vocational training in Scotland with the individual learner at its heart.
- The future, learner-centred system should be founded on the following 12 principles:
 - Is easy to understand and navigate;
 - Offers excellent insights on, and access to the world of work;
 - Operates coherently and collaboratively at local / regional level with appropriate governance arrangements;
 - Operates in a transparent and accountable environment so that learners, employers and communities can drive provider responsiveness and continuous improvement;
 - Is market-led with strong employer engagement throughout;
 - Is performance driven with a clear focus on outcomes and impacts;
 - · Retains and attracts an increasingly ambitious and adaptive workforce;
 - Embraces innovation and creativity;
 - Gains more from current and future technologies;
 - Is responsive to the diversity of opportunities and needs across all parts of Scotland;
 - Offers the country exceptional public value; and
 - Has strong international connections and impacts
- 3 The Scottish Government should consider forming a time-limited Commission to drive forward the transition to an integrated system. The Commission should include the leaders of each part of the existing system, matched by an equivalent number of people representing the interests of businesses / employers, learners / trainees and the wider community. It should consider engaging specialist help in system design and service integration. It should ensure strong connections to both the school and university systems.
- The Scottish Funding Council should provide public information about the system of resource allocation and distribution for further education provision across Scotland, including the rationale for year-on-year changes in priorities and distribution.
- 5 Skills Development Scotland should provide public information about the system of resource allocation for Modern Apprenticeships to different age-groups, sectors and geographical areas of Scotland, including the rationale for year-on-year changes in priorities and distribution.

- 6 Skills Development Scotland should consider introducing an online service for employers and individuals to enable to them to register their respective interests in taking / being a Modern Apprentice.
- The Scottish Government should work with the Department for Work and Pensions and other relevant partners in colleges and local authorities to create an online and telephone-based information resource on student financial support, including connections with the benefits system and the child care system. The creation of such a resource will become even more important as the UK welfare reform programme takes effect.
- 8 The Scottish Government, through its funding agencies, should require all publicly funded learning and training organisations serving local / regional labour markets to consult widely and collaboratively with employers and other stakeholders, and use available national and local labour market information, to annually shape their mix of provision to best meet the needs of the economy and community.
- 9 The Scottish Government, through its funding agencies, should require all publicly funded learning and training organisations (whether offering full time or part-time programmes) to provide online quality labelling on key outcomes, including learner success rates, destinations, wage gain, quality and satisfaction levels of both employers and individuals.
- 10 The Scottish Government, through its funding agencies, should create a new and public institutional performance framework for learning and training providers a balanced scorecard based on their profile of aggregate outcomes / destinations, customer satisfaction levels and quality, balanced against evidence of the economic, social and labour market characteristics of their catchment areas.
- 11 The Scottish Government, through its funding agencies, should encourage and recognise providers who build direct relationships with employers for full-cost or co-invested provision of work-related training, and incorporate that expectation into institutional performance frameworks.
- 12 The Scottish Government, through its funding agencies, should encourage and support more active collaboration between providers (both at local level and across the country) to ensure that the mix and quality of education and training is best matched to economic and employment needs and opportunities.
- 13 The Scottish Government, through its funding agencies, should support the trading or transfer of expertise and provision between providers at local / regional level to achieve the best match between supply and labour market needs.
- 14 The Scottish Government should undertake a fundamental review of how post-16 education, vocational training and workforce development is financed. The system brings benefits to individuals, employers and society, so the funding for the

system should be the shared responsibility of individuals, employers and the public sector.

- A revised funding model should be founded on a clear and transparent set of objectives which is consistent with the strategic direction of policy and designed to reinforce the Government's purpose of sustainable economic growth. The new funding model should be created around a series of nine drivers.
- The funding system should be changed as soon as possible to end discrimination in funding post-16 education and vocational training, including higher education, on the basis of whether the learner is engaged part-time or full time, on-the-job or off-the-job, or provider-based or distance-based.
- Over time, the distinctions between further and higher education and between academic and vocational education and training will become more blurred as innovation, collaboration, flexibility and technology accelerate change. Scotland should anticipate these trends and design a comprehensive strategy and investment / funding system that will support this direction of travel.
- Having considered whether the future funding system should be unified at the national level, unified and then dis-aggregated to regional level, or personalised through a system of Personal Development Accounts that could be held by anyone over age 16, the Scottish Government should take the lead and commission a study, supported by an independent expert group, to consider the options and recommend a way forward.
- 19 As part of that work, a feasibility study on the introduction of a national system of Personal Development Accounts should be commissioned , with a view to its possible introduction in three phases over the next ten years.
- The Scottish Government should continue discussions with the UK Government with a view to securing devolution of the labour market services of Jobcentre Plus and the resources provided by DWP and its suppliers for the Work Programme in Scotland.
- There is a widely recognised need to adapt the existing systems and services to create something more unified and robust, both to support economic inclusion and to help advance economic growth. The UK Commission for Employment and Skills has undertaken a review of employment and skills services in Scotland in parallel with this review. Both reviews share the same recommendations for action to achieve continuous improvement:
 - Coherent information: to increase awareness of the needs of both individuals and employers to improve outcomes and participation rates in provision;
 - Collaboration between partners: through fair and inclusive partnership arrangements than align the goals and resources of the local employment and skills systems;

- Customer focus: that gives communities a voice to influence and engage with tackling local priorities effectively; and the involvement of individuals and employers directly in design and delivery of provision;
- Progression in work: should be focus and ultimate collective goal of the employment and skills system to enable people to move beyond low-paid work.
- The system should be adapted to become high-performing in every part of the country to serve the twin aims of:
 - supporting unemployed people into work; and
- helping businesses that want to grow find and develop their future workforce. Existing employability partnerships should form part of the foundation of a new network of licensed Growth Partnerships at regional / local level to focus on employability, skills, jobs and growth. Partnerships should be awarded a 5-year licence, following open competition, based on a set of published criteria designed to support the twin aims for which they would be set up.
- It is important for Scotland's future that business leaders and other employers become much more significant influencers and players in the skills and vocational education system than is currently typically the case. The scale and reach of public sector institutions can have the effect of crowding out or discouraging employer leadership and investment. More of both is needed. The lessons from the 11 innovative partnerships funded by the Joint Skills Committee, together with the experience of the first round of English GIF schemes, should be considered later in 2011. These lessons should then be used as the basis for the design of a Growth and Innovation Fund for Scotland, directed at attracting business leadership and investment into co-funded initiatives that will accelerate business growth through skills and related investments.
- Scottish Government should, in partnership with the existing 16 Industry Advisory Groups, review and change their purpose and functions. They should change from being primarily advisory, to being about sector leadership to drive skills, jobs, growth and exporting. The best of the 16 are already orientated in that way. Business, not government, should lead these groups. 16 may not be the right number for the future but that will emerge as part of the review process. It will be important that businesses from all parts of Scotland are able to be candidates for leadership and membership of each of these business leadership groups.
- At the regional and local level there are many important roles that businesses of every size can play in the school, skills and vocational education systems. At the level of each local authority (or combination of local authorities) there should be established a Business-Education Network to co-ordinate and extend the wide range of connections that exist (or will be created in the coming years) between businesses, schools, colleges, and training providers. Some places in Scotland already have a vehicle of this kind. The Networks should be co-funded from the private and public sectors.

- Development and implementation work must proceed rapidly on the Scottish Government's Career Information, Advice and Guidance strategy and Skills Development Scotland's work on My World of Work and Career Management Skills in order that the benefits of the investment can be realised by individuals and employers in Scotland as soon as possible.
- 27 Skills Development Scotland should continue to explore private sector investment partnership possibilities for the subsequent products and services that will be developed in the Career Information, Advice and Guidance area, so that constraints on public funding do not impede the development and roll-out of next generation digital services.
- At the appropriate time, a major marketing effort should be mounted to get My World of Work and other new services embedded in every school, college, training facility, employability programme and Jobcentre in the country, and adopted by employers as a resource of choice.
- There are many other countries (such as EU accession countries and others) which would value, but may not be able to create an online service such as My World of Work and Career Management Skills. As a contribution to export growth and internationalisation, Skills Development Scotland should commit some resource, in partnership with Scottish Development International and other public education bodies in Scotland that already have international connections, to explore export opportunities.
- The Career Academies Programme is an interesting and, in England, large-scale programme, jointly financed by businesses, colleges and schools. The only two examples in Scotland are those operated by Anniesland College and Edinburgh's Telford College. It is especially relevant to this review as Career Academies are focused on S4 and S5 and on students in further education. The Career Academies Programme should be reviewed in partnership with the two Scotlish colleges involved and with the leading companies in Scotland that support it.
- 31 The experience of the four work placement programmes financed by the Scottish Funding Council will be of considerable value in considering how to develop work of that kind in the future. The experience of the students and the employers will be of particular interest in helping shape policy and practice for the future. An approach should be made to *ratemyplacement.co.uk* to explore their willingness to provide a service for these SFC funded programmes. Alternatively an online service such as '*rate my placement'* should be created to enable the 2400 students taking part in the current round of SFC funded programmes to record their own experiences and feedback, and to enable all the students to take part in peer-to-peer exchange to help the continuous improvement of the placements over the coming years.

- 32 Skills Development Scotland should be asked to explore the potential for creating a matching and rating service for placements and internships in Scotland; or alternatively of *ratemyplacement.co.uk* actively developing its business in Scotland, possibly in a co-investment package with SDS. *Ratemyplacment.co.uk* is available to businesses and students in Scotland but very few companies from Scotland are listed among the participants, although UK-wide companies operating in Scotland are.
- A new sharper strategic focus on workforce development in Scotland should be based on three broad principles:
 - Support businesses to create more jobs and more highly skilled jobs

Scotland's prosperity depends on how many people are in work, in which sectors they work, how productive they are in work, how competitive are the products and services they offer, and into which markets their products and services are sold. Scotland's business environment, business ambition and business leadership are critical determinants of all five ingredients.

2 Invest in the right attitudes, capabilities and skills

These are the essential elements that help achieve business success and individual performance, and effectively meet the changing needs of the labour market.

3 Use information and incentives as levers to raise employer and individual ambition and investment in skills

There is a real need to challenge and change the way that individuals and businesses perceive skills – from a one-off experience in youth to a lifelong commitment to personal development; from a business expense to a recurring investment in future success. A key role of Government is to enable these changes to take place across the economy – using political leadership and public investment as levers for achieving and sustaining greater investment in skills, and using information to continually inspire and encourage business leadership development, business ambition for growth, investment in people and skills Whatever level of public investment is available should be re-engineered to maximise the leverage it can secure with businesses and individuals.

34 The Framework for Action for Workforce Development has been approved by the Strategic Forum and work is now underway on the Implementation Plan. An important issue, following the election, is to ensure that the policy priorities for workforce development from 2011 are consistent with the Government Economic Strategy and the economic development priorities of the coming decade. Public effort and investment cannot be expected to cover all sectors of the economy, so it is vital to focus mainly on businesses with the ambition to grow, whatever their

current size, in the key growth sectors of the economy, to support their expansion in growth markets around the globe.

The roles and responsibilities of key public agencies and delivery partners at national and sub-national level should be clearly defined and aligned, in terms of goals and outcomes. Measures and incentives should be set that drive ambitious performance, and enable appropriate monitoring of impacts, success and failure. A culture of continuous improvement should be put in place so that accepting indifferent performance become a thing of the past.

It is important to recognise that the role of Sector Skills Councils has, and is changing substantially from April 2011 onwards. The strategy should integrate their new role to ensure that the SSCs complement and enhance Scotland's priorities.

Skills Development Scotland's designation as leader of the implementation of the Framework for Action for Workforce Development is a significant and welcome step forward in providing clarity. It is important that its responsibilities and accountability is specified and well understood by all stakeholders. The continuance of the Skills Utilisation Leadership Group should also be welcomed as it has performed a ground-breaking role in this field over the past 3 years. Its membership may merit review as it enters a new phase in its role and in the impact it wants to achieve.

Lessons can be learned and applied from existing good practice in joined-up, employer-facing work in Scotland and elsewhere in the UK and abroad. Good home-grown examples are the Skills Investment Plan for the Energy Sector, the work of PACE (Partnership Action for Continuing Employment) during the economic turbulence of the past three years, and the partnership between Forth Valley College, Heriot Watt University and the Chemical Industry Association and its employers.

As part of the overall strategy to galvanise industries and sectors to improve the skills and productivity of their workforces, Scottish Government agencies and partners should incorporate into their plans the refocused role of the UK Commission for Employment and Skills (UKCES) and the Sector Skills Councils. The primary role of UKCES is to work with employers, trade unions and public organisations with the aim of significantly raising employer ambition.

From April 2012, Sector Skills Councils will be able to bid into a UK-wide Employer Investment Fund (EIF) held by UKCES, to support sector solutions that meet the particular challenges within their industries. Solutions could be combinations from a range of measures from occupational licensing, levies, procurement and voluntary codes, to group training associations and employer networks. Employers in their sectors are best placed to know how radical these approaches need to be, where action should be targeted to achieve real change, and how effectively to build the capacity and capability of employers to continuously improve, routinely set and

raise standards, and become high performance working organisations. SSCs will want to work with Scottish partners in developing their proposals for the EIF.

Union Learning and Investors in People are both tools that can be further strengthened and re-invigorated as part of an overall strategy to enhance business performance and raise individual aspiration by creating a culture of continuous learning in the workplace.

There is a need to utilise and if necessary supplement existing authoritative sources of high quality, independent, forward-looking labour market intelligence (UK, Scottish, sectoral) and market it through the workforce development system. This will help support strategic thinking, provide planners with common sources of intelligence, and offer individuals access to high-quality information to help them make informed decisions about the development of their career. Identifying the current and future skills required to support business growth and technological changes will help the system work more effectively. Independently commissioned and conducted employer surveys are important to achieve system improvement and target investment appropriately. It is also important for Scotland to conduct benchmarking and evaluation (at international as well as UK level) to assess the country's competitiveness in relation to skills, jobs and growth. The Scottish Government should consider commissioning a National Strategic Skills Audit to build a current intelligence base for investment decisions for the next decade.

Building a common Labour Market Intelligence (LMI) framework across all sectors of the UK economy is widely regarded as an essential building block for the future. UKCES has been working with all sectors of the economy on this endeavour and negotiations are currently underway with Jobcentre Plus about the development of a common LMI framework across their network.

37 Scotland should consider introducing further incentives to promote high performance workplaces and stimulate demand for skills solutions. In England only, the Department for Business, Innovation and Skills (BIS) has launched a Growth and Innovation Fund (GIF). The GIF supports employers to be more ambitious about raising skills in their sectors and improve their development and deployment of workplace knowledge and skills. Employers and their sectoral organisations can apply for investment into employer-led proposals to raise skills levels and business performance through innovative approaches that address a clear market failure or opportunity. The GIF is underpinned by co-investment from employers.

Leading-edge employers in Scotland are eager to create better workforce and skills development solutions than those that are routinely on offer at present. Employers in oil and gas, construction, renewable energy, food and drink, engineering construction, catering and culinary, graphic design, multi-media technologies and chemicals have noted their frustrations with the mainstream systems they currently encounter, and their interest and commitment to co-design better solutions to meet the needs of their businesses and their workforce. There would be a very positive response to the creation of a Growth, Innovation and Skills Fund in Scotland,

initially focused on the key growth sectors. The Fund's remit and regulations should be co-designed between the appropriate government agencies and industry leaders and it should be designed to encourage and incentivise innovation and productivity.

A range of financial tools can be considered as incentives to support investment by employers in skills. These include subsidies, loan guarantees, tax-relief and other tax-based schemes, pay-back clauses, procurement clauses and others. As public funding will be constrained for the next 5 years and possibly longer, the aim should be to develop sustainable models of co-investment which enable the public sector to reduce over time the scale of its commitment to any particular employer or sector.

Co-investment by individuals could be supported through finance for tuition, for example low interest, income-contingent loans or other incentives, channelled through the Personal Development Account, proposed elsewhere in this report.

Based on the evidence of the positive impact of Union Learning Representatives on employee demand for skills development, consideration should be given as to how the approach might be replicated in the majority of workplaces that do not have trade union representation. The 'dialogue' approach advocated in a recent paper by the CBI, TUC and BIS, offers one solution.

Skills Development Scotland and the Skills Utilisation Leadership Group, together with industry leaders, need to make and win the economic argument for greater investment in skills and workforce development in Scotland. As there is strong evidence of the benefits to the individual, the company and the Scottish economy of greater investment in skills, this should be developed as a major marketing and engagement plan over several years, on a scale comparable to the engagement plan for the Low Carbon Economy.

Employers are unwilling to invest in training that does not reflect the skills they want and need. Nor are they keen to buy training from colleges and other providers who only offer one kind of service that fails to match the pattern, pace, content and location that the employer requires. This is a particularly difficult issue in rural areas where the choice of local training provider is inevitably more restricted. Elsewhere, the report covers changes that are required on the supply side of the system so that more employers can source the service they seek.

38 Skills Development Scotland, as lead agency for workforce development has a particularly important role in shaping key messages. A marketing strategy is required that uses all the general and sectoral employer channels and trade unions. A range of marketing channels will be required including on-line multi-media products and social networking.

Employers approach a wide range of organisations for information about employment, skills and workforce development. The imminent review of the Business Gateway contracts offers a good opportunity to re-visit its role in relation

to workforce development. The work underway in Skills Development Scotland to transform its online services to individuals, businesses and communities should be accelerated so that it can become the best-in-class, online resource for everything employers need and want in the workforce development arena.

The Scottish Credit and Qualification Framework Partnership can do more to promote the framework as a simple translation and recognition tool for employers, by making more of the alignment agreements with other UK qualification frameworks and the European Qualifications Framework. Simple on-line tools and communications should be produced that show how Scottish qualifications compare with those from other countries. The more international our economy becomes the more benefit will come from the ability of businesses and individuals to understand comparabilities.

Explore expanding the reach and accessibility of the business mentoring service offered via Business Gateway through partnering with online mentoring services provided by social enterprises. An example is the partnership that the UK Government's Department for Business Innovation and Skills has forged between Business Link and *Horsesmouth* to provide online, mediated mentoring services to businesses that reach employers at times and places of their choosing.

- 39 Ensure the engagement of business right throughout the post-16 system from national boards, committees and forums, through to Community Planning Partnerships and provider boards. Engagement can be drawn from general representative bodies, sector bodies, professional and trade bodies, as well as individual businesses. Another section of the report discusses the issue of employer engagement more generally.
- 40. Taking the lead from The Open University the UK's largest university and the one that offers greatest student satisfaction Scotland should create 'The Open College' to enable post-school education and vocational training to gain the same kind of advantages in performance, flexibility and outcomes. This could be a collaborative venture co-designed with the Open University, colleges, businesses and students. It could become an international college, serving the English-speaking world, and adding to Scotland's internationalisation and export growth.
- 41. Programmes, processes and funding models should be re-designed to enable accelerated opportunities those capable of taking advantage of them, while offering less intensive programmes for those who need more support. The providers, employers and trainees consulted during the review who have introduced accelerated programmes have found significant business benefits from doing so and would not revert to their previous practices.
- 42. The Scottish Government and partners should explore ways in which the capital assets of the post-school education and vocational training system could be used differently and more intensively to serve a larger population of students and to offer flexibility to more people so that they can learn and earn at the same time. The system could operate like other businesses and some other public services with

50 week / 6 day / 15 hour operations. With the added benefit of learning technologies, more people should be able to learn from home and/or work as well as attending an institution or other training provider.

- 43. Commending the principle and practice of cross-boundary collaboration, the public funding system should strongly incentivise innovative approaches on a large scale of the kind already adopted by several colleges, universities and businesses.
- 44. The Further Education Colleges should take the lead to explore the scope for shared / outsourced services with a view to improving customer services, unifying back office and other functions, and saving public funds. It should be noted that unification need not imply centralisation in large population centres.
- 45. The funding system should incentivise acceleration towards low carbon and resource efficiency in education and training institutions and programmes. A knowledge network should be created across the education and training system to share good practice and encourage ever-better outcomes. A carbon measurement system should be created (similar to the system on white goods) to reveal the resource efficiency of buildings and other facilities in the system.
- 46. In order to tighten relationships between learning and training providers and employers, and to enhance the quality and relevance of training, the vocational training system in Scotland should consider how best to enhance the Continuous Professional Development opportunities on offer to its workforce, using the Austrian model as a trigger for discussion.

3. A strategic vision for Scotland's future in post-16 education and vocational training

3.1 The post-16 education and vocational training system is of critical importance to Scotland's ability to achieve sustainable to economic success and social mobility.

The education and vocational training system that serves people over 16 years of age is one of the most important building blocks of the successful economy and inclusive society we aspire to have in Scotland. Public investment in the Further Education Colleges, which are one part of the system, increased from £329m in 2001 to £584m in 2010 – up 77% in cash terms and 37% in real terms. In addition to public investment in the post-16 education and training system, employers and individuals also invest substantial sums of money into parts of the system, demonstrating that this is a system of shared investment and shared commitment.

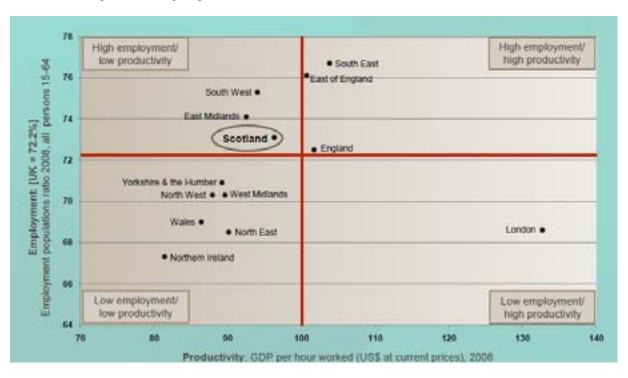
The system plays a critical role in helping young people gain the capacities, skills, work experience and qualifications that will help them become productive and committed workers who can contribute well to Scotland's economy. It also provides an essential resource to help young people in all communities, who have not benefited as much as some from their experience in the school system, to catch up, learn about themselves and the world of work, and embark on a pathway towards personal success. In addition the system supports working adults of any age who need or want to change their job or career, or upgrade their skills. The system is also the prime provider of employability services, information advice and guidance and job entry support for unemployed people and those returning to work after having a family, following an illness or accident, leaving institutional care or prison, and for inward migrants.

The Scottish Government published an update on the Scottish Economic Recovery in March 2010, noting that the support for skills and training designed to mitigate the immediate impacts of the recession was also designed to bring long-term benefits to the Scottish economy, with a focus on upgrading the Scottish skills base, widening options for both individuals and Scottish businesses. The focus on strengthening education and skills sits alongside a commitment to invest in innovation and industries of the future, aligning support across the public sector to

create a flexible, supportive business environment, while supporting jobs and communities.

So there are big prizes for Scotland to win if it can equip more of its workforce and potential workforce with the ambitions, capacities, skills and qualifications to succeed in a fast-changing and internationally competitive economy. The fact that Scotland has a better qualified workforce than any other nation or region of the UK (apart from London and south-east England) should not distract us from the pressing need to align our ambitions and achievements with other small, successful European countries, where we currently lag behind.

Productivity and employment in the UK



Source: UKCES

3.2 The post-16 education and vocational training arrangements in Scotland should be strengthened and better integrated with other parts of the education and employment systems

The current post-16 education and vocational training arrangements supported by the public sector are not truly a system, but a large and complex mix of:

- government agencies;
- colleges and schools;
- training providers in the public, private and third sectors;
- · local authorities;
- · employers and employers' organisations;
- · voluntary organisations and social enterprises;
- trade unions;
- · programmes;
- funding regimes;
- · student support systems;
- qualifications; and
- · regulations.

The 'system' is partly devolved to the Scottish Government, partly reserved to the UK Government (examples being Jobcentre Plus, the Work Programme and the Advisory, Conciliation and Arbitration Service (ACAS), and partly negotiated across the four nations of the UK, (an example being the Sector Skills Councils). It aims to serve the current and future needs of employers which range in size from microbusinesses operating in a single location to the largest, multiple-site national employers with hundreds of thousands of workers across the UK and internationally.

Although not yet a fully developed or integrated system, the current Scottish arrangements include some important and effective building blocks around which a more coherent and effective system could be built, including:

- the Scottish Credit and Qualifications Framework (SCQF);
- the system of unitised academic and vocational qualifications accredited by the Scottish Qualifications Authority (SQA);
- the recently launched web-based service from Skills Development Scotland (SDS), 'My World of Work' (MyWoW);
- the network of 40+ colleges of further education, most of which offer a wide range of opportunities, including higher education qualifications;
- the networks of private and third-sector training and employability organisations and partnerships;

- the UK-wide network of Sector Skills Councils (SSCs) that channel the voice of employers into the design and development of apprenticeships and other programmes;
- the system of Individual Learning Accounts (ILAs), from which 44,500 people on low incomes benefited in 2009-10, attending 53,000 courses to increase personal control and choice over their skills and learning development.

3.3 There are excellent initiatives across Scotland that demonstrate the potential there is to accelerate innovation and collaboration across traditional boundaries

In addition to studying and witnessing the above examples, the Review has seen excellent examples of innovations that cut across existing structures and traditions to create more flexible, holistic and future-focused approaches, for example:

- The award-winning Engineer of the Future programme, a joint venture by the Chemical Industry Association, Forth Valley College and Heriot Watt University that offers accelerated apprenticeships, intense work experience, and university education to young people to maximise the benefits and impact of their learning and training for themselves and their employers;
- The partnerships that The Open University has developed with 350 students in 50 secondary schools across Scotland through which the OU offers access to a broader curriculum, supports the process of transition to independent study, and connects young people to the richness of the OU virtual learning environment including access to its globally-successful i-tunes-U multi-media learning materials;
- The highly collaborative work underway in West Lothian, linking the Local Authority, colleges, schools, Skills Development Scotland and the business community into a common endeavour to create a virtual 'West Lothian Campus'. This is designed to maximize flexibility and mobility across organisations, offer a richer, higher value curriculum, accelerate young peoples' and teachers' understanding of the world of work, and create much greater public value for the investment available;
- The internationally-connected ICT Youth Challenge Programme, run by Highlands and Islands Enterprise (HIE) for the past 8 years, in partnership with secondary schools in the region, in which teams of students compete to devise, build and market innovative ICT-enabled products, applications or services. At the culmination of the competition each June, the 5 final teams spend a residential week together, supported by business experts from ICT, finance and marketing, to win top recognition and outstanding prizes. The technology partners in the programme provide the prizes for the 3 winning

teams which include a week at BT Research Labs in Suffolk, a week at MIT Media Lab in Boston, and a week at Microsoft HQ in Seattle.

These, and other outstanding examples of innovation across the country, show that there is a willingness, indeed an appetite, to design and apply new approaches that go well beyond existing structures, regulations and traditions. But locallygenerated initiatives will not, on their own, bring about the development of the more coherent and transparent system that Scotland needs in order to achieve greater returns on the investment the country makes in its education and training systems. The existing arrangements and structures can make it hard for some young people, their parents/carers, teachers, employers and others to understand the options and choices available, their consequences and implications, and the routes that will be available at the end of a particular stage or course. Evidence heard during the Review points to the need to build a much better system: one that is easily understood, effectively connected, with clear / accessible route-ways through it, leading more people to achieve sustained successful outcomes, and with much deeper engagement from employers of all sizes across all sectors.

3.4 Scotland should commit to creating a truly coherent and high-performing system with the individual learner at its heart

Scotland, as an ambitious country, should commit to creating a truly coherent, high-performing system that will serve our economy and society well over the coming decades. The system should be designed, engineered and built with the individual learner at its heart, so that it is focused on helping each of them achieve their full potential to contribute to Scotland's future. There is no dispute around the contention that young people and the existing workforce are the primary resource to drive our future prosperity, so creating a system that maximises their chances of succeeding is in everyone's interest.

The key principles of the learner-centric system proposed are described below.

Principle	What that means or implies
The future learner- centric system will	
Be easy to understand and navigate	A clear and stable statement of entitlement and obligations for young people aged 16-25 and beyond
	A clear and stable 'deal' between Scotland and its workforce about skills updating and job changing
	A new, and eventually large-scale system of Personal Development Accounts that empowers learners with real customer choice and responsibility to shape their learning future, supported by transformed on-line services such as My World of Work
	Effective and efficient public communication and understanding of the system and how the different parts connect
	Effective and efficient public communication and recognition of achievement in the system
	Effective and efficient tools to enable people to plan and navigate their route-way/s through the system
Offer excellent insights on, and access to the world of work	De-mystify the world of work for learners, parents, teachers, advisers
WOLK	Clarify what employers are looking for in their workplaces
	Highlight sectors and sub sectors likely to experience growth / decline, and locations where future opportunities may emerge
	Create effective systems for work experience, internships, mid- course and graduate placements
	Offer the Further Education and training provider workforce deep and recurring experience of working in businesses in the sectors(s) in which they teach / train
	Co-create, with businesses and employers in all sectors of the economy, online multi-media resources that bring to life the entire range of jobs in the economy
3 Operate coherently and collaboratively at local / regional level, with	A shared system of national and local labour market intelligence to inform and adapt provision
appropriate governance and accountability arrangements	Funding systems encourage and incentivise collaboration not competition
	A core focus and common understanding across the system on work-readiness, employability, and employer engagement
	Learners have good and confident experience of transitions between different parts of the system
	The concept of `return on investment' is routinely built into the design of programmes and courses

4 Operate in a transparent and accountable environment so that learners, employers	Systems for allocating public funding are transparent within the system and outside it
and communities can drive provider responsiveness and	All publicly supported programmes provide quality labelling of key outputs and outcomes to enable informed choice by learners
continuous improvement	All publicly supported providers consult widely and collaboratively each year with their communities and labour market to help shape the mix of provision that best meets the opportunities and needs of the economy and society
5 Be market-led with strong employer engagement throughout	A new 'something for something' partnership deal with employers across the country is one of the foundation stones of a system where employer voice and influence is much stronger at all levels
	A new online, multi-media service, similar to My World of Work is created for employers to integrate the relations between them and the organisations that make up the system
	This online service also enables employers to be consulted by the system; and for their voices to be more influential than before
	A new integrated 'growth offer' is co-designed with micro and small businesses to join up public support and investment in helping them grow their business, workforce and productivity
6 Be performance-driven with a clear focus on outcomes and impacts	Achievement rates in many parts of the system need to rise steadily year on year
	The personalisation driver means that each individual learns at their own pace (many faster) and with more tailored support
	The system becomes much less driven by time-serving to complete a course; and much more driven by the pace of learner achievement, enabling more effort to be devoted to learners needing greater support
	A 'spirit of enquiry' helps all parts of the system to understand drop-out and disengagement, account publicly for results, and use evidence to continuously improve performance
	Funding regimes change to buy the right things and the right outcomes, including:
	 accelerated learning / apprenticeships where appropriate; not just participation but a sustained job, self-employment or further / higher education progression
	Introduce an independently verified system so that the public can see online the performance of each provider for each course over several years
	Political discourse shifts from 'number of starts' to 'number of achievements' or 'number of sustained jobs achieved ' and other progressive outcomes

7 Retain and attract an increasingly ambitious and adaptive workforce	Workforce in the education and training system becomes more diverse with more coming from industry and business backgrounds
	New patterns of teaching and working are developed to allow most college teachers / trainers to work in industry / business half the year and teach / train the other half of the year; with a new qualification that recognises this pattern of work
	Offer people in industry / business / public services / third sector career development opportunities as part-time teachers / trainers
	Create a system for graduates of the Modern Apprentice programme to return to college / training company to inspire and inform the next generation of MAs
8 Embrace innovation and	Go further with the STEM Ambassador programmes and extend to other sectors of the economy, building greater public awareness and recognition for the value of these forms of engagement Incentives and active encouragement for innovative (often
creativity	collaborative) approaches to shaping the design and delivery of future services
	Explore extreme collaborations with very different partners, often in different geographies, to create new models for achieving results – art, design and engineering in the same space, as an example
	Move beyond most of the arcane rules that may once have had a purpose but now constrain innovation and personalisation, for example, age-limits, hours-per-week rules, term-time patterns
	Move beyond the dominance of 'time-serving' in so much of the system; towards personalised and accelerated learning / training, focusing more support on people who need it
	Explore questions such as: 'at what point in time does this college or training centre feel more like the real world of work than the world of school?'
9 Gains more from current and future technologies	Current and future technologies to support flexible and home- based learning are embraced across the sector, becoming a 'game changer' for productivity, engagement and performance
	Scotland builds top-level partnerships with global players in the technology sector to accelerate country-wide adoption of latest learning technologies and shared investment in delivering the benefits across the sector
	All of the information, advice and support systems that serve the sector and its partners are web-enabled for future mobile broadband platforms
	ICT user skills become a 100% mandatory requirement for everyone entering post-16 education and vocational training as a learner and for everyone working in the system

	,
10 Be responsive to the diversity of opportunities and needs across all parts of Scotland	Distribution of public funds across the country is proportionate in relation to the opportunities and needs of local/regional economies, and is transparent
Sectional	National agencies work in close collaboration with local / regional organisations in making decisions on policy and resources
	Greater devolution of some decisions from national level to regional collaborative groups
11 Offer Scotland exceptional public value	Large-scale changes in provider business models to achieve shared (and sometimes) outsourced services across broad spectrum of activity
	Unified application process (not decision-making system) for the post-16 system across Scotland, with a centre of excellence open long hours to provide telephone and electronic support
	Strong encouragement and time-limited incentives for providers to collaborate with schools, other providers, businesses and universities to maximise public value
	The national drive towards a low carbon and resource efficient economy is embraced by all providers and becomes a source of competitive advantage, supported on a time-limited basis by investment incentives
	Providers collaborate with employers whose sectors they serve to find value-adding ways to achieve more for less, with shared benefits
12 Have strong international connections and impact	Scotland's businesses will be building ever-stronger international trade links – the education / training system that works with them does the same
	International collaborations to share curriculum become commonplace
	Centres of deep expertise in sub-sectors and niches offer new international business opportunities (eg marine renewables, oil and gas, chemicals, clean technologies, life-sciences, creative industries, food and drink etc)
	Language skills and knowledge of doing business in other countries more widely learned and embedded
	Connections with EU programmes and countries offer widespread opportunities for international collaborations, including with EU accession states and countries adjacent to EU in North Africa and Middle East
	Opportunities to bring students to Scotland in significant numbers helps education economy and population growth

If Scotland wants to gain greatest economic, social and environmental benefits from its investment in the post-16 arrangements, there is a need to move decisively to create a truly effective system, built around these 12 principles. This is not a business-as-usual proposition. It is a system change proposition. It will require fresh thinking by all parties right across the landscape. The knowledge, skills and experience needed to design, engineer, build and implement a better system exist in Scotland and beyond, and will need to be harnessed to ensure success.

3.4 Here are three inspiring examples of system transformation, chosen from other areas of public service, to illustrate what can be achieved when committed people decide to challenge the status quo, introduce large-scale innovation and build something that is much more effective at delivering results.

Monkseaton High School, North Tyneside

Dr Paul Kelley is headteacher of this pioneering high school on Tyneside and author of Making Minds: what's wrong with education? His overarching principle is that schools ought to apply neuroscientific research to education and transform the way that young people learn. He practices this at Monkseaton High School, as a result of which he has transformed an underperforming comprehensive into a cutting-edge high school that is attracting interest internationally. The new school, co-designed with substantial input from students and staff, is a terrific blend of open plan, open access computing and classrooms. Outstanding sound absorption creates an extraordinarily calm atmosphere in which an English lesson takes place in an open plan gallery area while a game of basketball takes place in the gym below. The research that went into the design of the building discovered that any shape of classroom is better than a rectangle, so there are none of that shape. The school has a constant temperature of 18.5C (known to be the temperature at which teenagers learn best), and the school is filled with interactive light (known to be critical to young people's performance). The school day starts at 10:00am, following the research findings of Professor Russell Foster, Chair of Circadian Neuroscience at Oxford University, showing that teenagers' brains work better in the afternoon and that the internal body clocks of teenagers are such that they work and learn best two hours later in the day than adults.

The school has also introduced a concept called 'spaced learning' throughout the curriculum, based on the theory of how the brain actually creates memory (researched by Douglas Fields of the National Institute for Child Health and Development in the USA). In spaced learning, instead of classes or periods of 45 minutes, there is very different pattern of activity. There are 3 intensive sessions of 15-20 minutes, between each of which is a 10-minute break. In each of the sessions, material is repeatedly presented but in quite different ways, deepening and extending its meaning. The 10 minute breaks are very active periods of physical or musical activity. In controlled trials, Monkseaton has shown that it is possible to teach concepts normally covered over several hours or weeks in about 30 minutes of teaching time.

As a result of these changes, Monkseaton High has seen a 27% reduction in unauthorised absence and an improvement of over 25% in overall school attainment and performance.

West Lothian Criminal Justice System

West Lothian used to have a criminal justice system much like the others around Scotland. It wasn't a system, except in as much as the same customers passed through most parts of it. It was five separate services -Police, Prosecution, Courts, Council, Prisons, (plus Sheriffs, Defence Agents and support organisations in the public, private and third sectors.) Each of the five services was accountable in a different way and each had its own systems and practices. Then, in 2004, the West Lothian Criminal Justice Board, which drew the parties together into a loose collaborative arrangement, decided that it would be in everyone's interests to try to transform the services into a truly effective system that would be better for everyone and deliver much better public value. Using Systems Thinking methodology they embarked on an inclusive approach, and within less than 3 years they had transformed the system's effectiveness and efficiency. The Sheriff Principal who commissioned the project reports: 'not only are the quantitative results remarkable, but staff throughout the system are positive and confident about the changes and do not want to return to the previous arrangements'. Here is a snapshot of 'before' and 'after'.

Before and after

- Average time from caution and charge to final determination 150 days reduced to 59 days
- Average time for any non-court disposal of a case 100 days reduced to 36 days
- Percentage of police reports to prosecutor containing errors that required re-working
 75% reduced to 20%
- Time allowed for submission of these reports
 21 days reduced to 2 days

The West Lothian experience demonstrates the ability of public servants, working within the right inter-agency systems-based environment, to bring about radical and sustainable changes to the effectiveness and efficiency of their services. It has important lessons for the design and management of many public services in Scotland.

Transport for London

Transport for London (TFL) is the public agency charged with delivering the Mayor of London's transport strategy for the capital. It is responsible for creating and procuring / delivering a truly integrated transport system for London that serves the needs of customers and businesses ever more effectively, while at the same time achieving much greater public value. It is the leader of the system, almost all parts of which are delivered by a huge range of partners, each operating within the guiding principles that the system has laid down. Before TFL was created there was no integrated system, but a series of separate services, promoting and protecting their own interests, leaving it to customers to make the best of what was available. Here is a snapshot of 'before' and 'after'.

Before

- Separate systems of buses, underground, trains, light railway, taxis
- A map for each different mode of travel no system map
- Separate tickets required for each different mode no through tickets
- Many ineffective and inefficient transfer points
- No integrated timetables that connected buses with tubes

- No coherent capital investment system to make things better longterm
- Many missing links and inefficient use of existing infrastructure
- No policy bias in favour of public transport users

After

- Even more modes of transport now river-buses, bicycle hire system, safe walking routes as well as the old ones – but all operate within a single system
- A single map for all modes of transport a system map that customers can understand
- A totally unified ticketing system across all modes Oyster supported by great technology, plus purchase and top-up on-line
- Oyster also provides TFL with unrivalled real-time data on changing use and demands on the system, allowing it to adjust and plan changes in provision
- All capital investment now devoted to strengthen system integration and ease of use for customers
- System now highly responsive to changing customer demands and preferences –recently started a new city-wide cycle hire network as a public-private partnership
- Future focused now installing a city-wide system for electric vehicle battery charging
- Customer-focus is key, as TFL now sees its purpose as being much more than a transport agency; it now sees its role as one of the primary systems supporting the economic and community life of the capital

The remainder of this report describes in more detail the main findings of the review and proposals for development and change. However, little of lasting value will be achieved by cherry-picking individual proposals for change. Scotland needs to commit to, and deliver system-wide improvements as a precursor to creating an environment that will actively encourage wide-scale innovation, creativity and flexibility across the country.

The way that this task is approached will be critical to its success. While government commitment to system-wide change will be essential, so will the commitment of all the main players who operate and support the existing services. It will be necessary to build a collaborative process that enables the main interests (including learners and employers) to co-create and co-design the system of the future, built on a common commitment to the ultimate goal of Scotland's economic

success, and founded on agreement to the principles that should underpin the system.

3.5 Recommendations

- The Scottish Government should take the lead, and seek a broad consensus, to create a truly coherent system of post-16 education and vocational training in Scotland with the individual learner at its heart.
- The future, learner-centred system should be founded on the following 12 principles:
 - Is easy to understand and navigate;
 - Offers excellent insights on, and access to the world of work;
 - Operates coherently and collaboratively at local / regional level with appropriate governance arrangements;
 - Operates in a transparent and accountable environment so that learners, employers and communities can drive provider responsiveness and continuous improvement;
 - Is market-led with strong employer engagement throughout;
 - Is performance driven with a clear focus on outcomes and impacts;
 - Retains and attracts an increasingly ambitious and adaptive workforce;
 - Embraces innovation and creativity;
 - · Gains more from current and future technologies;
 - Is responsive to the diversity of opportunities and needs across all parts of Scotland;
 - Offers the country exceptional public value; and
 - Has strong international connections and impacts
- The Scottish Government should consider forming a time-limited Commission to drive forward the transition to an integrated system. The Commission should include the leaders of each part of the existing system, matched by an equivalent number of people representing the interests of businesses / employers, learners / trainees and the wider community. It should consider engaging specialist help in system design and service integration. It should ensure strong connections to both the school and university systems.

4. Building a more open and transparent system

4.1 The lack of transparency is an issue that affects the system at many levels and is impeding the achievement of peak performance. Openness and access to high quality information should be placed at the heart of the system.

As well as building a more coherent and understandable system of post-16 education and vocational training, Scotland should create a much more transparent system than there is now. Throughout the Review evidence has been provided from many sources, and from many parts of the country, that the lack of transparency and understandability in some of the current arrangements is impeding the achievement of peak performance. The lack of transparency is an issue that affects the system, and the people who use it, at many levels.

Examples of lack of transparency at the system level include:

- How decisions are made, and resources allocated and distributed around Scotland for Further Education in colleges;
- How decisions are made, and resources allocated for Modern Apprenticeships to different economic sectors and geographical areas in Scotland;
- The rationale for allocating and distributing most Modern Apprenticeships to training providers, and the consequences of this approach for employers and applicants;
- The rationale for some learning opportunities being free of charge, while
 others charge fees, often depending on the student's pattern of learning (full
 or part time); and the obscure and often contradictory rules in relation to the
 benefits and child care systems;
- The complexity and difficulty that institutions and learners face in understanding, and having confidence in the systems of student financial support;
- The lack of comparative information across the field of publicly-supported learning and training providers about the cost, value and impact of courses, and the success rates of their students in entering employment or higher education in their field of study / training.

Examples at the institutional level include:

- The absence, in most cases, of effective systems to enable potential learners / individuals to access information about previous success rates in different courses in different institutions, and the opinions of previous students about their experiences;
- The difficulty for potential learners / individuals and their advisers in making meaningful comparisons between the courses offered by different institutions in the same sector / curriculum area;
- The lack of transparency of most, but not all providers, in enabling potential learners / individuals to see how much of their preferred course is accessible online from locations other than the institution;
- Lack of publicly accessible information about the cost, value and reputation of courses offered by institutions, thereby limiting applicants' ability to make fully informed choices.

Examples in the employer / provider / learner relationship include:

- Lack of information for potential learners / individuals about the extent of employer engagement in any course being offered by a college or training provider, for example, in the design and development of the curriculum, the nature and extent of work experience, placement and internships, or the success rates of previous students in gaining jobs with relevant employers;
- The negligible level of participation by employers and students in Scotland in UK on-line 'rate my placement' services that enable employers to recruit learners / individuals on placements and internships, and enable students to rate their placement across a range of criteria;
- The lack of accessible information about where employers and apprentices
 can find accelerated apprenticeships; or where employees can find flexible
 learning opportunities that allow them to balance their work and family
 responsibilities with their learning commitments (with the exception of The
 Open University);
- The difficulty facing young people who aspire to become a Modern Apprentice a year ahead, that there will be MA opportunities in their chosen field, in their part of the country, at that time.

The issue of transparency and accessibility to good quality information should be placed at the heart of the system of post-16 education and vocational training. The agencies responsible for investing public funds in the system, together with the provider organisations themselves, should expect to operate at the higher levels of transparency and accountability suggested by the above examples. With the benefit of the insights that come from benchmarking systems, it is easier for

organisations to understand their comparative performance and value-added, and thereby to become more effective and productive. Moreover, society's expectations are growing that information, such as described in the examples above, should be accessible online as a matter of course, both to enable organisations to be properly accountable for their use of public resources, and to enable people to make more informed decisions about where to spend their time and money.

4.2 The UK Commission for Employment and Skills has provided advice to the Scottish Government about ways in which the Scottish system could become more transparent, accountable and performance-driven. The Review endorses the Commission's proposals.

In its advice to the Scottish Government in 2010, *Towards Ambition 2020 : skills, jobs, growth for Scotland,* the UK Commission for Employment and Skills (UKCES) recommended 'building a more strategic, agile and labour-market led employment and skills system'. It proposed that one key component should be :

'Empowering customers and communities to drive provider responsiveness, quality and continuous improvement through the use of outcome-based, public course labelling and institutional scorecards'.

UKCES argued that the content of learning and qualifications should be shaped by the relevant sector, whilst informed customers, both employers and individuals, should drive supply, performance and quality. It also urged the importance of assessing the performance of providers and the whole system on the basis of outcomes and impacts. This means factors such as learner success rates, employment destinations, wage gains over time, employer and learner satisfaction levels, external quality assessments by HMIE. This approach is wholly consistent with the Scottish Government's own approach to national and sub-national outcomes in the wider 'Scotland Performs' framework.

The UKCES made three specific proposals in this regard:

Expect all publicly funded learning institutions in a local labour market to
consult widely and collaboratively with employers and other stakeholders in
their community, and use available national and local labour market
information to annually shape their mix of provision to best meet the needs
of the economy and community;

- Require all publicly funded learning programmes (full and part time) to provide public quality labelling on key outcomes, including learner success rates, destinations, wage gain, quality and satisfaction levels of both employers and individuals;
- Create a new and public institutional performance framework for learning providers, a balanced scorecard based on their profile of aggregate outcomes / destinations, customer satisfaction levels and quality, balanced against evidence of the economic, social and labour market characteristics of their catchment area.

The UKCES's view is that such a framework would provide an effective incentive for continuous improvement, stronger governance and enhanced outcomes. Consequently, its advice to the Scottish Government was to:

- Encourage and recognise providers who build direct relationships with employers for full-cost or co-invested provision of work-related training, and incorporate that expectation into institutional performance frameworks;
- Encourage and support more active collaboration between providers in their local communities to ensure that the mix of education and training offered on local labour markets is best matched to economic and employment needs and opportunities;
- Support the trading or transfer of expertise and provision between providers at community level to achieve a better match between supply and labour market needs.

The UKCES's recommendations are welcome and should be endorsed. They fit well with the thrust of 'Scotland Performs'. They would bring a new level of transparency, accountability and performance improvement to the system. They would further encourage and support the welcome initiatives taken by many providers to build deeper collaborative relationships with other providers and with businesses in their local or regional economy.

The Review commends the work that Skills Development Scotland (SDS) has been developing with its partners and stakeholders in the past three years, in the area of transparency of information, advice and guidance. This has now resulted in the recent launch of 'My World of Work' (MyWoW) that establishes a new future-proofed standard for online services in this area. Though still under development, MyWoW is a good example of the rich benefits that can be brought to the entire

online population of Scotland by a service co-designed by users and professionals together.

If Scotland embraces transparency in its post-16 education and vocational training system, other benefits will follow in its wake, including:

- Understandability making it easier for people to make informed choices, navigate their way through the system, gain best advantage from all that it offers, and secure a better future for themselves;
- Flexibility enabling more people and more employers to engage with the system to match their needs, circumstances, work-life-learning balance and preferred pace;
- Resource efficiency so that the taxpayer and the learner can both be confident that the system always uses their time and money productively;
- **Progressiveness** enabling and empowering people to build their knowledge and capability through many stages of life, with different patterns of participation and engagement with learning providers;
- **Quality and performance** so that everyone who engages with the system can be confident about its efficacy and beneficial impact.

4.3 Recommendations

- The Scottish Funding Council should provide public information about the system of resource allocation and distribution for further education provision across Scotland, including the rationale for year-on-year changes in priorities and distribution.
- 5 Skills Development Scotland should provide public information about the system of resource allocation for Modern Apprenticeships to different age-groups, sectors and geographical areas of Scotland, including the rationale for year-on-year changes in priorities and distribution.
- 6 Skills Development Scotland should consider introducing an online service for employers and individuals to enable to them to register their respective interests in taking / being a Modern Apprentice.
- The Scottish Government should work with the Department for Work and Pensions and other relevant partners in colleges and local authorities to create an online and telephone-based information resource on student financial support, including connections with the benefits system and the child care system. The

creation of such a resource will become even more important as the UK welfare reform programme takes effect.

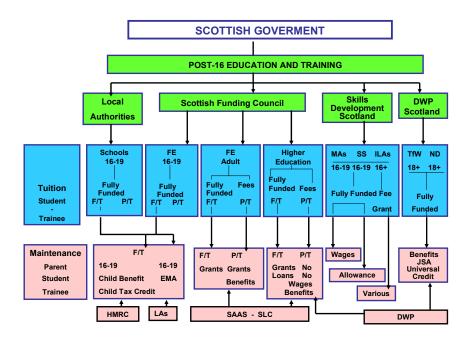
- 8 The Scottish Government, through its funding agencies, should require all publicly funded learning and training organisations serving local / regional labour markets to consult widely and collaboratively with employers and other stakeholders, and use available national and local labour market information, to annually shape their mix of provision to best meet the needs of the economy and community.
- 9 The Scottish Government, through its funding agencies, should require all publicly funded learning and training organisations (whether offering full time or part-time programmes) to provide online quality labelling on key outcomes, including learner success rates, destinations, wage gain, quality and satisfaction levels of both employers and individuals.
- The Scottish Government, through its funding agencies, should create a new and public institutional performance framework for learning and training providers a balanced scorecard based on their profile of aggregate outcomes / destinations, customer satisfaction levels and quality, balanced against evidence of the economic, social and labour market characteristics of their catchment areas.
- 11 The Scottish Government, through its funding agencies, should encourage and recognise providers who build direct relationships with employers for full-cost or co-invested provision of work-related training, and incorporate that expectation into institutional performance frameworks.
- The Scottish Government, through its funding agencies, should encourage and support more active collaboration between providers (both at local level and across the country) to ensure that the mix and quality of education and training is best matched to economic and employment needs and opportunities.
- 13 The Scottish Government, through its funding agencies, should support the trading or transfer of expertise and provision between providers at local / regional level to achieve the best match between supply and labour market needs.

5. A new funding model

5.1 A new funding model is needed to support the strategic direction of policy for post-16 education and vocational training

The level of funding available to invest in post-16 education and vocational training, and the way it is distributed, are critical to the achievement of the Scottish Government's economic and social objectives. The funding system is also one of the most important levers that can be used to align the behaviour of providers behind these objectives. While it is recognised that Scotland's need and demand for skills development is as great as ever, the capacity of the public finances to fund it at the present level will probably diminish over the coming years. In such a fiscal environment alternative funding models need to be considered. There is both a need and an opportunity to create a rational and stable system that enables learners and employers to contribute to the cost of post-16 learning and training, so that public funding alone is not a constraint on the range and volume of post-16 learning and training undertaken.

The current funding landscape for publicly-supported post-16 education and vocational training in Scotland is complex and diffuse, as illustrated in the diagram below. Less well known, but equally complex, are the patterns of employer and individual investment in learning and training.



Funding of post-16 training by employers (private, public and third sectors) has been estimated to be around £4 billion a year in Scotland, equivalent to 10% of employer spending on training in the UK. Current survey and data systems are not, however, sufficiently robust to verify this figure so it should be treated with some caution. Private employers falling within the corporation tax regime can set aside revenue spending on training – provision and wages – against taxable profits. Meanwhile the self-employed falling within the PAYE regime can set aside the cost of training, but not their wages, against taxable profits. Compulsory funding of training by employers, however, is limited to two sectors in Scotland – construction and engineering construction.

5.2 Post-16 education and training brings benefits to individuals, employers and the nation. Investment in the system should be a shared responsibility among the three groups of beneficiaries, as it already is in the system of Modern Apprenticeships.

Post-16 education and training brings benefits to individuals (for example in terms of access to further learning, satisfaction and salary in work), to employers (for example in terms of increased innovation, productivity, quality and profit) and for the nation (for example in terms of a more successful economy, improved community and individual wellbeing and a fairer society). Therefore it is appropriate for the cost of post-16 learning and training to be shared by contributions from a combination of beneficiaries – learners, employers and the public sector. The Modern Apprenticeship system is an existing example of shared investment – employers invest in wage costs and contribute to training costs; individuals invest through foregoing a full wage for the duration of the apprenticeship; the public sector invests through making a contribution to training costs and through paying for the management of the apprenticeship system.

The public funding for post-16 education and training should be based on a clear and transparent set of objectives which is consistent with the strategic direction of policy. It should:

- Drive post-16 providers in the direction of greater flexibility and responsiveness to the needs of its customers – individual learners, employers and communities;
- Reward providers who have a track record of success in achieving sustainable pathways into employment or further learning;
- Incentivise post-16 providers to raise greater levels of fee-for-service income from employers and learners;

- Incentivise providers to work together collaboratively to plan local and regional provision in ways which involve employers and communities;
- Empower learners to make informed choices of provider, course and mode of learning, through a world-best information, advice and guidance system;
- Not disadvantage learners who require or prefer particular modes of study (for example full- or part-time, off- or on-the-job; provider-based or distance-based) or who have an expectation that their prior learning and achievements will be assessed and credited;
- Incentivise learners who might otherwise be discouraged from learning because of special learning needs, poor basic and employability skills, age or distance from larger centres;
- Incentivise the take up of learning and training in employment sectors regarded as significant for future economic growth; and in those sectors that have a good track-record in offering employment to those who are unemployed;
- Enable Scotland to continue to support a vibrant network of publicly accountable providers of post-16 learning and training.
- 5.3 Over time, the current distinctions between further and higher education and between academic and vocational training will become more blurred as innovation, collaboration, flexibility and technology accelerate change. Scotland should anticipate these trends and design a comprehensive strategy and investment / funding system that will support this direction of travel.

Over the coming years, the traditional distinctions between higher education and other post-16 learning and training will become increasingly blurred as new and changing institutions, funding models and technologies create greater diversity and personalisation in the system. New patterns, and a greater variety of learning modes will also become more commonplace as online and blended learning become widespread. The time is right for Scotland to anticipate and plan for these changes by creating a single strategy and policy for all post-16 learning and training, along with a single legislative basis and a single funding and student finance system. This would draw together and bring coherence to currently separate public funding streams for post-compulsory school provision, further education, higher education and apprenticeships. It should also draw in other public funding being directed to skills development and training, such as from the two enterprise agencies, local authorities and EU sources.

Further detailed definition of such a unified system is beyond the scope of this review. However, it is a rationalisation that should be considered to enable Scotland to gain greatest educational, economic and competitive advantage from the investment available. The proposal fits well with other recommendations including:

- Making the process of decision-making on investment in post-16 learning and training much more open to direct comparisons of costs, funding and outcomes achieved between different education and training providers;
- Offering the possibility of drawing national funding together with other sources of funding into a unified governance model;
- Creating a new system of Personal Development Accounts for post-16 education and training;
- Offering an enhanced Information, Advice and Guidance service to people of all ages and stages of their learning and working life.

5.4 Other changes will also be needed to support the successful introduction of a new funding model.

The creation of a co-funded model for post-16 education and training will need to be underpinned by a number of other developments including a national:

- approach, and supporting protocols, about the contributions expected of government, employers and learners at different stages of the system;
- approach to an agreed cost base, or cost base range, for pricing provision in different subjects/ courses. This information should be publicly available alongside subject / course information in the IAG system;
- approach to the planning, funding and delivery of provision at regional and local level, on the assumption that this will be organised through collaborative networks of providers to increase choice and minimise duplication;
- approach to the measurement of provider performance both at the macro level and the individual level. At the national level it should be based on quality indicators that are meaningful to prospective customers and demonstrate the added value performance of the provider. At the level of individual provision it should focus on independent measures such as learner and employer satisfaction and on the extent to which the actual outcomes matched the intended outcomes.

- system of 'currency' that can be applied to all publicly-supported learning, whatever its location, mode of delivery or size – to compare and track learner outcomes. The SCQF's system of levels and credits offers a wellestablished basis for such a currency in Scotland;
- recognition of the mixed performance of existing providers, and the need for
 the whole system in Scotland to operate at, or close to the performance of
 the best. One way to accelerate a move in that direction would be to
 introduce a system of limited contestability among colleges and other
 providers, where the most effective will flourish and the poorer performers
 will be forced to merge, change their leadership, drop poorly-performing
 services or otherwise provide better public value.

In the current public funding model the majority of funds focus on purchasing bulk learning volumes from FE Colleges. It is insufficiently targeted to drive the desired outcomes from providers or to support the empowerment of learners to make informed choices. The model buys 'participation', not results, and is insufficiently focused on the achievement of a job, or the transfer of an individual to another positive destination.

A new funding model could be designed to reflect the different levels of involvement and accountability of different stakeholders in the system, for example:

- At national level, bodies such as SFC and SDS could be charged with ensuring that the outcomes of public funding align with the national strategic and policy directions set by the government of the day;
- At the regional and local level, formal or looser collaboratives of providers or provider/employer/local authority partnerships could provide valuable insights to ensure that regional and local labour market needs are supported through the use of publicly-supported training; and
- At purchaser level, individual learners and individual employers would make choices of provision and provider based on good quality information, advice and guidance available to them.

The current funding system is orientated towards the national level of the hierarchy described above. In designing a new funding model it would be possible to consider options that could deliver the objectives described at the start of this chapter, while still retaining strong national orientation. For example, greater degrees of conditionality could be applied to funding for providers to ensure that those objectives were met. Such an approach could be combined with a rationalisation of funding streams. Such a change might require the national funding bodies' operations to become more complex with consequences for overhead costs.

Alternatively, the balance of responsibility could be shifted from the national level to a more local level through, for example, the distribution of post-16 public funding to a regional governance entity rather than to providers. Such a regional entity would then distribute the funding to regional / local providers on a commissioning basis. Again there could be real advantages in pooling as many current national and local funding streams as possible in such a model to ensure good targeting, prioritisation, simplification and accountability. This model would have a much greater impact on current funding bodies since much of the detailed distribution / commissioning and accountability would shift to regional and local levels. This would allow national bodies such as SFC and SDS to adopt more strategic and catalytic roles.

Alternatively again, the balance of public funding could be radically shifted towards the customers – employers, and particularly learners. In the current system, those individuals and employers who invest their own money in skills development on a fee-for-service basis make their choice of provision and provider directly. This approach could be extended to one in which public funding for skills development were directed towards learners, leading to a much more market-oriented system in which individuals, with advice, were empowered to make key choices about their learning and skills, and to take responsibility for gaining the fullest advantage from their learning / training experience.

5.5 A system of Personal Development Accounts could be designed and introduced progressively across the post-16 system to put the learner in the driving seat and to create greater flexibility and responsiveness in the system.

One possibility, described in more detail below and in Annex 3, would be to create a system of Personal Development Accounts (PDA) – a learning and development bank account. Such an account could be invested in by the government, the individual and the employer, and could be used by the individual to 'purchase' learning, training and other forms of personal development from the provider/s of their choice, in the learning modes of their choice and at the pace / intensity of their choice.

The Review conducted some research and feasibility into PDA though much more detailed research and design work would need to be done prior to reaching a decision on such a significant change of model. An unbridled free market would not necessarily operate in the best interests of the whole of Scotland and would not necessarily support the investment needed in future skills. Equally, however, an

approach such as PDA could be designed in such a way that important strategic considerations were built into the model.

The model could, for example, be designed to ensure that public investment were prioritised in the following ways:

- To provide incentives to ensure the availability of provision which is:
 - economically important, for example, in strategic sectors such as STEM subjects, low carbon and resource efficient technologies, bioscience, and creative industries;
 - economically important and experiencing significant skill shortages, for example care assistants, manufacturing technicians, mechanical engineers;
 - responding to a national initiative and requires the building of a new workforce, for example, a unified health and social care worker;
 - economically important on a regional or local basis, for example, marine renewable energy, oil/gas technology, aquaculture;
 - highly specialised and nationally essential but would otherwise be uneconomically expensive to run, for example, dental nursing;
 - responding to market failure, for example, post-school individuals who lack the core employability skills required to access the labour market;
- To support the operation of publicly-accountable providers, and which could include funding directed to incentivise local and regional planning and delivery collaborative networks;
- To incentivise employers' workforce development costs, particularly in relation to nationally important ambitions, such as the internationalisation of the Scottish economy, the low carbon strategy, skills utilisation and productivity gains;
- To incentivise individuals who want to develop the skills and capabilities to start their own business.

A system of PDA would probably have to be offered on a voluntary, incentivised basis as there may be little appetite in Parliament to compel employers and individuals to invest in learning and training.

The objectives of introducing such as system would be to:

- Encourage people beyond 16 to take greater responsibility for shaping and investing in their own future through engaging in post-16 education, training and life-long learning;
- Enable people at different stages of their life to save, borrow and receive public and employers' funds to support their learning, training and development;
- Allow government to connect to individual citizens about their learning, training and development, offering differentiated incentives in relation to areas of particular importance to the economy (as outlined above).

The PDA system proposed would not be a 'product' (as is an Individual Learning Account) or a 'programme' which fills a gap in the education or training landscape, but a vehicle to help bring about system change across the post-16 landscape.

The PDA proposed would be owned by the individual, available to anyone post-16, and portable across Scotland. It would be supported by an increasingly effective system of information, advice and guidance, as is now being built by SDS through My World of Work and other future portals. It would be a life-cycle account, akin to a Driving Licence. The PDA system would be managed by a national agency, with specialised outsourced support.

Further information about the proposed Personal Development Account is included in Annex 3.

6.6 Recommendations

14 The Scottish Government should undertake a fundamental review of how post-16 education, vocational training and workforce development is financed. The system brings benefits to individuals, employers and society, so the funding for the system should be the shared responsibility of individuals, employers and the public sector.

- A revised funding model should be founded on a clear and transparent set of objectives which is consistent with the strategic direction of policy and designed to reinforce the Government's purpose of sustainable economic growth. The new funding model should be created around a series of nine drivers.
- The funding system should be changed as soon as possible to end discrimination in funding post-16 education and vocational training, including higher education, on the basis of whether the learner is engaged part-time or full time, on-the-job or off-the-job, or provider-based or distance-based.
- Over time, the distinctions between further and higher education and between academic and vocational education and training will become more blurred as innovation, collaboration, flexibility and technology accelerate change. Scotland should anticipate these trends and design a comprehensive strategy and investment / funding system that will support this direction of travel.
- Having considered whether the future funding system should be unified at the national level, unified and then dis-aggregated to regional level, or personalised through a system of Personal Development Accounts that could be held by anyone over age 16. The Scottish Government should take the lead and commission a study, supported by an independent expert group, to consider the options and recommend a way forward.
- 19 As part of that work, a feasibility study on the introduction of a national system of Personal Development Accounts should be commissioned , with a view to its possible introduction in three phases over the next ten years.

6. Employability, employment, skills and growth

6.1 There is an elaborate and complex mix of services in the public, private and third sectors, designed to help people prepare for work, acquire the skills they need for work, get a job, and progress in employment

The policy and organisational landscape around employability, employment and skills is complex and crowded. Under the current devolution arrangements, employment policy is a reserved matter for the UK Government, and employment services within the public sector are largely the responsibility of the Department for Work and Pensions (DWP) and its executive agency, Jobcentre Plus which operate across Great Britain, but not in Northern Ireland. Recently, major changes have taken place in the DWP's system for procuring welfare-to-work services, resulting in the awarding of two contracts to prime contractors to deliver the Work Programme in Scotland. These contractors – Working Links and Ingeus Deloitte – will both provide services in all parts of Scotland. In May 2011, the new Scottish Government decided to include 'employment' in the title of the Cabinet Secretary for Finance, Employment and Sustainable Growth, signalling a more explicit focus on jobs growth for the next 5 years.

Employability and training for employment policy and services in the public sector are a shared responsibility of the UK and Scottish Governments. Jobcentre Plus delivers certain services to its customers to support their journey from unemployment to employment, while the Scottish Government has lead responsibility for the strategy and delivery systems that support employability services. These are delivered partly by Skills Development Scotland (SDS), through its procurement of services from private, public and third sector contractors, and partly by Local Employability Partnerships in the 32 local authority areas, each of which attracts resources from a wide range of places in the public, private and foundation sectors as well as from the European Commission.

Skills strategy, policy and delivery in the public sector is largely, but not wholly devolved to the Scottish Parliament and Government. The UK Government has the lead, for example, in a four-government partnership for the network of 23 Sector Skills Councils which cover the UK, and for a small number of other UK-wide activities. That apart, the Scottish Government has full responsibility for the skills

agenda, and for related areas such as Career Information, Advice and Guidance. Public funding for skills development is channelled principally through the Scottish Funding Council to 43 colleges, and Skills Development Scotland, both to manage its own activities and to contract with more than 300 private, public and third sector providers across the country.

In the area of employability policy and services, the delivery infrastructure has developed considerably in the past 5 years, following publication of the Workforce Plus strategy. Key players include the following:

The **Scottish Employability Forum** which has the key role to oversee approaches which increase sustained employment and reduce the scale of welfare dependency in Scotland;

The **National Delivery Group** which is responsible for achieving a more coherent framework within which to deliver services locally – sharing information and identifying common challenges through engaging key players from every part of Scotland;

The **Health and Employability Delivery** Group which exists to embed employability within the health agenda and ensure that practitioners in the NHS with relevant roles can share practice and influence policy;

The **Third Sector Employability Forum** which provides a focus for the many organisations, large and small, throughout Scotland that play a leading part in delivering employability services;

32 Local Employability Partnerships, sitting within the Community Planning framework, which are responsible for co-ordinating and improving services within their part of the country;

The **Employability Learning Network** which connects up all parts of the system to improve the delivery of employability services through sharing good practice, building capacity, and commissioning new tools, resources and research.

Beyond the public sector, employability support is provided by a number of private companies and corporations. This includes the companies involved in financing and sponsoring the Career Academies Programme and the Deloitte Employability Initiative, delivered in partnership with nine centres across the UK including the University of Aberdeen School of Education. Deloitte United Kingdom has had a long-standing focus on education and skills. Since 2001 it has pioneered an innovative employability skills programme, the Deloitte Employability Initiative for

colleges and government organisations to design and deliver a course that provides young people with the personal skills, attitudes and behaviours they need to secure sustained employment. Since 2001 more than 16,000 students have been through a Deloitte course, delivered by a network of over 500 trained teachers. The programme, in which Deloitte have invested £2m runs till 2012. Last year Deloitte undertook a strategic review of the programme as a result of which a new joint venture is being established with Pearson, the largest UK awarding body. The new body aims to secure the long-term future of the programme, extending its scale, reach and impact.

6.2 There is a widely recognised need to design and build a more unified and robust employment and skills system to support economic inclusion and help advance economic growth

'Skills for Scotland', first published by the Scottish Government in 2007, and refreshed in 2010, contained the commitment to move towards greater integration of Jobcentre Plus and Skills Development Scotland (SDS) advisers. Significant progress has been made with the achievement of national coverage of a joint SDS and Jobcentre Plus offer to Jobseeker Allowance (JSA) claimants once they have been seeking work for 13 weeks. However, there is still much further progress to be made to achieve a fully integrated offer from the two agencies, and a more holistic system of employability and skills support at local level throughout the country. There are several reasons to move with pace and confidence to create a stronger, more unified service including:

- Lack of skills and work experience is increasingly disadvantaging people in the labour market;
- Tackling entrenched labour market problems is complex and so requires the expertise of people in both the employment and skills systems;
- Implicit in integration is greater co-ordination of efforts and therefore a reduction in duplication and increased efficiency;
- Public spending constraints will mean that closer joint working becomes essential to provide a good quality service;
- Evidence shows that benefit recipients want skills advice and training to be part of the employability service they receive;
- The low pay / no pay cycle which many people experience is very damaging to people's lives; skill acquisition can be an important part of the solution that enables people to achieve progression in work;
- Employers need skilled, work-ready recruits in order to grow their business and their productivity

In parallel with this Review, the UK Commission for Employment and Skills (UKCES) has been undertaking a major review of employment and skills across the UK, including substantial field work in two parts of Scotland: Edinburgh, Lothian and Borders; and Aberdeen. Both reviews have shared common insights and intelligence and have taken part in joint consultations. The Commission's report on England was published in April 2011 while the Scotland report was published, following the election, in June. The UKCES review was established against the backdrop of substantial changes that are underway in the employment and skills landscape and in the welfare to work system. It sees these changes as an opportunity to focus services on a common goal for the individual and employer giving individuals the skills to develop, while enabling employers to grow. 'The opportunity', says the Commission,' lies in where public investment can support the achievement of both outcomes for both customers. The prize for achieving this is more individuals moving into sustainable work with the skills to progress, whilst meeting businesses' ambitions for growth with the necessary skilled staff to succeed'. The report is a call for action for:

- Employers to engage more effectively with local partners that deliver employment and skills services, clearly signalling their needs and becoming involved in the design and delivery of provision; and
- Local partners to seize the opportunity offered by greater flexibility and deliver services that have real and lasting impact for individuals and employers.

The UKCES report identifies four areas for action to create a better system, and this review supports its recommendations for continuous improvement through:

1 Coherent information

Coherent information to increase awareness of the needs of both individuals and employers to improve outcomes and participation rates in provision.

- Share customer information across services to improve the understanding of the needs of individuals in order to provide a seamless journey and better tailoring of services;
- Develop a clearer understanding of employer demand at a local level in order to respond more effectively to current and future business needs;
- Use performance information as a catalyst to empower individuals, employers and communities and hold local partners to account, enabling informed decision making, and driving performance improvement.

2 Collaboration between partners

Collaboration between partners through fair and inclusive partnership arrangements that align the goals and resources of the local employment and skills systems.

- Re-shape existing partnership arrangements to become more inclusive in order to have greater influence and impact;
- Identify and work towards common goals that achieve sustainable employment and progression in work. Enabled by an approach that trusts providers and aims to increase their flexibility to collaborate with a wider group of partners operating locally;
- Support collaborative approaches by aligning incentives for providers and financial planning cycles.

3 Customer focus

Customer focus that gives communities a voice to influence and engage with tackling local priorities effectively .Involving individuals and employers directly in design and delivery of provision allows services to be tailored more effectively.

- Understand how to increase customer involvement in design and delivery of employment and skills services;
- Explore ways of working that create opportunities for customers and practitioners to design personalised solutions together;
- Evaluate performance from the perspective of the customer and the needs of businesses and the local community

4 Progression

Once the above enablers are in place then progression in work should be the focus and ultimate collective goal of the employment and skills systems to support individuals to move out of low-paid work.

- Define 'progression' in work and measure current levels of progression in the labour market;
- Adopt a high-level universal commitment to sustainable employment and progression;
- Explore a 'career clusters' approach to support individual progression at a local level. By understanding local sectors that may support progression and working with employers to understand the structure of jobs, job requirements and advancement pathways.

6.3 The UK Coalition Government has embarked on the most radical and far-reaching reform of the UK welfare and employment system in more than half a century, the impact of which will begin to be felt from summer 2011

Integrating employment and skills into a single, high-performing system is not, of course, a matter for the Scottish Government alone as major parts of the system are shaped and managed by the UK Government, in particular the Department for Work and Pensions (DWP), and two of its executive agencies, Jobcentre Plus and the Pension, Disability and Carers Service. The UK Coalition Government has an ambitious agenda of reform which aims to create a new welfare system for the 21st century. It aims to transform the opportunity for people without jobs to find work and support themselves and their families; and to ensure that the most vulnerable in society are protected. The DWP Business Plan 2011-2015 describes the aims of the reform programme:

- 'Tackle poverty and welfare dependency through a simplified welfare system that encourages and incentivises people to find work, rewards responsible behaviour and protects the most vulnerable;
- Promote high levels of employment by helping people who are out of work, including people in disadvantaged groups, to move into work;
- Help people meet the challenges of an ageing society and maintain standards of living in retirement; and
- Provide opportunity, choice and independence to enable disabled people to take an equal role in society.'

The DWP Business Plan goes on to describe some of the radical changes in the tax and benefit system, and in welfare-to-work policy that are now being introduced:

"To deliver this vision we will introduce a Universal Credit, which will make work pay and help break the cycle of welfare dependency; put in place a single Work Programme to support people into sustainable work; and reform the private and state pension system to ensure dignity in later life and make increased saving a reality. We will introduce Work Choice and a Right to Control to improve the opportunities of disabled people in terms of both employment and choice."

DWP has adopted a Structural Reform Plan that is matched by others across the UK Coalition Government. Together these plans are designed to 'turn government on its head'. The Coalition Agreement talks about 'bringing about a power shift, taking power from Whitehall and putting it into the hands of people and communities; and

a horizon shift, making the decisions that will equip Britain for long-term success'. Within the DWP Plan there are six priorities, of which three have significant implications for the relationship between employment and skills policies in Scotland. These priorities will also have a direct impact on large numbers of the customers in Scotland, served by employment and skills programmes and services. They are:

1 Reform the welfare system

Introduce the Universal Credit and other reforms to simplify the welfare system and to ensure that the system always incentivises work and that work always pays. The overall reform package will help make the welfare system affordable in the long-term. Some of the actions that will deliver this reform are:

- Introduce the Universal Credit;
- · Reassess Incapacity Benefit recipients for their readiness to work;
- · Introduce Housing Benefit reforms;
- Introduce a household cap so that no workless family can receive more in welfare than median after-tax earnings for working households;
- Switch to the consumer price index for indexation of benefits and public pensions.

2 Get Britain working

Introduce the Work Programme, an integrated package of personalised support to get people into work – from jobseekers who have been out of work for some time, to those who may have been receiving incapacity benefit for many years. Some of the actions that will deliver this reform are:

- Create an integrated welfare-to-work programme to help unemployed people, including those in disadvantaged groups, get back to work, with providers paid largely by results, and including the use of benefit savings from people moving into work;
- Promote self-employment to unemployed people and, through the New Enterprise Allowance, give up to 10,000 people per year (GB) access to the advice and support they need to start their own business;
- Establish a network of locally led Work Clubs in community settings where people can meet, exchange skills, share experiences and receive support in finding local job opportunities;
- Offer work experience placements to young unemployed people, including those from disadvantaged backgrounds who lack experience or basic skills or face other barriers to work;
- Help connect unemployed people with volunteering opportunities in their area through a new volunteering initiative called Work Together
- Give employment support to unemployed offenders and ex-offenders, with the providers paid by the results of getting people into work.

3 Achieve disability equality

Improve equality by promoting work for disabled people, developing new ways to deliver Access to Work and introducing Work Choice to provide employment support for disabled people facing the greatest barriers. Support more independent living for those who face the greatest barriers to work. Some of the actions that will deliver this reform are:

- Improve the work opportunities of disabled people with the greatest barriers to employment through Work Choice training and support;
- Reform Access to Work, so disabled people can apply for jobs with funding already secured for any adaptations and equipment they will need;
- Introduce the 'Right to Control' in seven locations, giving disabled people the right to have specific services arranged on their behalf or to commission services and purchase equipment directly by taking a cash payment;
- Ensure carers receive the right employment support to extend flexible working opportunities and support into work for those who wish to seek paid employment
- Reform Disability Living Allowance, ensuring fair access to benefits.

The nature, scale and reach of these reforms will become evident from summer 2011. Already the two prime contractors who will deliver the Work Programme for the whole of Scotland have been appointed – Deloitte/Ingeus and Working Links. As these companies will be paid overwhelmingly by the results they achieve in getting unemployed people into sustainable employment, it is reasonable to anticipate that competition for jobs between Work Programme graduates, people in local employability programmes, and school and college leavers will intensify in the future.

The profound changes taking place in welfare-to-work and welfare reform across the UK are creating new opportunities to help achieve better alignment between DWP/Jobcentre Plus employment services and Scottish Government policy goals and local needs. Examples include the following two areas:

Greater flexibility in Jobcentre Plus

Earned autonomy will allow Jobcentre Plus District Managers (DMs) to decide how best to deliver elements of service delivery effectively, procuring external services where appropriate in order to meet the diverse needs of their customers. This may include the movement of resource around a district, for example allocating staff time differently to achieve greater results; DMs will be able to make the case to change the delivery model to best suit the needs of the community. This represents a move away from a one-size-fits-all to a flexible model, tailored to the needs of the district, and to the nature of the employer demand locally;

All Jobcentre Plus districts now have an increased degree of flexibility with the aim of moving towards 'earned autonomy'. DMs who want to take advantage of extra flexibility will have to present a business case outlining the changes they want to make and the benefits that will result. This is likely to lead to greater distinctiveness between Jobcentre Plus districts as managers take advantage of their new powers.

The Work Programme offers greater freedom and flexibility to providers

DWP has consciously adopted a hands-off approach to managing Work Programme providers, leaving delivery organisations free to identify the most effective approach to moving customers into employment. With the removal of prescriptive targets to define an individual's journey, providers should be able to offer personalised approaches to helping people back to work;

Crucially, Prime Contractors (2 in Scotland) will be paid on achieving outcomes for customers and will eventually receive funding only for sustained employment. Providers are free to offer appropriate, and potentially very varied, services to meet the requirement that their customers achieve sustained employment;

DWP claims to have based its contracting decisions on Prime Contractors' ability to capitalise on a diverse local supply chain. Working with local delivery organisations, particularly in the third sector, will be essential to their ability to deliver the results required.

6.4 The system needs re-designed to become high-performing in every part of the country, to serve the twin aims of supporting unemployed people into work and helping growth businesses find and develop their future workforce. A network of licensed Growth Partnerships should be created at regional / local level focused on employability, skills, jobs and growth.

Employers' views on the attributes they are seeking in new workers that they recruit are remarkably consistent, irrespective of the age of the candidate or the qualifications they may have. They want workers who can demonstrate:

- The right attitude and approach to work;
- The ability to work successfully with others in a team;
- · Good communication skills;
- · The ability to plan and organise work;
- The ability to analyse and solve problems; and
- Willingness to learn, adaptiveness and flexibility.

These attributes and skills transcend the boundaries between employment and skills policies and programmes. Taken as a whole, they make the case for Scotland having a truly integrated employment and skills system – one that reaches back into the school system, supports all the transitions that young people make in their journey from school, further education, training and university into work, and is available to adults as they plan and make moves between jobs and careers during their working lives.

Despite the good progress made in the past 5 years to work towards more integrated employment and skills services in Scotland, there is much more that needs to be done to create a service that matches the public service aspirations at the heart of the Christie Commission's work on the future of public services in Scotland. The Scottish Government, in establishing the Commission, made clear that it 'wants to take public services from good to excellent in every facet and in every place'. Its vision is for public services that:

- Are innovative, seamless and responsive, designed around users' needs, continuously improving;
- Are democratically accountable to the people of Scotland at both national and local levels;
- Are delivered in partnership, involving local communities, their democratic representatives and the third sector;
- Tackle causes as well as symptoms;
- Support a fair and equal society;

- Protect the most vulnerable in our society;
- · Are person-centred reliable and consistent;
- Are easy to navigate and access;
- Are appropriate to local circumstances, without inexplicable variation;
- Are designed and delivered close to the customer wherever possible, always high quality;
- · Respond effectively to increasing demographic pressures;
- Include accessible digital services that are easy to use and meet current best practice in the digital economy; and
- Have governance structures that are accountable, transparent, cost-effective, streamlined and efficient.

The challenges in designing and building a truly integrated employment and skills system are considerable:

- DWP's services are designed and driven for Great Britain as a whole, without significant regard for differences in the economies, policies and priorities within the nations and regions;
- Within Scotland, some Scottish Government funded programmes are designed and delivered for the whole country through national arrangements, with limited scope for variation at local level. SDS's work with local authorities to co-design 32 service delivery agreements is, however a good response to this issue and has further potential;
- Employability Partnerships, typically at local authority level make the best of a very complex pattern of funding and accountabilities, but often have to distort what they would ideally offer to meet rules set elsewhere.

The opportunities, however, outweigh the challenges if all the key parties are willing to commit to an ambitious programme of change and improvement.

The Scottish Government's Economic Recovery Programme focuses strongly on growth businesses, in growth sectors, trading in growth markets. It recognises that the opportunities for growth within the domestic economy of Scotland and the UK are limited in the short-term, while at the same time, many markets around the world are growing strongly. The new Government has therefore launched an ambitious campaign to increase Scotland's exports by 50% over 5 years and to drive forward the internationalisation of the country's economy. To emphasise the significance of the link between skills, jobs and growth, the Cabinet Secretary, Mr Swinney, now has had a new responsibility for employment included within his portfolio.

At the same time, the UK Government's Work Programme to help people who have been unemployed for some time back into sustainable employment has been launched throughout Scotland. It will offer eligible customers a sustained programme of advice, support, training and experience to enable them to take up a job and sustain their employment. In the longer term, the introduction of Universal Credit from 2013 is intended to create a radically different benefits system in which people will always be better off in work than on benefit.

Taken together, these changes create the need for a new sharper and unified focus on the twin aims of:

- Helping unemployed and under-employed people become employable, get and keep a job, and progress within work; and
- Helping businesses of any size that want to grow, to find, keep and develop the workers they need, and through them, their productivity and success

At a national level, under the present arrangements, skills policy and employability services are developed and co-ordinated in the Employability, Skills and Lifelong Learning Directorate of the Scottish Government. Skills services and career IAG are delivered by SDS and its partners around the country, with employment services in the public sector being delivered by Jobcentre Plus and its contractors (accountable to the UK Government). Small business support for growth is delivered partly by Business Gateway, partly by SDS, and partly by Scottish Enterprise and Highlands and Islands Enterprise.

At a local level there are employability partnerships or equivalents at the level of the 32 local authorities, while in some parts of the country local authorities collaborate across their boundaries. This is particularly, but not exclusively, the case in smaller authorities where travel-to-work areas and local labour markets transcend their boundaries. There are also 32 Service Delivery Agreements negotiated between SDS and each local authority or community planning partnership. Also at local level are the 43 further education colleges, some serving part of a local authority's area, some serving the whole area, and some serving the population and business community of two or three local authorities. In addition, there are many organisations, ranging from specialist social enterprises to chambers of commerce to sectoral networks, who have an interest in some parts of this agenda. There are also business development programmes and services delivered by business organisations, often funded partly from public sources.

Yet in most parts of Scotland there is nowhere at regional or local level where all the key players in the employability, skills, jobs and growth agenda come together to share, plan, co-ordinate and market their services to their citizens and to the businesses and other employers they hope will recruit those graduating from their programmes.

The twin aims outlined above should become the foundation of a refreshed and redesigned system of employment and skills in Scotland. The focus of the system should be on employability, skills, jobs and growth. Many, though not all of the building blocks already exist, but even where they do they are not usually connected together in ways that effectively deliver the results sought.

At a national level, the Scottish Government should take the lead to bring about a more integrated service landscape to support employability, skills, jobs and growth. This should become the shared agenda of the Employability, Skills and Lifelong Learning Directorate and the Business Directorate. There is an imminent opportunity to refresh and re-contract Business Gateway services, and Skills Development Scotland is actively engaged in reviewing and improving its services to businesses.

In each local or regional area (as agreed between the main parties involved), there should be one recognised and licensed partnership that brings together into a high-performing system all the essential players who have a part to play in enhancing employability, skills, entrepreneurship, business growth and productivity. The new partnerships should adopt a common identity - Growth Partnerships - signalling their focus on personal growth, business growth and productivity growth. This could be achieved by adapting and extending existing partnerships, building new alliances that do not currently exist, or merging separate bodies to create something stronger, more effective and more productive.

In terms of coverage, 32 is not the right number of Growth Partnerships for a nation of 5 million people. The economic and social geography of Scotland is very diverse, and the number of Growth Partnerships should reflect the realities of regional / local economies, travel-to-work areas and business networks. One partnership would probably be appropriate for each of Shetland, Orkney and the Outer Hebrides as there are limited connections between their economies. But in parts of central Scotland, some local authority areas are much smaller than travel-to-work areas, and in these cases it might make sense to use some of the former regional or sub-regional boundaries as the partnership areas. In other places, such as the north-east, Aberdeen City and Aberdeenshire already work closely on many issues and a single partnership would probably work well there.

The system of Growth Partnerships should be created through the awarding of a licence, following an open competitive bidding round. The licence should be offered for 5 years, subject to high performance against agreed criteria. The award of a

licence should bring with it both authority and accountability. The Scottish Government should take the lead to create a public/private/third sector/customer licensing authority to manage the process of licensing the Growth Partnerships and holding them to account. The Growth Partnerships should themselves reflect the interests covered by their brief and should have prominent customer interests represented on their boards.

6.5 Recommendations

- Policies, programmes and resources to support employment, employability, skills and growth are elaborate and complex. The situation is made even more so by the fact that some parts of the system are reserved to the UK Government, while others are devolved to the Scottish Government. Jobseekers are, at certain points of their route back to work, reserved, and at other points devolved. The Scottish Government should continue discussions with the UK Government with a view to securing devolution of the labour market services of Jobcentre Plus and the resources provided by DWP for the Work Programme in Scotland.
- There is a widely recognised need to adapt the existing systems and services to create something more unified and robust, both to support economic inclusion and to help advance economic growth. The UK Commission for Employment and Skills has undertaken a review of employment and skills services in Scotland in parallel with this review. Both reviews share the same recommendations for action to achieve continuous improvement:
 - Coherent information: to increase awareness of the needs of both individuals and employers to improve outcomes and participation rates in provision;
 - Collaboration between partners: through fair and inclusive partnership arrangements than align the goals and resources of the local employment and skills systems;
 - Customer focus: that gives communities a voice to influence and engage with tackling local priorities effectively; and the involvement of individuals and employers directly in design and delivery of provision;
 - Progression in work: should be focus and ultimate collective goal of the employment and skills system to enable people to move beyond low-paid work.

- The system should be adapted to become high-performing in every part of the country to serve the twin aims of
 - supporting unemployed people into work; and
 - helping growth businesses find and develop their future workforce.

Existing employability partnerships should form part of the foundation of a new network of licensed Growth Partnerships at regional / local level to focus on employability, skills, jobs and growth. Partnerships should be awarded a 5-year licence, following open competition, based on a set of published criteria designed to support the twin aims for which they would be set up.

7. Business leadership, ambition, engagement and investment

7.1 The economic shocks of the past 3 years, together with fresh recognition of the huge opportunities facing Scotland in the coming decade, are creating an environment in which outstanding business leadership is now critical to future growth.

There is fresh recognition in Scotland of the critical role of sustainable economic growth in creating the conditions for a successful economic future. The First Minister's focus on growth companies, in growth sectors, operating in growth markets is likely to be centre-stage for the next decade. As well as strategic political leadership, the achievement of this goal will depend on strategic business leadership across all sectors of the economy.

The refreshed skills strategy *Skills for Scotland: Accelerating the Recovery and Increasing Sustainable Economic Growth* set out a clear vision of a Scotland where 'high skill, high productivity, healthy workplaces enable people to perform at their best'. It outlines:

'The ambition for a highly and relevantly skilled workforce is clear but to increase productivity the improvements in the supply of skills must be matched with the right conditions for these skills to be absorbed and used effectively by employers. Businesses' demand for skills derives fundamentally from their needs and ambitions. More effective leadership and management is needed to raise business ambition and to help increase the capacity of firms to realise their ambitions. Clearly raising ambition is more than just a product of leadership and management development and this refreshed skills strategy must be seen against the wider context of the Government Economic Strategy'.

Scottish Enterprise has been leading on the development of an action plan for leadership and ambition with the close involvement of Strategic Forum member bodies and other partners.

The UK Commission for Employment and Skills (UKCES) provided expert advice to the Scottish Government in 2010 on the linked themes of skills, jobs and growth, *Towards Ambition 2020 : skills, jobs, growth for Scotland.* Its advice focused on three strategic priorities:

- Maximising individual motivation and opportunity for skills and sustainable employment;
- · Increasing employer ambition, engagement and investment in skills;
- Building a more strategic, agile and labour market responsive employment and skills system.

Within the second of the above strategic priorities, the Commission's advice was that Scotland should:

- Enhance the capacity of more Scottish firms to be high growth, high skill, high value added businesses through the stimulation of new industries, greater innovation and better leadership and management;
- Develop and deploy high quality labour market intelligence, enhanced by foresight on emerging strategic skills requirements, to inform industrial investment priorities, anticipate and better match the supply of skills to emerging employment demand;
- Stimulate greater employer networking, collaboration and collective action on skills, within sectors, labour markets and supply chains, to increase workforce development, improve skills utilisation and create more high skills, high performance workplaces.
- 7.2 The UK Government has a strong focus on growth that is now being rolled out right across the public sector through a series of 'growth reviews', each of which seeks to understand how public authorities and services act either to help or hinder the acceleration of economic growth. The latest review, launched in June 2011, is tackling the education and training sector.

Since the UK General Election in May 2010, significant changes have been taking place in England in the approach to employer engagement and leadership on skills. The UK Government believes that much greater commitment is needed from business to invest in the skills that drive enterprise, productivity and growth. As a consequence, it has created a Growth and Innovation Fund (GIF) in England, worth £50m in 2011-12, rising to £60m in 2014-15, to help employers be more ambitious about raising skills in their sector, as a key to realising their growth potential.

The GIF comprises two elements designed to drive employer ambition and investment:

- A match-funded leadership and management grant for senior leaders in SMEs;
- The investment fund for employer-led, joint investment programmes.

The intention of the new fund is to 'run with the fastest' and invest in those sectors with the greatest ambition and strongest proposals for achieving scale and impact with their skills solutions. The fund is based on the principle of co-investment by employers and government and will focus on investment in innovative, employer-led skills solutions that will make a significant impact on the big skills challenges facing employers. The initial prospectus for the fund invites employers and their organisations to come forward, in partnership with others, with proposals for three types of project:

- 'Best market solutions' new initiatives to raise employer ambition to raise skills and growth, including the introduction of new professional standards and training levies;
- National Skills Academies expanding this employer-led programme into new sectors to build on achievements to date;
- Joint Investment Programme bringing together employer and public investment in learner training costs, to tackle market failure in vocational skills or address opportunities for productivity and growth.

Although focused on England only, it seems likely that the cumulative impact of the GIF over 4 years will not stop at the Scotland/England border, if new employer investment is released to match government funding, and new patterns (such as training levies) are introduced into UK-wide sectors of the economy by major corporations, sectors and supply chains.

7.3 The outstanding business leadership that is seen in some sectors of the Scottish economy needs to become commonplace across the board. More businesses and other employers need to become deeply engaged with the education and training system to help shape its future

There are four reasons that Scotland should seek and expect a sea-change in employer leadership, ambition, engagement and investment in skills, jobs and growth:

- 1. Scotland's economy needs more businesses with big ambitions to grow, raise productivity and invest in leadership and skills.
- 2. The involvement of businesses and other employers large, medium and small in education and skills needs to be much broader and deeper than is currently the case, to ensure that more people can make better in-school and post-school choices, and so that more vocational training is commercially orientated in its content, pattern and pace;
- 3. More businesses, especially prominent ones, need to exert decisive sectorwide leadership about the future ambitions of their sector or sub-sector in Scotland. This should be evidenced by, for example:
 - business leadership of sector skills investment planning in Scotland, in partnership with public leadership;
 - larger businesses providing training opportunities for more than their own needs, to support the growth of their sector's skills, workforce and productivity;
 - larger businesses taking the lead to create pooled investment from their sector to match public funding for priority skills investments; and
 - more businesses partnering with colleges, universities and others in innovative projects to enhance productivity, promote enterprise or develop new approaches to workforce development.
- 4. Public funding is going to be severely constrained for the next 5 years, so there will be a need to create new approaches to co-investment by businesses, individuals and government at some stages of the skills development system.

Over the past four years the energy sector and the food and drink sector, for example, have demonstrated what is possible when top-level leaders in business combine with academics and the public sector to build ambitious leadership and skills investment strategies and plans. Another outstanding example is the work of the Skills Utilisation Leadership Group, which has brought together leading people

from government, business, trade unions, third sector and academics to undertake ground-breaking work on employer ambition, high performing workplaces and skills utilisation. There are also some excellent examples of business/training/education partnerships in key industries. But as Dr Craig Thomson, principal of Adam Smith College commented on the 'Engineer of the Future' programme, "the success of initiatives like this is down to the ingenuity of the employers and trainers involved, and not the system".

Scotland's approaches, practices and public investments have been dominated historically by supply-side thinking and measurement systems, often to the exclusion of a focus on the demands and needs of the economy and business. In recent times, however, a wider range of innovative partnerships has developed, often supported by funding from SFC and SDS, through their Joint Skills Committee. At national, regional and local level, there are now a number of interesting examples of business leadership, engagement and innovation within the skills and education systems. These include:

- Scotland Food and Drink National Skills Academy;
- Tourism Framework for Change Skills Group;
- · Working with Attitude toolkit for Creative Industries and Tourism;
- Business Improvement Techniques for manufacturing companies and colleges;
- Skills Utilisation and College Graduates research programme;
- Aquaculture work-based learning and development programme;
- Scottish Dairy Skills Academy;
- Skills for the Life Sciences Industry recruitment and training initiative;
- Enhancing skills utilisation by social care providers;
- Creating a culture of innovation through Creativity and Design; and
- Recognising and enhancing skills acquired in the engineering workplace.

Many of these initiatives will be reporting the lessons learned and the results achieved in the course of 2011, from which it should be possible to distill best practice and move forward more strategically in the years ahead.

Building and sustaining partnerships of these kinds requires that both the business community and the education/training community is open for doing business with the other, and open to potentially radical ways of re-shaping their services and business models.

Edinburgh's Telford College is one of a number of colleges engaged in radical rethinking about their future role in serving the needs and demands of the economy they serve. Key to its growing success is deep and sustained engagement between businesses and the college. The college has created a series of business boards for each curriculum area, to help it shape the content, pattern and pace of training so that it matches the needs of businesses in which its students will want to seek their career. Each business board member is expected to bring into the college insights and knowledge about the changing nature of their business and the attitudes and skills they will require in their future workforce. As a consequence of this kind of deep business engagement, the college is re-shaping its courses – their content, pattern (in college / on placement), and pace – so that they bring benefit the student and the employer at the same time. In the catering/ culinary area, and the graphic design area, radical changes have already been made to the courses, leading to accelerated achievement, high-quality work placements and more satisfied students and employers. HMIe recently recognised the impact and value of these changes and commended the college for the strategic direction it has adopted. At this point, however, the funding model for further education, does not incentivise or reward accelerated achievement of the kind that Telford is pursuing.

7.4 A framework for employer engagement and investment in the education and training system

Following reflection on recent developments and research projects, it is clear that employer ambition, engagement and investment should be encouraged, welcomed and strengthened through:

- National level strategic and sectoral thinking and investment planning;
- Regional and sectoral level operational planning and integration;
- Local level engagement and influence in colleges and schools.

National

The current 16 Industry Advisory Groups for the most significant sectors of the economy are important building blocks for the future. The work of the Energy Advisory Board and Skills Development Scotland in creating the Skills Investment Plan for the Energy Sector provides an excellent example of what can be achieved, even in a large, complex sector that is experiencing fundamental change and potentially rapid growth.

However, there should be a review of the Industry Advisory Groups' (IAG) purpose and functions. While many of them have been of real value, others have been less effective. The purpose of the IAGs should change from being primarily advisory (to Government and its agencies) to being about sector leadership, growth, exports and internationalisation. These functions would, of course, embrace skills

acquisition and skills utilisation as critical elements for business success. It has become clear over the past 2-3 years that Scotland can only succeed as an economy if, in every sector, the leading businesses collectively take responsibility for driving their sector forward in the global economy. In sectors where there are significant issues, barriers or opportunities in skills and workforce development, the appropriate IAG should work closely with the relevant Sector Skills Council (SSC) to maximise the potential for Scotland from the new UK-wide Employer Investment Fund. Equally, all the SSCs should have close relationships with their relevant IAG to ensure that SSCs take Scottish businesses' needs on board in bidding for investment funding from the EIF.

In parallel with top-level, collaborative business leadership of all the significant sectors of the economy, government should focus its efforts on creating the conditions in which businesses and sectors can thrive and grow, including:

- Ensuring that the fiscal regime for each sector of the economy and the country as a whole is as business–supportive as possible;
- Ensuring that the education, skills and workforce development systems are fully aligned with the needs of employers, and that the regulatory frameworks are as non-bureaucratic and flexible as possible;
- Ensuring that the infrastructure (transport, telecommunications, energy transmission, international business knowledge and networks) to support high-performing, export-oriented businesses is at least on a par with our competitors; and
- Ensuring that the whole of our society wakes up to Scotland's critical dependence on international markets, connections and collaborations, and the need for all parts of our education system to embrace this requirement.

At a national level, the routine expectation should be that business voices should be prominent in all organisations, forums, and investment planning groups. Good progress has been made in recent years, but there is some distance still to travel. It is one thing for business leaders to be invited to join leadership groups, but it is another to create the conditions in which their investment is levered to spur innovation and fresh thinking, as is being done in England through the new Growth and Innovation Fund launched earlier this year by the Department for Business, Innovation and Skills.

At present, the interests of Scotland's employers, along with those from the other nations and regions of the UK, are reflected in the work of the Sector Skills Councils (SSCs) whose work in Scotland is coordinated by the Alliance of Sector Skills Councils Scotland. In recent years, most of the public investment in SSCs has been provided through grant-in-aid from the UK Government Department for Business,

Innovation and Skills (BIS) to the UKCES, which has had the responsibility for relicensing and part-funding the SSCs. Following the formation of the UK Coalition Government in 2010, future public funding of SSCs has been radically reformed. During the current year, most core funding of SSCs will be withdrawn and future funding will be contestable. A new Employer Investment Fund (EIF) has been created to stimulate greater ambition and enterprise from employers and to generate a more pro-active approach to funding. The EIF is available across the whole UK (unlike the GIF which is England-only). Initially £5m is available to the EIF but this is expected to rise significantly from 2012 as the bulk of SSC funding moves away from core funding to a more flexible and contestable approach.

From 2012/13 the role of the SSCs in Modern Apprenticeship Frameworks, National Occupational Standards and Labour Market Information will be handled through a separate fund, into which SSCs will bid, dedicated to the provision of what will be known as Universal Services. UKCES will issue contracts for Universal Services, and will buy exactly what the 4 Governments within the UK specify that they wish to buy. The IAGs, along with the Scottish Government, should be closely involved in specifying the contracts for Universal Services to ensure that the needs of businesses in Scotland are fully met.

Regional

The regional dimension of employer engagement and investment is more obviously relevant in some sectors than others. It is clear in sectors that are concentrated in particular parts of Scotland, including oil and gas exploration, aquaculture, chemicals, off-shore renewable energies, financial services. It also has relevance, however, across all sectors of the economy if we are interested in engaging businesses that do not operate across the whole country, but nonetheless make significant impacts within the regional and local economies of Scotland. The regional dimension also needs to feature in the work of the public funding agencies in education and training (SFC and SDS) as their investment decisions need to be based on perspectives and intelligence that are broader than the interests of individual institutions or local authorities. The economic development agencies (Scottish Enterprise and Highlands and Islands Enterprise) also have an important role to play in bringing their knowledge and perspectives to bear, especially about the companies, sectors and markets that are going to drive forward future growth, exports and the internationalisation of Scotland's economy.

Local

Most people live their lives at a local, rather than a regional level, and most employers draw their main workforce from a travel-to-work area. Most, but not all schools, colleges, private and third sector training providers, serve local markets, though specialist organisations (or specialist parts of larger organisations) sometimes serve national or even international markets.

So, for some employers, the greatest and best impact that they can have on the post-16 education and vocational training system will be at local level - while still contributing through other networks to national issues and debates. Employers should be invited and welcomed to play greater roles in the school and post-school education and vocational training system in the future. Here are some examples of the roles that employers (and their employees) can play in supporting the quality and effectiveness of the system:

- If the funding model for further education and vocational training is changed
 to focus on destinations achieved after training, as recommended in this
 report, colleges and other providers will want to build and sustain excellent
 relationships with those employers who can offer employment to their
 graduates;
- If colleges and other providers want to win more commercial business from the economy they serve, or elsewhere, they will want to build and sustain excellent relationships with businesses and sectors where such opportunities exist;
- Employers can provide work experience, work placements and internships for students, which can enhance their employability skills and workplace awareness;
- Employers can use their current industry knowledge to help providers improve or update the content of courses relevant to their business sector, advise on the best patterns of workplace and college/provider time, help providers design accelerated ways to offer their courses, so that they are as commercially focused and paced as possible;
- Employers can provide professional development and updating experience for teaching and technical staff employed by providers. Assuming the recommendations on college / provider workforce development are accepted, providers will want to find employers who are capable of providing this kind of service;

- Employers can provide facilities, premises, equipment and other resources to enable colleges / providers to offer courses, or parts of courses, that would otherwise be impossible because of cost, scale complexity or quality of equipment;
- Employers can provide endorsement / recommendation about the quality, effectiveness and responsiveness of the provider, based on their first-hand experience;
- Employers can contribute to the annual consultation and engagement process that colleges and providers (individually or collectively in their region of operation) will be expected to undertake with their stakeholders and communities;
- Employers can offer the time of some of their employees to perform roles with students and teachers in colleges, providers and schools. Roles can include mentors, STEM ambassadors, Guru lecturers.

The best colleges / providers already have some excellent relationships with employers, through which some of the above benefits are being delivered.

In some parts of the country there are Education-Business Partnerships, typically one per local authority area, through which a range of services is provided, including Determined to Succeed programme elements. If it is accepted that Scotland needs to build much stronger relationships between education and business, of the kinds described above, Education-Business Partnerships will have a wider role to fulfil to bring coherence to education/training/business connections in each local or regional economy.

7.5 Recommendations

It is important for Scotland's future that business leaders and other employers become much more significant influencers and players in the skills and vocational education system than is currently typically the case. The scale and reach of public sector institutions can have the effect of crowding out or discouraging employer leadership and investment. More of bothis needed. The lessons from the 11 innovative partnerships funded by the Joint Skills Committee, together with the experience of the first round of English GIF schemes, should be considered later in 2011. These lessons should then be used as the basis for the

design of a Growth and Innovation Fund for Scotland, directed at attracting business leadership and investment into co-funded initiatives that will accelerate business growth through skills and related investments.

- Scottish Government should, in partnership with the existing 16 Industry Advisory Groups, review and change their purpose and functions. They should change from being primarily advisory, to being about sector leadership to drive skills, jobs, growth and exporting. The best of the 16 are already orientated in that way. Business, not government, should lead these groups. 16 may not be the right number for the future but that will emerge as part of the review process. It will be important that businesses from all parts of Scotland are able to be candidates for leadership and membership of each of these business leadership groups.
- At the regional and local level there are many important roles that businesses of every size can play in the school, skills and vocational education systems. At the level of each local authority (or combination of local authorities) there should be established a Business-Education Network to co-ordinate and extend the wide range of connections that exist (or will be created in the coming years) between businesses, schools, colleges, and training providers. Some places in Scotland already have a vehicle of this kind. The Networks should be co-funded from the private and public sectors.

8. Career Information Advice and Guidance

8.1 The Scottish Government's strategy for the future of Career Information Advice and Guidance is built around 4 themes – strengthening partnership, empowering Scotland's people, supporting Scotland's employers and modernising delivery.

Earlier this year the Scottish Government published its first strategy for Career Information Advice and Guidance (IAG), describing it as a 'framework for service redesign and improvement'. The Government committed itself to an all-age, universal service as a central feature of the Scottish skills system. In her foreword to the strategy Angela Constance MSP, the then Minister for Skills and Lifelong Learning said: "Career IAG is more important than ever in enabling people and businesses to develop their knowledge and skills in order to take full advantage of the opportunities before them". She went on to commend the launch of SDS new web service, MyWorld of Work, as a "flagship development that marks a new chapter in the delivery of Career IAG in Scotland about which we should be excited and proud".

The Scottish Government's vision for Career IAG in Scotland is that it should be focused on helping increase sustainable economic growth and on delivering high levels of employment. To achieve this will require new and different services, partnership working of the highest order and better use of the country's collective resources. The strategy sets out the values around which Career IAG of the future should be built. It should be:

- Independent respects the freedom of the career choice and personal development of the individual;
- High quality should be up-to-date, accurate and consistent, enabling people to make fully-informed, confident choices;
- Impartial is in accordance with the person's interests and is not influenced by provider, institutional or funding interests;
- Informed should be based on a detailed knowledge of the changing labour and learning markets and emerging opportunities for career development;
- Supportive of equal opportunities will promote equality, in line with the Single Equality Act 2010;
- Confidential –individual's right to privacy will be balanced with the need to share information in appropriate circumstances;

• Holistic – individual needs and circumstances will be taken into account, with Career IAG forming part of a wider package of support where appropriate.

The strategy is built around four principal themes:

Strengthening partnership

The strategy recognises SDS's leadership role and the diversity of the IAG sector as key strengths on which to build universal and targeted services.
 It sets out the Scottish Government's expectations of SDS and its partners. And it identifies the importance of continuous improvement and professional development of the IAG workforce;

Empowering Scotland's people

The importance of IAG is recognised in raising aspirations, helping people
understand and adapt to the changing jobs market and acquiring new
skills. Career management skills are identified as a key to making the
most of changing opportunities. The potential of technology is
recognised, balanced by the value of face-to-face guidance particularly for
those who need it most;

Supporting Scotland's employers

 The essential role of employers in building a world-class skills base is recognised, along with their responsibility to make effective use of their employees' skills. A new emphasis is placed on creating services that are responsive to employers' needs including business support and IAG. The unique role that employers can play in giving young people early insights to the world of work is highlighted.

Modernising Career IAG delivery

 The future IAG service delivery model should be user-centred, costeffective and sustainable into the future. There is a call for service redesign and modernization, maximizing the potential of online tools and resources, backed by professional advice, while maintaining and improving face-to-face services for those who need it most.

The retention and development of all all-age, universal service of Career IAG in Scotland during the past decade is in sharp contrast to what has happened in England where many public services in this area have been dismantled. Now, after

more than ten years of fragmentation and disinvestment, England has decided to start again to build an all-age Career IAG system to support skills development.

8.2 The public sector no longer has a monopoly on the supply of Career IAG and related services.

A whole new generation of online services is now reaching the market, some of them at the very cutting edge of design and inter-active engagement. Recent research reveals that some of the principal drivers of change in the online marketplace are consumers and markets, culture change, funding models and regulation and quality assurance.

Meantime, however, the financial and other pressures facing public services have made space for the growth of a new generation of online products and services, some in the private sector, some in the social economy, and some created as public-private partnerships. This trend illustrates the rapidly changing nature of the mixed economy in information and advice services that were formerly mainly the domain of the public sector. Examples of online services outside the public sector include www.horsesmouth.co.uk, an online coaching and mentoring network for life, work and learning, www.b-live.com, showing you the way to the future, www.careerplayer.com, graduate jobs and careers advice on video, and www.aspire-i.com, a career and employment support service run as a social enterprise.

In March 2011, UKCES published a report *Integrating new technologies into careers practice : extending the knowledge base.* The report was commissioned to explore and understand how greater integration of information and communications technologies (ICT) in Career IAG across the UK is being mediated by changes occurring within public, private and community services. The report complements and extends recent UKCES work on how ICT can enhance careers support and ways in which labour market information is used online. It also builds on earlier research findings which examined governments' role in stimulating, regulating and / or compensating for market failure in careers support services.

The UKCES work is highly relevant to the Scottish Government's Career IAG strategy and the developments being taken forward by SDS in My World of Work and related services. It is clear from the report that the exploitation of ICT for building sustainable networks is re-shaping the economy. This, says UKCES, has significant implications for future workforce capacity building, with new market players and system developments operating within a climate of spending cuts, innovation or a combination of both. This is leading to shifting paradigms for

delivery and is increasing pressures for the greater use of ICT to help achieve more for less.

UKCES identifies four factors that are driving transformational changes in Careers IAG: consumers and markets; culture change; funding models; and regulation and quality assurance. The key features of change are outlined below:

Consumers and markets

- Consumer research and insights from professionals working in Career IAG should be two of the most important influencers on the deployment of ICT in new services;
- The changing nature of products and services, and the growth of new channels will pose considerable challenges for the workforce in Career IAG, who will need to up-skill themselves to deliver the services of the future;
- As the online market is essentially unregulated, there is likely to be a growth of 'rogue traders' and increasing demand for quality-marking or regulation of products and services;
- Investment by governments in raising public awareness of quality-assured services could improve social mobility and provide value-added returns to the economy.

Culture change

- There is significant scope to cross-fertilise ideas and actions between providers across the UK to redefine ICT paradigms for the delivery of online careers services;
- Those organisations likely to be most successful will be those who have access to existing and potential customers, significant ICT expertise and commercial acumen through effective cross-sector partnerships.

Funding models

- The impact of ever-changing ICT will grow and take new forms in the coming years;
- There is an obvious appetite to think of creative solutions and harness ICT more fully;
- Mediated careers support (already evident in all four UK countries) will require some form of policy leverage to stimulate and attract investment from non-traditional sources beyond the public sector;

 Public funding will continue to be highly constrained at the same time as customer expectations of online services will continue to grow. It is likely that a mixed funding strategy will be required in the future.

Regulation and quality assurance

- Regulation and quality assurance is difficult to implement online as the quantity and diversity of service providers grows;
- A quality kite-mark, endorsed by governments, employers and Careers IAG providers, under-pinning face-to-face and online services could be developed across the countries of the UK;
- The Careers IAG profession is moving towards 'chartered status' through development work undertaken by the UK Careers Profession Alliance, which should help tackle these issues.
- 8.3 SDS's design and development work on the next generation of interactive online services has now led to the launch of My World of Work which will bring significant benefits to Scotland through the customer service experience, customer feedback and co-design, innovation and scaleability.

As the leading agency in Scotland for Careers IAG, SDS has been working, since its foundation in 2008, on the design and development of a new generation of online products and services. The recent launch of My World of Work (MyWoW) marks the start of the roll out of the new suite of services designed to transform the content, accessibility, usability and reach of SDS's universal service. Its tools and resources enable users to learn about the world of work in the 21st century, to plan, build and direct their career, and, at any time in working life, pick up new skills and move on and up. MyWoW includes a CV builder, self-diagnostic tools and extensive information on learning, training and employment and self-employment opportunities. It also offers access to thousands of YouTube-style videos featuring people who work in most of the different jobs in the economy - a service made possible by SDS's partnership with icould.com www.icould.com. icould is a nonprofit charity focused on inspiration, encouragement and discovery, helping people to make the most of their potential and talent, by showing how others have used theirs. The SDS/icould partnership is an example of extreme collaboration (one of SDS's principles), that enable public services to be transformed by imaginative partnerships with the social economy and the private sector.

The strategic planning, design and development of MyWoW will bring significant benefits to Scotland in the following ways:

- Customer service experience MyWoW is a 24/7 service offering dynamic inter-active ways of accessing and sharing information, advice and guidance. With its new service SDS will be able to provide enhanced services to a much larger public;
- Customer feedback and co-design this service provides different ways in which customers can rate products and services, thereby contributing to the design and improvement of future online resources;
- Innovation the architecture of MyWoW makes use of current web technologies using open and common standards to allow future innovation to be exploited;
- Scaleability-MyWoW provides a robust platform on which SDS can scale up the provision of services, providing a platform on which further applications can be added.
- 8.4 Transformed public services of the kind now being designed in education, health, care and others will not succeed unless Scotland embraces new technologies such as superfast broadband and 4G mobile telephony to the full. Mobile platforms will be at the heart of this new generation of services.

The recent publication by the Scottish Government of Scotland's Digital Future: a strategy for Scotland sets MyWoW in the wider context of a society which is embracing new technologies across all age and social groups. The commitment by the UK and Scottish Governments to ensure that superfast broadband is delivered to the whole country – including all communities which the market, on its own, will not reach – is an essential pre-requisite for digital inclusion and for spreading associated economic, educational, health, social and environmental benefits to the entire country.

As important as covering Scotland with superfast broadband is the need to roll out 4G mobile connectivity as soon as can be achieved, including all ferry routes, fishing grounds and off-shore energy installations. Most of the latest developments in technology-supported public services – including telehealth, telecare, and all of SDS's existing and planned online services – are based around the growth of

mobile, inter-active web services. The quality of online services now being introduced across the public sector, as well as in key sectors of the economy such as tourism and the creative industries, depend on much faster and universal mobile connectivity. Countries comparable to Scotland – Tasmania and Faroe Islands to name just two – already have almost universal 3G mobile connectivity and expect to complete their 4G networks by 2012. Faroe Islands even has 4G service 50km out from the coast to support their fishing industry. Meanwhile, there are places in Scotland that still have no mobile coverage and many parts of the country where 2G is the best available. Ofcom's Communications Market Report for Scotland (August 2010) describes 3G coverage at 41% geographic coverage and 66% population coverage, well behind the UK average of 76% by geography and 87% by population.

8.5 Career Management Skills are destined to become an 'essential skill' under Scottish Government and SDS plans for the next few years, equipping people with the confidence and competence to take greater control of their decisions on learning, work and life.

One of the strategic goals contained in SDS's Corporate Plan 2009-2012 is to equip Scotland's current and future workforce with the skills to manage and develop their career through the development and application of Career Management Skills (CMS). The ambition is to create greater workforce mobility and flexibility in support of emerging and growing skills needs in businesses; and greater confidence in support of individuals' participation, sustainability and progression in learning and work.

Individual career development sits at the heart of the balance between skills demand and supply, and is a critical step forward in re-aligning the skills, learning and work system in Scotland. Empowering individuals to play a more informed role in determining and shaping their own career will be even more important as the balance of the economy changes, as new industries and new services emerge, and as the demographics of the workforce change.

SDS's vision for CMS is that it should become an Essential Skill, which equips people with the confidence and competence to take greater control over their decisions on learning, work and life. The direction of travel has been described as:

from..... to.....

people with problems
coping with change
choosing a job
punctuated lives
learning an occupational skillset
a deficit model
adding on expertise

people with resources
embracing change
preparing for future, even unknown jobs
better managed transitions
flexibility and mobility in learning and work
a strengths-based model
building in our expertise

adding on expertise building in our expertise building in our expertise creating networks

CMS have been recognised by the Scottish Government in the 2010 refreshed version of the Skills Strategy as a key skill for the current and future workforce, alongside literacy, numeracy and occupational skills. The Curriculum for Excellence provides a rich context for the development of CMS and has been the underpinning foundation on which it is being developed. CMS have been defined by SDS as:

'skills to gather, interpret and analyse career, learning and labour market information; the personal knowledge to combine this analysis with ambitions; the self-confidence to regularly explore options in learning and work; and take resultant action in building personal career pathways'.

CMS are described as comparable to the skills of learning to learn – 'a fundamental shift from teaching knowledge to students, requiring recall to excel in exam results, to teaching them how to learn and apply their knowledge in differing contexts, not only in exams. This does not negate the need to teach, but changes the pedagogical approach from behaviourist (teaching to a given outcome) to constructivist (teaching the skills to encourage lifelong learning in any context)'.

For the past year SDS has been leading the development of a CMS Blueprint for Scotland in partnership with many other players and with a strong connection to the Curriculum for Excellence, in particular *Building the Curriculum 4: Skills for Learning, Skills for Life and Skills for Work.*. A major customer insight programme was undertaken to ensure that CMS would be relevant and appropriate for people from all backgrounds and all stages of life. This led to the recognition of four key areas in which customers would value support from SDS:

- Understanding and growing self awareness;
- · Building on strengths, competencies and preferences;
- Widening horizons and exploring greater personal potential;
- Finding out and connecting into new and wider networks.

In order to accommodate the different stages and contexts in which people have to make choices and explore opportunities for their future, the CMS Blueprint has been developed to include these three different contexts:

- Learning and transitions from learning
- Working and transitions in and from work
- Out of work and transitions into learning or work.

The Career Management Skillset has 16 components, built around the four key areas derived from the customer insight research. These are:

Self

- I can develop and maintain a positive self-image
- I can maintain a balance in my life, learning and work roles that is right for me
- I can adapt my behavior to fit a variety of contexts
- I can change and grow throughout life
- I can make life, learning and career enhancing decisions

Strengths

- I am aware of and can build on my strengths, skills and achievements
- I am confident, resilient and able to learn when things do not go as well or as expected
- I can draw on my experiences and on formal and informal learning opportunities to inform and support my career opportunities

Horizons

- I understand that there are a wide variety of learning and work opportunities that I can explore and are open to me
- I know how to find and evaluate information and support to help my career development
- I am confident in responding to and managing change within my life, learning and work roles
- I am creative and enterprising in the way I approach my learning and career development
- I can identify how my life, my work, my community and my society interrelate

Networks

- I have the ability to secure, create and maintain work
- I can interact confidently and effectively with others to build reciprocal relationships
- I can develop and maintain a range of reciprocal relationships that are important for my career journey.

Development work on the CMS Blueprint for Scotland is well underway right across the five stages of Curriculum for Excellence, from First Stage (pre-school to P1) to the final stage (Senior Phase - S4-S6 or 18).

8.6 Recommendations

- Development and implementation work must proceed rapidly on the Scottish Government's Career Information, Advice and Guidance strategy and Skills Development Scotland's work on MyWorld of Work and Career Management Skills order that the benefits of the investment can be realised by individuals and employers in Scotland as soon as possible.
- 27 Skills Development Scotland should continue to explore private sector investment partnership possibilities for the subsequent products and services that will be developed in the Career Information, Advice and Guidance area, so that constraints on public funding do not impede the development and roll-out of next generation digital services.

- At the appropriate time, a major marketing effort is mounted to get My World of Work embedded in every school, college, training facility, employability programme and Jobcentre in the country, and adopted by employers as a resource of choice.
- There are many other countries (such as EU accession countries and others) which would value, but may not be able to create an online service such as My World of Work and Career Management Skills. As a contribution to export growth and internationalisation, Skills Development Scotland should commit some resource, in partnership with Scottish Development International and other public education bodies in Scotland that already have international connections, to explore export opportunities.

9. Work Experience, Placements and Internships

9.1 Work experience, placements and internships are a growing feature of the education to employment landscape, though they appear less well developed in Scotland than in London and southeast England. There is a growing market in privately-funded programmes and services and public/private partnerships in key industries and sectors.

Work Experience, Placements and Internships are as important as Career IAG in connecting young people with employers and engaging employers with their workforce of the future. When work opportunities are well-designed, well-supported and well-implemented, they can bring significant benefits both to the employer and to young people. Across Scotland there has been a significant growth in such opportunities in recent years, but the system is still underdeveloped in comparison with some other parts of the UK, in particular London and south-east England.

Determined to Succeed has created a country-wide movement that connects schools and young people with employers in the private, public and third sectors. Now that Curriculum for Excellence is being implemented, the demand for more, and more substantial engagements between young people and employers is certain to grow. The experience of employers who engage with young people is that it brings real benefits to the business, as well as making positive impacts on young people. These benefits can be found in areas such as recruitment, staff development, leadership training, development of new ideas and approaches, enhanced business reputation in local communities and more widely, and personal satisfaction and development for the employees involved.

This approach is supported by all the major employers' organisations in Scotland and is practiced by many significant businesses, including, for example, Johnson and Johnson, Halcrow, Muir Homes, McAlpine Plumbing, Scottish Power, Scottish and Southern Energy, Morgan Stanley, Deloittes, Santander, Aquaterra Energy, ASDA, and many others.

There is a growing range of different approaches to engaging employers and young people. One approach is Career Academies UK. There are over 100 Career Academies across the UK, but only two in Scotland – one at Anniesland College and

one at Edinburgh's Telford College. Career Academy students follow a rigorous two-year curriculum that can include both academic and vocational qualifications, all of them recognised by the Credit and Qualification Frameworks of the different UK countries. The aim of the Career Academy programme is to provide a relatively broad and rounded education for a young person studying for Level 3 qualifications, rather than training for any specific career or business sector. As well as subject knowledge, Career Academies equip students with valuable life skills. Employability training forms part of the curriculum offer. The whole Career Academy class follows the same pattern of study and work experience which includes various curriculum enhancements such as visiting speakers, mentoring by employee volunteers from partner businesses, six-week paid internships and employer-led seminars. This helps build powerful team morale in the Career Academy group which includes students, teachers, non-teaching staff and employee volunteers, all focused on raising the achievement and ambition of everyone involved.

The Career Academy model differs from others in the way that it mainstreams employer support in young people's course work – something that few education-business link activities offer. Existing Career Academy themes include business, finance, IT, marketing and communications, creative and media, engineering, law, retail, health and social care, and travel, hospitality and tourism.

Critical to the success of the Career Academy model is the active engagement of a large number of committed employers, known as Partners in Business. Through a rigorous selection process, they deliver employee volunteers who provide Career Academy students with one-to-one support with coursework and life skills. They are role models, critical friends and advisers.

A highlight of the young people's experience in the Career Academy is the six-week paid internship which takes place in the summer between the two years of the course. Employers provide the internship, based on a standard working-hours week, in real operating environments, and aiming to use the skills and knowledge the student has learned in school / college. These internships are neither the traditional 'work experience' offered at 15 or 16 years of age; nor are they undergraduate schemes. In addition to the internship, Academy students get the benefit of visits to employers, employer-led seminars, and, at the very start of the course, a special event in London that brings together all new Academy members for an ambition-raising experience.

Responsibility for making the Career Academy a success lies principally with the participating schools and colleges, and the quality of engagement they build with businesses and other employers in their region. The system of Academies is well supported at UK level by senior business leaders from almost 1000 companies.

Local Advisory Boards, made up of locally-based employers, provide strategic and practical support to each Academy and its partners. The effect of this process is to anchor the school / college with its supportive business community, enabling mutually beneficial long-term relationships to be nurtured.

9.2 The Scottish Funding Council has invested almost £5m in work-related learning in higher education.

The Scottish Funding Council decided in 2010 to invest over £4.7m in four large projects designed to build and showcase innovative and successful work placement projects for students in Higher Education. Each of the four projects is quite distinctive and all aim to learn what works best in different business / organisation environments.

Education into Enterprise

A 3-year project, led by Adam Smith College in partnership with others, to make accredited work-placement opportunities available to students enrolled in HE courses which do not currently offer this option. Placements are mainly with small and medium-sized businesses, micro businesses and third sector employers. The project is matching 850 students on 30-90 day placements with 500 employers.

• E-Placements Scotland

A Scotland-wide project led by Edinburgh Napier University and E-Skills Sector Skills Council to place 750 students of any discipline, at any level of study in participating universities and colleges into business and IT placements in the IT industry for between 3 and 12 months. Placements are paid, with E-Skills employers contributing up to £9m in student salaries over the 3 years life of the project.

Third Sector Internships

A 4-year Scotland-wide project led by Queen Margaret University in partnership with The Open University and the Scottish Council of Voluntary Organisations (SCVO). It is developing a national framework for managing and delivering internships tailored to the needs of third sector employers and full-time, part-time undergraduate and postgraduate students. The programme is placing 200-300 students in 60-day / 12 week flexible, paid placements.

Embedding work placements in Taught Masters Programmes

The universities of Edinburgh, Aberdeen and Stirling have formed a partnership to deliver placement opportunities to enable students in selected Masters programmes to be assessed on a report on relevant workplace experience instead of the traditional dissertation by research. Placements are sought in small and medium-sized businesses operating in key economic sectors. 500 students will work on 3 month / 60 day placements over the 3 years life of the project.

9.3 There are innovative private-sector services too that support an ever-growing industry of placements and internships

Rate my Placement

ratemyplacement.co.uk is a small UK company that has created a leading edge web service connecting companies with placements to young people seeking work experience. It now serves over 300 companies including some of the best and largest in the UK and tens of thousands of students. It has created an interactive service that encourages students on placement to 'rate their placement' against a set of criteria and score it in terms of how well it matched or exceeded their requirements and expectations. One effect of the introduction of a transparent placement rating system has been to expose poor-performing companies to enhance the quality of what they offer. Rate my placement runs on-line competitions and award systems and is now attracting a significant growth in placement opportunities.

The mission of rate my placement is:

- to provide students with access to a wealth of unique peer-to-peer information, helping them make informed career decisions;
- to work closely alongside college and university placement and career advisers, improving their knowledge of placement opportunities;
- to build a portfolio of tools and services and a complete online market place in placement recruitment;
- to raise awareness of the benefits to businesses and the economy of offering young people good work experience opportunities in companies of all shapes and sizes.

9.4 There is a growing number of innovative approaches to linking learning and work in Scotland.

In the course of the Review evidence has been received covering a wide range of innovative approaches to connecting further and higher education to the workplace. Most of the projects involve collaboration among partners and many of them cut across traditional boundaries and perceptions about the role of particular institutions.

Engineer of the Future

A partnership between Ineos Manufacturing, Forth Valley College and Heriot Watt University has created a highly innovative 5-year long training, education and career programme for high achieving school leavers. The Engineer of the Future programme integrates the development of hand-skills, work-based training and the academic requirements leading to a full MEng degree. All parties – university, college and company – are involved throughout the five years to produce work-ready graduates. Significant periods of the programme, including the academic vacation periods, involved workplace learning, training and development that includes health and safety, skills for employment and an in-depth knowledge of the sponsoring company and the chemical sector. The programme is attractive to the employers and the individuals as it enables each to gain the best knowledge and experience from both the academic and the vocational routes. Engineers of the Future is delivered jointly using a mixed-mode of delivery including:

- College / university integrated learning materials;
- Laboratory, workshop and project work in industry, college and university;
- Conventional teaching with focused contact time;
- Tutor support from both college and university in the workplace'
- Collaboration with industry sponsors to tailor and shape and academic learning with practical work in the company.

Managing in the workplace

In 2008 The Open University in Scotland and Scottish Care developed a new collaboration to support workforce development in social services. Senior care workers in residential homes are required to hold both professional and management qualifications. To meet the management qualification requirement, the university used the Open University Business School (OUBS) course, Managing in the Workplace, and adapted it to ensure it was relevant to the needs of senior care workers in the residential sector.

50 students registered on the course when it began, 20 employed by local authorities and 30 by a range of private sector care homes. Most of the students had not been engaged in post-school education, except for the vocational qualification which was required. Support from employers varied substantially, with the most engaged employers giving study time, time to attend tutorials and work-based support. Many employers gave none of this support.

Subsequently the Scottish Government responded positively to an OU bid for Skills Utilisation funding to develop support materials for students, tutors and employers in the sector. The work that is now underway will also research the specific supports which employers find most helpful in workforce development. The project is working with public, private and third sector employers to support skills development for people who have been traditionally undervalued and under skilled.

• Open University work-based learning awards

The Open University is developing a suite of work based learning awards at Diploma of Higher Education level. The awards are developed with industry and employer involvement and typically at least 50% of the credit points required to achieve the award derive from work based learning. More than 15 such awards are now offered in Scotland at Diploma of Higher Education level. The sectors in which they are available are:

analytical sciences; business; business IT; computing and its practice: early years; financial services; health sciences; health and social care; ICT; leadership and management; operating department practice; paramedic sciences; primary teaching and learning; sport and fitness; working with young people; and developing talented managers –a collaborative programme.

Scottish Agricultural College Work Placements and Distance Learning

Scottish Agricultural College (SAC) operates a scheme where students can be financially assisted to undertake work placements within the SAC Consulting Division and the Environmental Consultancy Group. Having successfully completed a placement, the students continue into the final year of their studies and, upon successful completion, may be offered a post within SAC.

SAC has re-validated or developed several programmes to be delivered through distance learning, to provide work-based high-level skills and continuous professional development, including MSc Applied Poultry Science, MSc Countryside Management and MSc Principles of Genetic Improvement.

University of the West of Scotland College Partnership Study Route

The College Partnership Study Route (CPSR) to a UK degree is offered by the University of the West of Scotland (UWS) in conjunction with colleges at Ayr, Cardonald, Cumbernauld, Dumfries and Galloway, Reid Kerr and Stow. It offers international students the opportunity to achieve a good UK degree following a combined college and university programme. CPSR was launched in 2008-09 to encourage international students to choose an innovative, flexible learning environment for their studies. It offers career-focused degree courses in engineering, computing, business, science and creative industries, affordable tuition fees, years 1 and 2 at a partner college, years 3 and 4 at UWS, and flexible entry requirements.

Robert Gordon University – College/University Degree Link

Robert Gordon University (RGU) has a long-established track record in building and sustaining links with colleges in Scotland. Degree Link enables students to complete an HND over two years and enter the third year of an RGU degree course. Students can also take a one year HNC before transferring to start the second year of a degree. Current arrangements are

in place with Aberdeen College, Angus College, Banff and Buchan College, Dundee College and the University of the Highlands and Islands (UHI). RGU also has an Associate Student Scheme whereby those who plan to progress to RGU under the Degree Link programme, receive a university card and experience many of the same benefits as full time students, such as access to university facilities and staff.

 University of the Highlands and Islands – Continuous Professional Development Awards in Sustainable Rural Development

University of the Highlands and Islands (UHI) offers Continuous Professional Development (CPD) Awards drawn from the syllabus of the BSc (Hons) in Sustainable Rural Development. These were developed in response to increasing demand from external agencies and businesses. Each individual award is composed of three related modules from the undergraduate degree programme covering sustainable development, social and community development, regional resource management, community participation, and ecology and the environment. Each participant studies in three consecutive semesters, with each short course being delivered online to provide maximum flexibility. A Virtual Learning Environment is used with course materials being augmented by tutorials, discussion boards, seminars and group activities. Evening tutorials are offered and the online environment allows students to connect from home, work or a UHI Learning Centre.

KPMG School Leavers' Programme

KPMG, which employs 10,000 people in the UK has launched a large-scale, innovative school leavers' programme. It aims to recruit high performing young people directly from school or college, and offer them a six year programme that includes a university degree, a professional accountancy qualification and work experience. Entrants are employees of KPMG and are paid an attractive salary throughout. University fees and professional examination fees are paid by KPMG. The Programme is designed to create an environment in which participants gain a total understanding of working in a professional, customer-serving environment, while they gain the knowledge and expertise that comes with a degree and a professional qualification. It is an unusual example of business leadership, innovation and intervention in the school to work journey.

9.5 Recommendations

- The Career Academies Programme is an interesting and, in England, large-scale programme, jointly financed by businesses, colleges and schools. The only two examples in Scotland are those operated by Anniesland College and Edinburgh's Telford College. It is especially relevant to this review as Career Academies are focused on S4 and S5 and on students in further education. The Career Academies Programme should be reviewed in partnership with the two Scottish colleges involved and with the leading companies in Scotland that support it.
- The experience of the four programmes financed by the Scottish Funding Council will be of considerable value in considering how to develop work of that kind in the future. The experience of the students and the employers will be of particular interest in helping shape policy and practice for the future. An approach should be made to ratemyplacement.co.uk to explore their willingness to provide a service for these SFC funded programmes. Alternatively an online service such as 'rate my placement' should be created to enable the 2400 students taking part to record their own experiences and feedback and to enable all the students to take part in peer-to-peer exchange to help the continuous improvement of the placements over the coming years.
- 32 Skills Development Scotland should be asked to explore the potential for creating a matching and rating service for placements and internships in Scotland; or alternatively of ratemyplacement.co.uk actively developing its business in Scotland, possibly in a co-investment package with SDS. Ratemyplacment.co.uk is available to businesses and students in Scotland but very few companies from Scotland are listed among the participants, although UK-wide companies operating in Scotland are.

10.Workforce development

10.1 With over 70% of Scotland's 2020 workforce already at work, investing in their further development and growth is one of the keys to economic success. It is quite as important as developing the next generation of apprentices.

Over 70% of Scotland's workforce of 2020 is already in work, so encouraging and supporting the development of those already in the workforce will be essential to Scotland's economic performance during the coming decade of change. Future success for individual businesses and the whole economy will increasingly depend on the willingness and capacity of organisations to identify and develop the skills required to support their business ambitions, and make most effective use of the abilities and potential off their existing employees. Tackling this issue is quite as important to Scotland's future as is developing the next generation of apprentices.

Many businesses do see skills as vital to achieving their goals and invest in their workforce accordingly. However, a range of indicators question the extent of Scotland's and the UK's ambition relative to international competitors. Only one third of UK employers could be classed as adopting 'high performance working practices', too few treat skills as a long-term investment, and too few are ambitious about competing in high-value international markets. Leadership and management performance in the UK also lags behind international best practice.

The UK is third bottom of the OECD countries for matching the supply of highly skilled people to high skilled jobs, even in a period (1998-2006) when the supply had been growing seven times faster than demand. This statistic alone reveals the scale of untapped potential in the workforce that could be more effectively utilised for economic success. What this means for Scotland is that, in order to build an internationally competitive economy, the future employment and skills system will need to invest at least as much effort on raising employer ambition and on stimulating demand as it does on enhancing skills supply. For this reason our definition of workforce development is broad, covering both business support and training and development for those in employment.

Investing in vocational training brings returns to individuals, employers and the nation, just as lack of them hampers progress. The UKCES report on *The Value of Skills*, published in 2010 shows that:

- Vocational training is a good investment for employers. The productivity gains from employer-provided training are up to 5 times the wages impact of training received by employees;
- Vocational qualifications can deliver significant benefits for their holders in terms of employment and wages. Wage premiums for vocational qualifications can exceed 20% and are comparable to premiums for academic qualifications when compared per year of study;
- Apprenticeships are most beneficial with wage premiums of up to 22% for the individual and £17 of net present value per pound of state investment;
- There are substantial employment benefits to acquiring vocational qualifications in adulthood. Men who leave school without qualifications and then go on to gain vocational qualifications at Level 1 are 4% points more likely to be employed than males who leave school without qualifications and undertake no subsequent qualifications. For women the figure is 16% points.
- Addressing poor literacy and numeracy skills boosts the employment and earnings potential of individuals. Men with Level 1 literacy are 6% more likely to be in employment than those with Entry Level 3, while for women the rate is 8%. Individuals achieving Level 1 literacy receive a 12% boost to earnings relative to those on Entry Level 3; for numeracy the boost was 6%.

10.2 Who invests what in workforce development?

In Scotland, many employers do invest in training; indeed employers in Scotland are more likely to train their workforce than is average across the UK (65% compared to 60%). According to the Scottish Employer Skills Survey 2008, almost two-thirds of employers (65%) had offered some form of training to employees in the preceding 12 months. However, this varies significantly by:

- Size of employer larger workplaces are more likely than smaller workplaces to train;
- Industry sector public administration, defence, education, health and social work sectors are most likely to offer training; agriculture, forestry and fishing, manufacturing, construction, transport, storage and communication sectors least likely;
- Private, public, third sector a higher proportion of public and third sector employers offer training than do private sector workplaces;
- Amount of training 25% of employers provided 1-2 days training in the previous year; 10% provided more than 20 days;

• Level of staff trained – professional and associate professionals are more likely to be trained than elementary staff.

Of those employers who do not train, 40% said it was because their staff were fully proficient and 31% said that training was not necessary in their business. Only 10% of employers said that lack of funds was their reason for not training, although financial support was important to small businesses.

Analysis shows that for some years to come, Scotland's most critical skill shortage areas are likely to be at skilled technician and associate professional level (intermediate level skills at SVQ levels 3-4; SCQF levels 6-8 equivalent) across many sectors, together with basic skills (numeracy, literacy, ICT user). Employers express concern that the deficit of basic skills is not only a problem for individuals and employers, but a heavy drag on business performance across the economy and should therefore be a policy priority. Other priorities identified by the business community include employability skills, skills in key growth sectors, and encouraging the take-up of STEM (science, technology, engineering, mathematics). The development of STEM skills on a wider scale has also emerged as a prerequisite to underpinning and maximising the potential from the technology-driven economy of the future.

10.3 There are quite a number of barriers that are impeding progress in workforce development including issues of strategic leadership and roles and responsibilities; issues about lack of effective and robust data; the funding model for the post-16 system; uncoordinated demands made of employers by the education and employability systems, and many more.

Other recent research and consultation at Scottish and UK levels points to a number of barriers within the current system that are hampering progress, including:

- Lack of strategy and leadership of workforce development in Scotland, leading to confusion around roles, responsibilities and priorities;
- Lack of robust, accessible labour market intelligence and information at national and sub-national levels to inform the planning of responsive provision, support business development and assist individuals with career planning and choice;

- Lack of a transparent funding model for the post-16 system, leading to no clear statement of what or whom the public purse will fully fund, and what requires to be co-funded between state and employer, or fully funded by employers and individuals;
- Allied to the above, the current funding model for Scotland's colleges, through which the bulk of post-16 skills funding flows, does not adequately incentivise the delivery of workplace-based, part-time, flexible provision that matches the needs of the employer;
- There is no accurate data on the current public spend on workforce development, as each public agency involved uses different terminology and data capture, and there is no central recording of spend across agencies;
- There are limited incentives to help individuals and employers co-finance
 their training and no clear information on which workforce development
 activities are supported through the public offer, who is eligible for support
 and where support of further information can be accessed. Also public
 funding available to support workforce development is scattered across a
 number of agencies;
- Arising from that, there is a lack of awareness, especially among small businesses of the public support available. The Federation of Small Businesses (FSB) has confirmed, for example, that the Flexible Training Opportunities scheme run by SDS is the right kind of targeted approach for small firms, but uptake is low because most small firms are unaware of its existence;
- In terms of awareness, confidence in knowing where to look for information, help and advice on skills or training-related issues is high and rising among larger businesses, but the picture is very different among small businesses. Only 3% of FSB members say they would approach SDS when considering staff training, although 93% have heard of Business Gateway. From a sectoral point of view, just over a third of all businesses in Scotland are aware of their Sector Skills Council (SSC), but the vast majority of FSB members (93%) know little or nothing about their SSC and their role in workforce development;
- A variety of uncoordinated demands made of employers by the education, skills and employment systems arising from a range of policy initiatives and priorities. The 'ask' includes work-experience for school students, work placements and internships for students and staff, support with course design, study visits, involvement in the governance system, summer jobs, gap-year opportunities and more;
- Many employers feel that publicly-funded learning providers are unresponsive to their needs, in terms of the timing, pattern, pace, content and location of learning and training;

- The contracting process for the national training programmes run by SDS –
 Modern Apprenticeships, Get Ready for Work, Training for Work is focused
 on achieving numeric targets rather than enabling flexibility to meet varied
 and changing economic and social priorities;
- The institutions, qualifications and support available for workforce development are sometimes unique to Scotland and different from the other countries of the UK. This can contribute to confusion and frustration particularly for large employers operating across the whole of the UK;
- Factors that may militate against some individuals within the workforce expressing a demand for skills development include: the nature of the employer (sector, size), employer attitudes and practices towards training; workplace culture, peer pressure and the extent of unionisation;
- Union Learning Representatives (ULR) are more likely to report a positive influence on training levels where:
 - They are valued by managers;
 - o They spend more than 5 hours per week on their ULR role;
 - Employers consult or negotiate with ULRs when deciding training matters;
 - o ULRs are responsible for no more than 200 employees;
 - o They are in workplaces with a learning centre;
 - o They have been involved in a Union Learning Fund project.

However, the majority of ULRs do not report these features, suggesting scope for improvements that could lead to increased workforce development in the workplace.

10.4 A fresh commitment is emerging to create an effective workforce development system for Scotland.

This commitment can be seen in the refreshed Skills Strategy *Skills for Scotland : Accelerating the Recovery and Increasing Sustainable Economic Growth* . It can be seen in the work of the Workforce Development Action Group of the Joint Skills Committee. And it is reflected in the decision of the Scottish Government's Strategic Forum to designate SDS as the lead body for workforce development.

The refreshed Skills Strategy sets out a vision of a Scotland where 'high skill, high productivity, healthy workplaces enable people to perform at their best'. It outlines:

'The ambition for a highly and relevantly skilled workforce is clear but to increase productivity the improvements in the supply of skills must be matched with the right conditions for these skills to be absorbed and used effectively by employers. Businesses' demand for skills derives

fundamentally from their needs and ambitions. More effective leadership and management is needed to raise business ambition and to help increase the capacity of firms to realize their ambitions. Clearly raising ambition is more than just a product of leadership and management development, and this refreshed skills strategy must be seen against the wider context of the Government Economic Strategy.'

In June 2009 the Strategic Forum agreed that the current workforce development public offer in Scotland required greater alignment, improved coherence and increased visibility to enable business to easily access available support, and to ensure the delivery of an efficient, cost-effective, demand-led workforce development system. To progress this, the Skills Committee of SFC and SDS set up a Workforce Development Action Group in September 2009 comprising representatives from key partner agencies and industry, led by Linda McKay, Principal of Forth Valley College.

The Action Group defines workforce development in Scotland as: 'Learning and organisational development activity for those in employment'.

Its Vision for workforce development in Scotland is:

'a system that is tailor-made (local and sectoral), responsive and agile, fitting to the Scottish system, and value for money'.

The Action Group's recommendations were endorsed by the Skills Committee on 26 August and by the Strategic Forum on 30 November 2010. SDS has been charged with providing top level leadership of the Framework for Action to ensure implementation of the recommendations.

Detailed information about the Framework for Action is included in Annexe 4.

10.5 There may be as much as £329m of tax relief each year for companies paying Corporation Tax in Scotland.

During the review research was commissioned on the value of tax relief on work-related training in Scotland in order to gain some idea of the nature and scale of the tax relief and to inform other aspects of the work of the review, for example in relation to personal development accounts. Early in 2011 the TUC published a paper 'Tax relief on training – investigating the options for reform'. The research suggests that companies in the UK receive around £5billion a year in tax relief on work-related training. The research provides an estimate of the value of the Scottish element of this relief as well as discussing the impact of the assumptions

made in arriving at the estimate. It considers the robustness of the initial figure quoted in the TUC paper; it details the assumptions used to attribute this value across the UK; and finally it estimates the value of the tax relief on work-related training for firms employing people in Scotland, using the same method as the TUC for comparability purposes.

For purposes of clarity and understanding, the research identifies a number of caveats relating to the total expenditure on training and a series of assumptions used to reach an estimate of the value of the tax relief in Scotland.

The TUC paper uses a figure of £39.2bn for total training investment in England by all types of enterprise, derived from the National Employers Skills Survey (NESS). There are several issues relating to this figure that are likely to influence whether this figure is appropriate and reliable for use in calculating the total value of training in the UK and Scotland:

- Firstly it is based on the results from a cost of training survey sample which is self-selecting. Participants in the main NESS survey were asked if they would like to participate in a follow-up survey. Therefore there are questions as to how representative this figure is, meaning that it could be influenced by bias in those who responded to the survey;
- Secondly, the figure is prone to problems with regards to cross-border issues, in that many organisations are likely to operate throughout the UK, and it is not clear how the expenditure on training for respondents to the England-only NESS accounted for this. It is also unlikely that to expect that individual respondents would have accounted for this is a uniform way as well. Therefore this raises a significant problem with regards to attribution of training activities to parts of the UK and potentially introduces some element of double-counting.

These issues are very important for the value of training tax relief in Scotland, as all subsequent calculations are directly dependent on this figure for total expenditure on training.

Armed with an understanding about the limitations on the accuracy of the data, it is possible to make an estimate of the value of work-related tax relief in Scotland, although the estimate needs to rely on some further simplifying assumptions as shown below:

- It is assumed that per capita expenditure on training in England is the same across the UK;
- It is assumed that the structure of the economy is the same across the UK as it is in England (in terms of the % of people employed in the private, public and third sectors;
- When estimating the tax relief for firms, it is assumed that the proportion of employees working in firms that make a profit (and therefore pay corporation tax) is the same proportion as the proportion of firms that make a profit;
- When estimating the tax relief for firms, it is assumed that training expenditure is spread evenly across profitable and unprofitable firms;
- When estimating the tax relief for firms, the average figures from HMRC are imposed onto Scottish data;
- When estimating tax relief for businesses that are partnerships or sole trading enterprises, English figures for the amount of training costs which are eligible for income tax relief are imposed onto Scottish data.

Given these assumptions, the estimated figures for expenditure on work-related training and also Scottish work-related tax relief are shown in the tables below.

Table 1 – estimated Scottish expenditure on work-related training by organisation type

Organisation	Total (£bn)	Tax regime
Private for profit companies	3.12	Corporation Tax
Self employed and partnerships (investment in own training)	0.34	Income Tax
Self employed and partnerships (investment in employee training)	0.27	Income Tax
TOTAL (£bn)	3.73	

Table 2 – estimated Scottish work-related training tax relief

Tax relief	Total	Tax regime
	(£m)	
Total Scotland Corporation Tax Relief	329	Corporation Tax
Total Scotland Income Tax Relief (for own training)	66	Income Tax
Total Scotland Income Tax Relief (for employee training)	53	Income Tax
TOTAL (£m)	448	

Therefore the above analysis suggests that tax relief of around £448m is received annually by firms employing people in Scotland, although it is important to note the caveats and assumptions behind the estimation of this number. By way of comparison, the annual budget of SDS for 2010/11 was around £210m. The

analysis of training tax-relief raises some significant questions in relation to investment of public funds in workforce development, including the following:

- If Corporation Tax were to be passed to some of the Devolved Administrations, as is currently under discussion, would the Scottish Government want to introduce any variations in the regulations around training tax-relief, or would it want to try to obtain greater leverage for the Scottish economy and workforce development through changes in the regime?
- How could private sector investment in workforce development on the scale shown in the table (£3.73 bn per year) be used to achieve greater impact in terms of leadership, competitiveness, profitability, innovation and productivity?
- Should there be greater transparency about individual companies receipt of training tax-relief when decisions are being made on further public investment in these companies in, for example, Modern Apprenticeships, Flexible Training Opportunities, or Graduate Placement Programmes?

10.6 Recommendations

33 A new strategic focus on workforce development

The new sharper focus on workforce development in Scotland should be based on three broad principles:

1 Support businesses to create more jobs and more highly skilled jobs

Scotland's prosperity depends on how many people are in work, in which sectors they work, how productive they are in work, how competitive are the products and services they offer, and into which markets their products and services are sold. Scotland's business environment, business ambition and business leadership are critical determinants of all five ingredients.

2 Invest in the right attitudes, capabilities and skills

These are the essential elements that help achieve business success and individual performance, and effectively meet the changing needs of the labour market.

3 Use information and incentives as levers to raise employer and individual ambition and investment in skills

There is a real need to challenge and change the way that individuals and businesses perceive skills – from a one-off experience in youth to a lifelong commitment to personal development; from a business expense to a recurring investment in future success. A key role of Government is to enable these changes to take place across the economy – using political leadership and public investment as levers for achieving and sustaining greater investment in skills, and using information to continually inspire and encourage business leadership development, business ambition for growth, investment in people and skills. Whatever level of public investment is available should be re-engineered to maximise the leverage it can secure with businesses and individuals.

34 Use the strategic framework

- The Framework for Action for Workforce Development has been approved by the Strategic Forum and work is now underway on the Implementation Plan. An important issue, following the election, is to ensure that the policy priorities for workforce development from 2011 are consistent with the Government Economic Strategy and the economic development priorities of the coming decade. Public effort and investment cannot be expected to cover all sectors of the economy, so it is vital to focus mainly on businesses with the ambition to grow, whatever their current size, in the key growth sectors of the economy, to support their expansion in growth markets around the globe.
- The roles and responsibilities of key public agencies and delivery partners at national and sub-national level should be clearly defined and aligned, in terms of goals and outcomes. Measures and incentives should be set that drive ambitious performance, and enable appropriate monitoring of impacts, success and failure. A culture of continuous improvement should be put in place so that accepting indifferent performance become a thing of the past.
- It is important to recognise that the role of Sector Skills Councils has, and is changing substantially from April 2011 onwards. The strategy should integrate their new role to ensure that the SSCs complement and enhance Scotland's priorities.

- SDS's designation as leader of the implementation of the Framework for Action for Workforce Development is a significant and welcome step forward in providing clarity. It is important that its responsibilities and accountability is specified and well understood by all stakeholders. The continuance of the Skills Utilisation Leadership Group should also be welcomed as it has performed a ground-breaking role in this field over the past 3 years. Its membership may merit review as it enters a new phase in its role and in the impact it wants to achieve.
- Lessons can be learned and applied from existing good practice in joined-up, employer-facing work in Scotland and elsewhere in the UK and abroad. Good home-grown examples are the Skills Investment Plan for the Energy Sector, the work of PACE (Partnership Action for Continuing Employment) during the economic turbulence of the past three years, and the partnership between Forth Valley College, Heriot Watt University and the Chemical Industry Association and its employers.

35 Raise employer ambition

- As part of the overall strategy to galvanise industries and sectors to improve
 the skills and productivity of their workforces, Scottish Government agencies
 and partners should incorporate into their plans the refocused role of the UK
 Commission for Employment and Skills (UKCES) and the Sector Skills
 Councils. The primary role of UKCES is to work with employers, trade unions
 and public organisations with the aim of significantly raising employer
 ambition.
- From April 2012, Sector Skills Councils will be able to bid into a UK-wide Employer Investment Fund (EIF) held by UKCES, to support sector solutions that meet the particular challenges within their industries. Solutions could be combinations from a range of measures from occupational licensing, levies, procurement and voluntary codes, to group training associations and employer networks. Employers in their sectors are best placed to know how radical these approaches need to be, where action should be targeted to achieve real change, and how effectively to build the capacity and capability of employers to continuously improve, routinely set and raise standards, and become high performance working organisations. SSCs will want to work with Scottish partners in developing their proposals for the EIF.

 Union Learning and Investors in People are both tools that can be further strengthened and re-invigorated as part of an overall strategy to enhance business performance and raise individual aspiration by creating a culture of continuous learning in the workplace.

36 Inform and empower stakeholders

- There is a need to utilise and if necessary supplement existing authoritative sources of high quality, independent, forward-looking labour market intelligence (UK, Scottish, sectoral) and market it through the workforce development system. This will help support strategic thinking, provide planners with common sources of intelligence, and offer individuals access to high-quality information to help them make informed decisions about the development of their career. Identifying the current and future skills required to support business growth and technological changes will help the system work more effectively. Independently commissioned and conducted employer surveys are important to achieve system improvement and target investment appropriately. It is also important for Scotland to conduct benchmarking and evaluation (at international as well as UK level) to assess the country's competitiveness in relation to skills, jobs and growth. The Scottish Government should consider commissioning a National Strategic Skills Audit to build a current intelligence base for investment decisions for the next decade.
- Building a common LMI framework across all sectors of the UK economy is widely regarded as an essential building block for the future. UKCES has been working with all sectors of the economy on this endeavour and negotiations are currently underway with Jobcentre Plus about the development of a common LMI framework across their network.

37 Encourage collective responsibility and co-investment by employers

• Scotland should consider introducing further incentives to promote high performance workplaces and stimulate demand for skills solutions. In England only, the Department for Business, Innovation and Skills (BIS) has launched a Growth and Innovation Fund (GIF). The GIF supports employers to be more ambitious about raising skills in their sectors and improve their development and deployment of workplace knowledge and skills. Employers and their sectoral organisations can apply for investment into employer-led proposals to raise skills levels and business performance through innovative approaches that address a clear market failure or opportunity. The GIF is underpinned by co-investment from employers.

- Leading-edge employers in Scotland are eager to create better workforce and skills development solutions than those that are routinely on offer at present. Employers in oil and gas, construction, renewable energy, food and drink, engineering construction, catering and culinary, graphic design, multi-media technologies and chemicals have noted their frustrations with the mainstream systems they currently encounter, and their interest and commitment to co-design better solutions to meet the needs of their businesses and their workforce. There would be a very positive response to the creation of a Growth, Innovation and Skills Fund in Scotland, initially focused on the key growth sectors. The Fund's remit and regulations should be co-designed between the appropriate government agencies and industry leaders and it should be designed to encourage and incentivise innovation and productivity.
- A range of financial tools can be considered as incentives to support investment by employers in skills. These include subsidies, loan guarantees, tax-relief and other tax-based schemes, pay-back clauses, procurement clauses and others. As public funding will be constrained for the next 5 years and possibly longer, the aim should be to develop sustainable models of coinvestment which enable the public sector to reduce over time the scale of its commitment to any particular employer or sector.
- Co-investment by individuals could be supported through finance for tuition, for example low interest, income-contingent loans or other incentives, channelled through the Personal Development Account, proposed elsewhere in this report.
- Based on the evidence of the positive impact of Union Learning Representatives on employee demand for skills development, consideration should be given as to how the approach might be replicated in the majority of workplaces that do not have trade union representation. The 'dialogue' approach advocated in a recent paper by the CBI, TUC and BIS, offers one solution.
- SDS and the Skills Utilisation Leadership Group, together with industry leaders, need to make and win the economic argument for greater investment in skills and workforce development in Scotland. As there is strong evidence of the benefits to the individual, the company and the Scottish economy of greater investment in skills, this should be developed as a major marketing and engagement plan over several years, on a scale comparable to the engagement plan for the Low Carbon Economy.

• Employers are unwilling to invest in training that does not reflect the skills they want and need. Nor are they keen to buy training from colleges and other providers who only offer one kind of service that fails to match the pattern, pace, content and location that the employer requires. This is a particularly difficult issue in rural areas where the choice of local training provider is inevitably more restricted. Elsewhere, the report covers changes that are required on the supply side of the system so that more employers can source the service they seek.

38 Communicate the messages

- Skills Development Scotland, as lead agency for workforce development has
 a particularly important role in shaping key messages. A marketing strategy
 is required that uses all the general and sectoral employer channels and
 trade unions. A range of marketing channels will be required including online multi-media products and social networking.
- Employers approach a wide range of organisations for information about employment, skills and workforce development. The imminent review of the Business Gateway contracts offers a good opportunity to re-visit its role in relation to workforce development. The work underway in SDS to transform its online services to individuals, businesses and communities should be accelerated so that it can become the best-in-class, online resource for everything employers need and want in the workforce development arena.
- The Scottish Credit and Qualification Framework Partnership can do more to promote the framework as a simple translation and recognition tool for employers, by making more of the alignment agreements with other UK qualification frameworks and the European Qualifications Framework. Simple on-line tools and communications should be produced that show how Scottish qualifications compare with those from other countries. The more international our economy becomes the more benefit will come from the ability of businesses and individuals to understand comparabilities.
- Explore expanding the reach and accessibility of the business mentoring service offered via Business Gateway through partnering with online mentoring services provided by social enterprises. An example is the partnership that the UK Government's Department for Business Innovation and Skills has forged between Business Link and Horsesmouth to provide online, mediated mentoring services to businesses that reach employers at times and places of their choosing.

- 39 Build capacity and strengthen the employer voice throughout the system
 - Ensure the engagement of business right throughout the post-16 system from national boards, committees and forums, through to Community Planning Partnerships and provider boards. Engagement can be drawn from general representative bodies, sector bodies, professional and trade bodies, as well as individual businesses. Another section of the report discusses the issue of employer engagement more generally.

11.Achieving greater public value

Looking forward to the decade to 2020, Scotland faces an unprecedented outlook which demands some radical changes in the ways it strives to achieve sustainable growth and an inclusive society. Among the most significant challenges and opportunities are:

- The substantial year on year reductions in public expenditure which will continue until 2015;
- The demographic trends which will see a reduction in the number of people of working age and a steady increase in older people;
- The ambitious strategic intentions of the Scottish Government to change Scotland's economy over the coming years to achieve the equivalent of 100% of Scotland's electricity needs produced from renewable energy by 2020; and an increase of 50% in exports by 2016;
- The opportunities that are available, using current and new technologies to transform many established patterns of work, education and public services;
- The drive, that is now well underway, to create a low carbon and resource efficient economy and society that will bring changes to everyone's lives.

Taken together, these five trends represent a profound rebalancing of how to achieve success in economic, educational and social terms. Scotland's education and training system needs to see itself as a key part of the solution to these challenges and opportunities, otherwise it will become part of the problem. The system needs to recognise that reducing the scale, quality and reach of its services because there is less public money available is not a viable option. Such an approach would weaken its contribution to the country's future success, diminish its productivity and value, and lead to its long-term decline. The system needs to think, plan and operate differently so that it focuses on how to achieve much higher productivity and offer Scotland greater public value. Scotland has reached the end of an era when increasing public funding could be used to increase quantity and impact. New business models are needed, and new forms of collaboration and co-investment are called for.

This short, final chapter of the report identifies some possible directions of travel and some innovative approaches to can contribute to future solutions. All of the ideas mentioned below have been witnessed in operation somewhere in Scotland or in other competitor economies. The future is already here, but it is disaggregated and tentative, as is always the case at the early stages of radical change.

11.1 The power and potential of learning technologies

The entire curriculum of the Massachusetts Institute of Technology (MIT) is available free of charge on the web to the world. The Open University is the largest producer of i-tunes U learning materials in the world. The University of the Highlands and Islands is the UK's most prolific university user of teleconferencing to support blended learning in tertiary education. There are some excellent examples of technologies being used in post-school education and vocational training in Scotland. But right now, there is not a strategic plan to embrace existing and coming technologies across the system, and much of what is in place is highly fragmented and disaggregated, constraining the advantages of scale, reach, efficiency and productivity needed for the future.

11.2 Acceleration of learning, training and apprenticeships

Much of Scotland's post-school education and training system is shaped and driven by 'time serving', where the traditional pace and patterns of the academic term, week and day dominate. This pattern may be traditional in education, but it is not how most businesses and many public services operate. Even the apprenticeship system – in which apprentices are employed while they train – is dominated by 3 or 4-year apprenticeships. There is a need to challenge the desirability of these patterns, and question in whose interest it is to retain them in their present form.

In the course of the review much evidence was submitted that calls into question the value in, and need for sticking with these traditions. The Modern Apprenticeship Frameworks do not dictate the length and pace of an apprenticeship. Many employers are frustrated that the pace and pattern of apprenticeships are too slow and too long, and often fail to instil the most efficient and productive working habits and practices. There are accelerated apprenticeships which are greatly valued by the apprentices, as more intensive training and work experience enables them to advance faster, earn more money sooner, and gain their qualification in 66% or 75% of the time otherwise required. These accelerated programmes are operating in catering and culinary courses where, through re-design of the model, the programme is routinely completed in 60% or so of the time previously required, bringing productivity gains for the individual, the training provider and the employer. Unfortunately, in the case of colleges, the funding model provides a disincentive to accelerated programmes as it pays for participation, not outcomes.

11.3 Effective utilisation of assets and capacity

Some public services operate 52 weeks, 365 days and 24 hours. Examples in Scotland are in public transport (where maintenance and repair is carried out in the 6/24 hours when services are not mainly operating); and in the National Health Service (where an appropriate level of service is available overnight and at weekends). In the area of post-school education and vocational training, in which the Scottish Government has invested £1000 million of capital expenditure in the past decade, a much less intensive pattern of resource utilisation is typical. In some parts of the Community College system in the United States (Wisconsin is an example), the colleges are open for business 50 weeks / 6 days / 15 hours. Milwaukee Area Technical College, for example, runs two full shifts from Monday to Friday (0700-1400 and 1430- 2130) and one on Saturday. This more intensive pattern enables them to provide training for a significant number of people who have full time jobs as well as offering flexible learning patterns to people who have family and caring responsibilities.

11.4 Collaboration, mergers, acquisitions and shared services

There are many collaborative relationships within the education and vocational training system, including some international examples. There are also many education / business and education / community relationships that have been visited during the Review. Mergers between institutions and companies, triggered by a variety of reasons, have taken place in recent years and are likely to continue. There are also good examples of collaborative programmes that cut across traditional boundaries between school / college, college / university and education / business. The University of the Highlands and Islands (UHI) is a large-scale example of innovation, tailored to the distinctive economic, educational, social, geographic and cultural realities and ambitions of the Highlands and Islands. It is a complex collaborative partnership between 13 colleges (that offer both further and higher education) and a number of research institutions. Geographical and cost factors have required UHI to be innovative in the design and delivery of everything it offers, and it has now embarked on a wide-scale programme to enable most of its courses to be offered as blended learning, including distance learning online and through video-conferencing.

Shared (and sometimes outsourced) services have the potential to offer enhanced quality, productivity and costs in the education and training system. Within the public services in Scotland there are many examples of major shared and outsourced services which operate highly successfully. The technology that stands behind NHS24 is outsourced. The technology services of SDS, Scottish Enterprise

and Highlands and Islands Enterprise have been unified and outsourced over the past 2 years with substantial gains in quality and major financial savings. The system that provides train tickets for the entire railway system is not run by ScotRail but outsourced to a specialist provider.

The Further Education Colleges in Scotland should explore how some of their backoffice and customer service systems could be shared or unified to offer enhanced customer service, to create unified services across the system, and to save public money.

11.5 Low carbon and resource efficiency

Every business, institution, social enterprise and household is going to become an active player in the drive towards a low-carbon and resource efficient economy. The Scottish Government has set Scotland on a path that aims to make the country a leading player in the low carbon economy. This has two kinds of implications for schools, colleges, universities and training providers that support the post-16 system:

- There is a growing market for knowledge, knowledge exchange, skills and qualifications related to low carbon and resource efficiency. Soon, most companies and institutions will have a strategic and operational business plan to become much greener. There is new business for players in the vocational education and training system who want to become centres of excellence in this area;
- Each college and provider receiving public funding will, in the future, be
 expected to demonstrate their own credentials as a low-carbon and resourceefficient operator. The pressure, and the opportunities to become ever-more
 resource efficient, will be continuous from this point on. The 'invest to save'
 approach will become ever-more compelling as the price of carbon rises and
 environmental and taxation pressures force every organisation to operate
 differently. The carbon measurement disciplines of the future will include
 carbon used in the travel to work / study process, requiring institutions and
 other providers to adopt strategies to reduce carbon use among staff and
 students to a minimum.

11.6 Workforce development and CPD

The post-school education and vocational training system is strongly (though not exclusively) focused on helping people who are destined (sooner or later) to use their knowledge and skills in the workplace. In order to be most effective in their roles, the teachers, lecturers and technicians who work in the system need to be aware of, and experienced in the kind of businesses and workplaces to which their students and trainees are destined. The continuous development of the further education and vocational training workforce is therefore an important element in ensuring that what happens in the training centre or college is fit-for-purpose for the needs of businesses in their sector.

Many businesses, and indeed many public and community services are themselves undergoing substantial change as they constantly improve their operations and / or introduce new technologies and ways of working. How, therefore, do the trainers and educators keep up to speed with what is happening in workplaces? In the best cases, there are opportunities for attachments, secondments and internships for staff to spend time with relevant employers. In other cases, the quality of the relationship between a training provider and businesses in their sector leads to informal opportunities for staff remain abreast of current practice and expectations. In yet other cases, some staff who work in colleges and training companies are part-time in that role and also work part-time in the sector in which they offer training. But there are thought to be many situations where staff in colleges and training companies are offered few or rare opportunities to work in businesses for which they are training the future workforce. In order to constantly improve the relevance and fit between what happens in training and what happens in work, new standards of CPD and work experience for teachers, lecturers, trainers and technicians should be established. The aim would be that everyone who works in the system can have recurring opportunities to work in business and gain greater experience of current practices, technologies and developments.

In the Austrian vocational education system, many staff have a contract that requires them to work in business 50% of the year and teach or train in the vocational college 50% of the year. That may or may not be something that Scotland would like to aim for, but the concept of 50/50 is a good one. In the Austrian system, one effect of that pattern is that students hold their teachers / trainers in high regard as they not only have high-value current knowledge about their subject, but they are in a position to offer students introductions to the business in which they work the other 50% of the year.

11.7 Recommendations

- 40. Taking the lead from The Open University the UK's largest university and the one that offers greatest student satisfaction Scotland should create 'The Open College' to enable post-school education and vocational training to gain the same kind of advantages in performance, flexibility and outcomes. This could be a collaborative venture co-designed with the OU, colleges, businesses and students. It could become an international college, serving the English-speaking world, and adding to Scotland's internationalisation and export growth.
- 41. Programmes, processes and funding models should be re-designed to enable accelerated opportunities those capable of taking advantage of them, while offering less intensive programmes for those who need more support? The providers, employers and trainees consulted during the review who have introduced accelerated programmes have found significant business benefits from doing so and would not revert to their previous practices.
- 42. The Scottish Government and partners should explore ways in which the capital assets of the post-school education and vocational training system could be used differently and more intensively to serve a larger population of students and to offer flexibility to more people so that they can learn and earn at the same time. The system operate like other businesses and some other public services with 50 week / 6 day / 15 hour operations. With the added benefit of learning technologies, more people should be able to learn from home and/or work as well as attending an institution or other training provider.
- 43. Commending the principle and practice of cross-boundary collaboration, the public funding system should strongly incentivise innovative approaches on a large scale of the kind already adopted by several colleges, universities and businesses.
- 44. The Further Education Colleges should take the lead to explore the scope for shared/outsourced services with a view to improving customer services, unifying back office and other functions, and saving public funds. It should be noted that unification need not imply centralisation in large population centres.
- 45. The funding system should incentivise acceleration towards low carbon and resource efficiency in education and training institutions and programmes. A knowledge network should be created across the education and training system to share good practice and encourage ever-better outcomes. A carbon measurement system should be created (similar to the system on white goods) to reveal the resource efficiency of buildings and other facilities in the system

46. In order to tighten relationships between learning and training providers and employers, and to enhance the quality and relevance of training, the vocational training system in Scotland should consider how best to enhance the Continuous Professional Development opportunities on offer to its workforce, using the Austrian model as a trigger for discussion.

TERMS OF REFERENCE AND CONDUCT OF THE REVIEW

Purpose of the Review

The Review is being undertaken to help achieve:

- Significantly better value for Scottish Government expenditures;
- More effective connections on employment matters between the Scottish and UK Governments; and
- Faster progress towards the Government Economic Strategy targets and National Outcomes (particularly Outcomes 2, 3 and 4)

Scope of the Review

The Review will focus on the area of post 16 vocational education and training which supports people into work and helps sustain them in productive employment or enterprise. The Review will focus on vocational education and training in a broad sense. It will include publically funded provision in further education, including HN provision in colleges, and through other training providers as well as provision funded by employers and learners and support services. It will not include higher education in universities or the case for Curriculum for Excellence. It will include school/college partnership activity, the relevant progression and credit mechanisms (from SVQ level 3, SCQF levels 6 and 7), and ensuring training provision for 16-18 year olds appropriately provides all entitlements within Curriculum for Excellence.

Terms of reference

The broad Terms of Reference for Review have been developed and are set out below under six main headings – Young People and Transitions to Work, Support to Unemployed People, Workforce Development, Skills Investment and Support & Emerging Sectors, Public Investment, and Skills Infrastructure & Partnership Working. Within each of these areas, the Review will:

Young People and Transitions to Work

- Examine the responsiveness of the education, training and support systems for young people in Scotland to current and future labour market needs.
- Identify options to improve the progression of young people both into post 16 education and vocational training and from this into sustainable employment, self-employment or enterprise development.

Support to Unemployed People

- Examine current provision for unemployed people and its impact on labour market participation.
- Identify options to improve the effectiveness and efficiency of provision for unemployed people against the backdrop of welfare reform across the UK.

Workforce Development

- Examine the effectiveness of current provision for and by employers in Scotland, including alignment with labour market needs.
- Identify options to improve the efficiency and effectiveness of the offer to employers to more fully meet labour market needs, maximising the contribution to productivity, competitiveness and growth.

Skills Investment and Support and Emerging Sectors

- Consider options to stimulate and sustain greater employer and individual investment in training and development.
- Examine the alignment and contribution of existing provision to emerging labour market opportunities and growth sectors, including the transition to a low carbon economy.

Public Investment

 Consider the deployment of public resources in training, employability support and new enterprise development in Scotland and assess how effective this is in delivering a high quality system with successful employment/self-employment outcomes for individuals.

Skills Infrastructure and Partnership Working

- Examine how well placed the skills and training system in Scotland is to deliver against future requirements and identify options for increased efficiency and effectiveness.
- Consider models of collaboration and partnership working and identify the processes that need to be deployed to ensure that appropriate models can be delivered effectively.
- Consider the contribution that current and emerging technologies can make to enhance effectiveness and productivity in the system.
- Consider other reforms that might increase the efficiency and impact of the training system and strengthen entrepreneurial growth in Scotland.
- Examine existing alignment between skills policy and provision and broader enterprise and demand-side policies and identify options for improvement.

Conduct of the Review

The Review was commissioned by the Scottish Government in September 2010 and completed in June 2011. It was independently led by Willy Roe CBE assisted by Dennis Gunning, Moira McKerracher, Matthew Crighton and Marc Humphries.

I would like to record my enormous appreciation for the contributions and support provided to the Review by a small number of people, without whose personal commitment and substantial knowledge it would not have been possible to undertake the work:

Dennis Gunning, former Director of Skills, Higher Education and Lifelong Learning in the Welsh Assembly Government, and an education and training policy leader with experience in Scotland, Australia and other countries. His previous work with SQA also provided unique insight and perspective to the Review.

Moira McKerracher, Assistant Director at the UK Commission for Employment and Skills, who has special responsibility for supporting the Commission's work in Scotland. Her prior and current knowledge of the Scottish system and her perspectives and ideas on building a demand-led system proved invaluable throughout the Review.

Matthew Crighton, seconded from Capital City Partnership, where he has worked for many years leading Edinburgh's work on employability. His lifelong expertise as a practitioner brought critical experience and ideas to the Review.

Marc Humphries, seconded from Atos Origin to support the management of the Review. The generous offer of Marc's time and expertise was greatly welcomed, as was access to wider Atos Origin expertise in systems design and integration.

While the review was led and conducted independently of the Scottish Government, I also wish to record my appreciation of the support I received from officials within the Scottish Government.

Expert Panel

I would also like to express my thanks to all of the members of the Expert Advisory Panel for the Review which met three times. I also worked with many of the members on a one-to-one basis between meetings of the Panel and much appreciated their ideas, support and critique. So thank you to:

Sue Baldwin: Director of Young People and Participation, Department for Education

David Coyne: Executive Director, Glasgow Works

Matthew Crighton: Capital City Partnership

Colin Dalrymple: Chief Executive, Scottish Training Federation

Michael Davis: Interim Chief Executive, UK Commission for Employment and Skills

Archie Ferguson: Chair, Scottish Construction Forum

James Fraser: Principal, University of Highlands and Islands

Jim Gallacher: Professor of Lifelong Learning, Glasgow Caledonian University

Chris Guest: Partnership Director, Department for Work and Pensions Jacqui Hepburn: Director, Alliance of Sector Skills Councils Scotland

David Jones: Principal, Deeside College, Wales

Ewart Keep: Deputy Director, SKOPE Cardiff University

Jane Liddell: Head of Education Quality and Development, North Lanarkshire

Council

Alan McGregor: Professor of Economics, University of Glasgow

Linda McKay: Principal, Forth Valley College James Miller: Director Scotland, Open University

Bernadette Monaghan: Director, Third Sector Skills Partnership

Richard Scothorne: Director, Rocket Science

Ruth Silver: Chair, Learning and Skills Improvement Service

Grahame Smith: General Secretary, STUC

Cay Stratton

Craig Thomson: Principal, Adam Smith College

Malcolm Wright: Chief Executive, NHS Education for Scotland

While I am delighted to recognise and applaud the contributions of all of the above, responsibility for the content of the report of the Review and its recommendations rests entirely with me.

Consultation

There were two major calls for evidence, in October and December. Over 100 submissions of evidence were made to the Review.

In the course of the Review, five themed workshops were held, one business conference was organised with support from the Alliance of Sector Skills Councils Scotland, and 13 regional consultative workshops were held under the title 'Shaping the Future'. The workshops were held in the following locations:

Prestwick

Dumfries

Galashiels

Edinburgh

Grangemouth

Glenrothes

Dundee

Aberdeen

Inverness

Kirkwall

Scalloway

Stornoway

Lochgilphead

Other meetings, workshops and visits took place in Glasgow, Livingston, Arbroath, Falkirk, Edinburgh, London,

The total attendance at these events was around 600 people.

In addition a large number of one-to-one meetings took place at the request of organisations which wanted to contribute to the work of the Review.

I would like to express his thanks and appreciation to everyone who contributed to the work of the Review.

Willy Roe

Leader of the Review

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Economic context

Summary

One of the key objectives of this Review is to provide recommendations that could help Scotland make faster progress against the national economic targets published in the Government Economic Strategy in 2007. This chapter looks at current trends in the Scottish economy and the key challenges and opportunities that are likely to impact upon future performance.

The Scottish economy is around 8% of the size of the overall UK economy. With the inclusion of Scotland's geographical share of oil, the size of the Scottish economy increases by just under $18\%^1$ The Scottish population is similarly around 8% of the size of the UK population. Scotland's Gross Value Added (GVA) per head is marginally smaller than the UK wide figure at £19,744 in 2009. However, of the 12 UK countries and regions, Scotland has the fourth highest GVA per head. At present, Scotland has a higher rate of employment and an equal rate of unemployment to the UK as a whole. In 2009, Scotland had 34 business registrations (births) per 10,000 of the adult population in comparison to the UK figure of 47. Excluding London and the South East, the UK figure would be 40 per 10,000 resident adults. Of the 12 UK countries and regions Scotland has the fourth lowest rate of business registrations per 10,000 resident adults.

Structure of Scottish economy

Over the past 30 years the Scottish economy has witnessed a general shift from manufacturing to the service sector which now accounts for around 75% of output. This pattern has been similar to the UK as a whole with Scotland's current structure broadly similar to that of the UK.

Although Manufacturing contributes a substantial 13% to total Scottish output, the sector only constitutes 7.5% of total employee jobs. This reflects the more capital intensive nature of the work. Construction, Other Production and Agriculture, Forestry & Fishing all have a smaller share of Scottish employee jobs compared to their share of total output in Scotland. Conversely, the Service Sector as a whole makes up 82.8% of employee jobs in Scotland despite accounting for slightly less than three quarters of output. The Public Sector accounts for around one fifth of Scottish GVA and around one quarter of total employment.

Openness of the Scottish economy

Scottish international exports in 2009 are estimated at £21.1bn, of which £13.2bn is attributable to manufacturing sector companies. The top 5 exporting industries are food & beverages (£3.6bn), chemicals including refined petroleum

¹ Based on the latest GDP estimates for Scotland 2009/10 as contained within Government Expenditure and Revenue Scotland 2009/10 – see http://www.scotland.gov.uk/Publications/2011/06/21144516

products (£2.7bn), business services (£2.7bn), electrical and instrument engineering (£2.0bn) and the mechanical engineering sector (£1.5bn).

An estimated £9.6bn (or 45.5%) of all Scottish international exports are destined for the EU, of which the Netherlands is the largest market, possibly because it acts as a hub for the shipment of goods to the Far East. The USA continues to be Scotland's top international export destination with an estimated £3.3bn of exports in 2009.

The rest of the UK is Scotland's main trading partner, which is estimated to account for around two thirds of total exports (£45.2bn). Of exports to the rest of the UK, £25.8bn is attributable to service sector companies and £12.7bn is attributable to manufacturing sector companies. Financial Intermediation is the largest export subsector to the rest of the UK accounting for £10.3bn.

Overseas and rest of UK investors in Scotland employ over 600,000 staff and have a turnover of over £145 billion. By nature they tend to be key exporters and Scotland is often their European base. These investors benefit Scotland by bringing new innovative practices, investing in research and development, upskilling their Scottish workforce and driving improvements in the supply chain. The number of foreign investors is growing year on year as the world becomes more open and markets more connected.

We are already witnessing an underlying structural repositioning of the global economy and the emergence of new trading partners. The continuing weakness in the domestic demand is unlikely to improve in the short term while at the same time international trade is growing at a faster rate that global GDP. All this sets out significant opportunities for Scotland in an increasingly competitive global economy.

Historical growth performance

Economic growth in Scotland has lagged the UK over the 30 year period to 2007. Scotland's average annual growth rate was 2.0%, compared to 2.5% in the UK resulting in a gap of 0.4 percentage points respectively. However, over the 5 year period to 2007, Scotland's average annual growth rate is now estimated to be 2.9%. This compares to an average annual rate of 2.8% in the UK over the same period. The performance during this period was somewhat stronger than previously thought following methodological improvements to the Scottish GDP series introduced in October 2010. This relatively strong growth performance in the five year period was due to particularly high levels of growth in the construction, and Business and Financial Services sectors. However, after 2007 output in these sectors entered a period of relatively sharp decline, which raises questions regarding the sustainability of the strong pre-recession growth in these sectors (which may have been reflective of short-term demand pressures). Over the longer term, it is the supply-side drivers that will influence the capacity of the economy to grow. These drivers are productivity, population and trends in labour participation – this is captured through the employment rate and average hours worked. The main factors that have kept economic growth lower in Scotland than the UK are lower population growth and productivity.

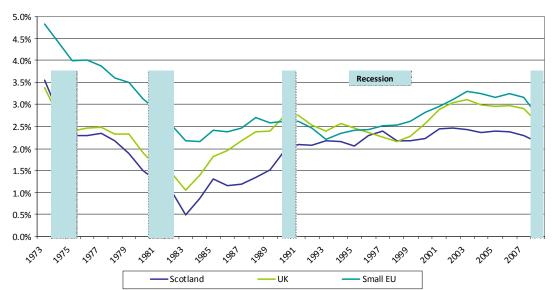


Chart 1: Rolling 10 year average annual GDP growth rates for Scotland, UK and Small EU

Recent growth performance

Following growth in the middle of 2010, output in the Scottish economy fell by 0.4% during the final quarter of the year. This performance is likely to have been heavily influenced by the adverse weather in December. ONS estimate that the disruption caused by the adverse weather accounted for 0.5 percentage points of the fall in output for the UK economy in Q4 2010. Therefore without the disruption, ONS report that output in the UK economy would have been broadly flat in Q4 2010. This volatility in Scottish GDP has made it difficult to interpret the underlying strength of the recovery. It is clear, however, that the recovery remains in its early stages and the level of output in the Scottish remains 4.3% down on pre-recession levels. The following chart illustrates this fall relative to that experienced by a number of international competitors.

In the run up to the global downturn, there were a number of years where the Scottish economy grew at rates above its 30-year average of around 2% per annum. This was particularly the case between 2004 to 2007 where the Scottish economy grew at a faster rate than the UK in three out of the four years. With growth of 4% in 2006 and 3% in 2007, there is evidence to suggest that the Scottish economy was overheating in the years immediately prior to the recession. This is supported by trends within the Scottish labour market as the unemployment rate in Scotland fell to a series-low of 3.9% in the first half of 2008.

The sectors which contributed the most to the strong growth in the run up to the recession were the construction and service sectors, with the latter supported by the expansion of activity within the Scottish business services and finance sector. This sector grew by 34% between 2002 and 2007 compared to growth of around 16% for the whole of the Scottish economy during this period.

Scottish labour market

Improved labour market participation is a key driver of economic growth. Increasing the number of people in employment adds to the productive capacity of the economy and makes better use of our human capital potential. It also improves the standard of living of those moving into employment and supports a more equitable distribution of the benefits of growth.

Participation rates in Scotland are influenced by demand for labour and the number of jobs in the Scottish economy as well as the supply of labour to fill those jobs. Supply depends on:

- The ability of individuals to participate in the labour market, influenced by health and social factors as well as skills levels;
- The willingness of individuals to participate in the workforce, affected by issues such as the relative incentive of seeking income from employment; and
- The impact of net migration on the size of the workforce.

The employment rate in Scotland rose from below 70% in 2000 to a peak of just under 75% in 2007. In the first three quarters of 2010 Scotland fell behind the UK although this position was again reversed in 2010 Q4, with Scotland overtaking both the UK average and the individual rates for all UK countries.

In international terms Scotland has the 11th highest employment rate of the OECD countries. Since the baseline position of 2006, the gap between Scotland's employment rate and the 5th highest OECD country has grown from 2.6 percentage points to 5.2 percentage points in 2009, an increase of 2.5 percentage points.

The recent improvement in the Scottish labour market suggests quite a different adjustment path for employment relative to the pattern of previous recessions in the 1980's and 1990's. Since mid 2008 the decline in the level of employment within Scotland has broadly followed the trend experienced for the UK during previous recessions. However, data over the past six months suggests that the long period of declining employment – as experienced during the 1980s and 1990s recession – may not occur during the current recovery phase, as employment levels appear to have stabilised and improved quicker than previous recessions. This can in part be explained by an expansion in part time work since the start of the recession and an increase in the numbers of people enrolling in education and training. Over the two year period to Q4 2010 part-time employment in Scotland increased by 77,000, whilst full-time employment fell by 117,000. Similar trends have also been witnessed in the UK labour market.

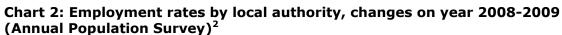
There has been a divergence between the degree to which employment levels in Scotland and the UK have been affected during the recent recession, with a higher and longer period of decline in Scotland. For example, employment levels in Scotland fell by 5.1% from their peak prior to the recession, whereas UK employment levels only fell by 2.5% from their previous peak. The Scottish employment rate peaked at close to 75% towards the end of 2007 while the UK employment rate was around 73% before it started to decline. However, the

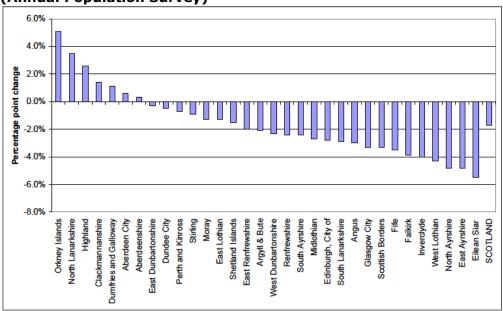
figures for 2010 Q4 show that Scotland's employment rate is now 71.1%, higher than that of the UK (at 70.5%).

These are fairly encouraging patterns in labour market participation compared to what was expected at the start of the recession and in comparison to previous recessions. Nonetheless there is still a reasonable likelihood that we shall be left with increases in the levels of structural unemployment and job insecurity even as the level of cyclical unemployment begins to subside.

Regional variations

The impact of the recession on employment levels and rates has varied across local authorities. The majority of local authorities (25 in total) experienced a reduction in employment rates between 2008 and 2009. Those most affected were Eilean Siar, East Ayrshire, North Ayrshire and West Lothian; with all seeing employment rates reduce by more than 4 percentage points over the year. Despite the challenging economic circumstances, some local authorities experienced growth in their employment rates over the year. These authorities included Orkney Islands, North Lanarkshire, Highland, Clackmannanshire, Dumfries & Galloway, Aberdeen City and Aberdeenshire.





All local authorities saw an increase in their unemployment rate over the year to 2009. Those showing the largest increases in unemployment between 2008 and 2009 are in North Ayrshire, East Ayrshire, Glasgow City, Clackmannanshire, West Dunbartonshire and Inverclyde, all up by more than 3.0 percentage points over the year.

² Note:- the data in this chart is from a sample survey, hence the estimates are subject to sample variability

Youth unemployment

During recession and in the early stages of recovery young people are more vulnerable to unemployment which can translate to future job instability and slow labour market progression. At 9% youth unemployment in Scotland (defined as 18-24 year olds) was at its lowest in 2005. By 2011Q1 it was 17.6%. The UK unemployment rate has exceeded Scotland in every year since 2005.

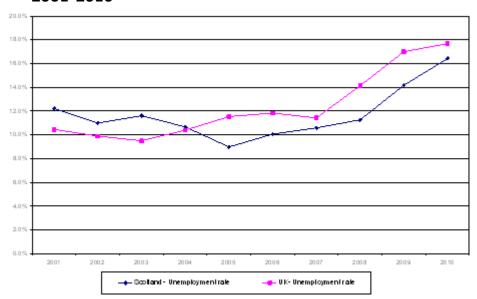


Chart 3: Unemployment rate for 18-24 year olds in Scotland and the UK, 2001-2010

Unemployment among this cohort is always higher than for the general population as young people seek to make the transition into stable employment for the first time. Failure to make a successful transition at this stage increases the likelihood of individuals moving into periods of long term unemployment with subsequent negative impacts on lifetime earning potential. When labour market conditions are challenging following recession young people face much stiffer competition than normal from more experienced workers increasing the likelihood of difficult transitions into work.

The Government has focussed on this age group at both the Scottish and UK level since the start of the recession through a range of measures including providing more training and college opportunities for school leavers and 18-24 year olds. As the school leaver destination statistics demonstrate these measures have been successful in keeping young people engaged in productive activity designed to improve job readiness. Nonetheless the scarcity of opportunities to gain work experience, labour market competition from more experienced individuals and new competition from emerging cohorts of young people are likely to continue to make the current cohort of 18-24 year olds less attractive to employers.

Labour market prospects

Job opportunities for the unemployed and new entrants to the labour market cannot be created from skills and training interventions. The short term prospects for increased job opportunities as a result of higher domestic consumption are not good. Ongoing reductions in public spending are likely to have a significant negative impact on domestic demand for labour in Scotland. Wage stagnation across the private and public sectors and any increases in inflation pressures would also continue to have impacts on domestic consumer consumption into the medium term. This in turn will have a negative impact on the number of job opportunities.

One of the negative impacts of the lower than expected increases in unemployment since the start of the recession is likely to be a slow upturn in recruitment as we move into accelerated recovery. Many employers who have retained staff throughout the downturn will have done so by absorbing reduced productivity per employee. As growth returns productivity per employee is likely to increase before employment demand increases. Even as new opportunities emerge in areas such as the low carbon economy, it is difficult for those who are out of work or who are entering the labour market for the first time to compete with more experienced workers with transferable skills.

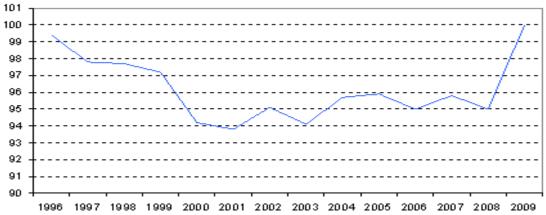
Productivity

Productivity (measured by GDP per hour worked) in Scotland has historically been lower than the UK average, although it has ranked in the top five of UK countries and regions over the past 10 years. It is important to recognise that the UK average is heavily influenced by London where productivity is some 32 percent higher than the UK average. It is also worth noting that UK productivity levels trail behind a number of international competitors and should not be the benchmark for Scotland.

Productivity is primarily determined through research and development, innovation, entrepreneurship, competition, infrastructure, increased efficiency and skills.

Data for 2009 shows that productivity in Scotland rose to the UK average, reflecting a lower rate of decline in output, a sharper deterioration in the labour market over the year in Scotland. Therefore the recent improvement in productivity may only be temporary, and it is too early to indicate whether it reflects a fundamental shift in the drivers of productivity.





On an international basis Scotland was ranked 12th (out of 32 countries) for productivity levels amongst OECD countries in 2009, placing Scotland in the middle of the second quartile. The evaluation is based on the change in the gap between productivity levels in Scotland and the lowest ranked country in the top quartile. Germany has been the lowest ranked country in the top quartile since 2003. In 2008, Scottish Productivity levels were 85.0% of levels in Germany - a gap of 15.0 percentage points. In 2009, Productivity levels in Scotland were 89.2% of levels in Germany - a gap of 10.8 percentage points. Therefore between 2008 and 2009 the gap between productivity levels in Scotland and the lowest ranked country in the top quartile (Germany) decreased by 4.2 percentage points.

Chart 5: International comparisons of GDP per hour worked 2009 (US=100)

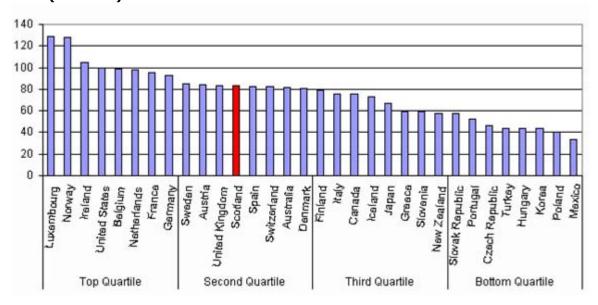
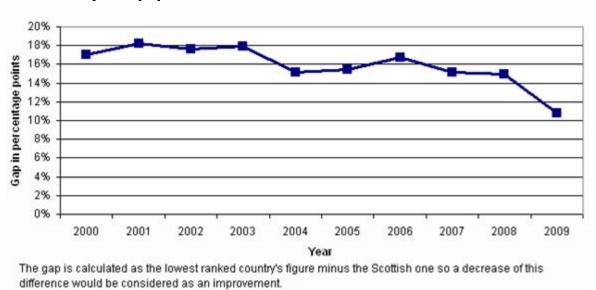


Chart 6: gap between Scottish productivity levels and lowest ranked country in top quartile



Where Scottish productivity has improved, it has done so through changes in the industry mix. That in turn suggests that government policies should take a sectoral approach by shifting the industry mix towards the high productivity sectors and those with specialised services, skills and external economies of scale.

Indicators of R&D expenditure and innovation activity cited in the Government Economic Strategy show that Scotland ranks very highly on R&D and innovation in the public sector - principally in the higher education sector - but does much less well in the business sector. In fact business R&D spending and innovation in Scotland proceeds at half the UK rate, and is less than the European average. Employment in medium-to-high-tech firms is below the EU average, with knowledge diffusion rated as no more than average. These are the dominant facts in the innovation data. The Council of Economic Advisers has offered 3 possible explanations:

- a lack of capacity in the smaller firms in Scotland to create or absorb new techniques, products or new ways of doing things;
- insufficient capacity to do so because they are not where the business decisions, production decisions or technical/process design decisions are being made; or
- a lack of skills and understanding within the workforce.

In terms of a highly-skilled population, Scotland performs well. In the UK Scotland is ranked third in terms of the percentage of the population with a degree level qualification or equivalent, behind only London and the South East. Recent analysis from the Centre for Public Policy for Regions³ show that Scotland has a higher proportion of workers with their highest education qualifications obtained from sub-degree vocational courses and A level or equivalent qualifications often provided though FE Colleges, including HNCs and HNDs. Data

³ Scottish Parliamentary Elections 2011, CPPR Briefing No:2, March 2011

from the Labour Force Survey show that around 9% of the Scottish population hold these compared to an equivalent figure of around 3% for England, Wales and Northern Ireland.

Population

Population growth is a key contributor to, and a consequence of, a more vibrant society and a more dynamic economy. Scotland is projected to experience a significant demographic shift, leading to an increasing average age, caused by considerable increases in the over-60 age group, between now and 2031. Unless we increase labour participation rates among older people or attract more people of working age to Scotland, our economic growth will be adversely affected

Since the 1950s, Scotland's population has remained at just over 5 million. Scotland's population had been falling since the early 1970s but in recent years, has seen relatively high levels of population growth. This is largely due to an increase in net migration following the enlargement of the EU in 2004 which gave workers from accession countries free movement into the UK labour market. Between 1991 and 2006, the average net migration rate for Scotland was -0.1%. Between 2004 and 2006, the average rate was 4.1 per 1000 inhabitants⁴. Population projections imply that migration will continue to support population growth over the next twenty years, but the rates of expansion are uncertain.

Over the past 60 years, there have been notable changes in the structure of the population. Rises in life expectancy mean that proportion of pensioners has risen and declining fertility rates mean that at the same time the proportion of under 16's has fallen. Population projections imply that demographic shifts will intensify, with pensioners making up an increasing proportion of the population going forward.

Solidarity

The Scottish Government has a target to increase overall income and the proportion of income earned by the three lowest income deciles as a group by 2017. The healthy development of our society depends on reducing inequalities and sharing the future benefits of growth among people and communities. Unlocking the economic potential of all individuals will support economic growth by increasing labour market participation and by removing the personal and social costs of poverty.

Total income increased every year between 1998/99 and 2008/09 however during this period the proportion of income received by those at the bottom of the income distribution remained broadly unchanged at around 13% to 14%.

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⁴ Office for National Statistics (ONS)

Returns to skills

There is relatively little evidence from Scotland on the returns to vocational qualifications. However, Walker and Zhu (2007) undertook analysis⁵ using Scottish data for the period 1996-2005 and the results are presented below. Set in the context of the Wolf Review findings:

- Walker and Zhu also found higher returns to academic qualifications than vocational qualifications, especially at lower levels, and high returns to a degree;
- they actually found good wage returns to holders of Level 2 vocational qualifications, although is likely to be because the Level 2 category included those qualifications (e.g. RSA and City and Guilds) that have been shown to have positive returns in other analysis.

Figure 1: Percentage Wage Returns for Qualifications - Scotland 1996-2005

rigure 1: Percentage wage Returns for Qualifications – Scotland 1996-2005										
Vocational Qualification Level	Male	Male (Cumulative)	Female	Female (Cumulative)						
None	Base	Base	Base	Base						
Level 1	9%	9%	11%	11%						
Level 2	7%	16%	9%	20%						
Level 3	19%	35%	9%	29%						
Level 4	17%	52%	23%	52%						
>Level 4	30%	82%	29%	81%						
Academic Qualification Level	Male	Male (Cumulative)	Female	Female (Cumulative)						
Qualification	Male Base		Female Base							
Qualification Level		(Cumulative)		(Cumulative)						
Qualification Level None	Base	(Cumulative) Base	Base	(Cumulative) Base						
Qualification Level None Level 1	<i>Base</i> 17%	(Cumulative) Base 17%	Base 18%	(Cumulative) Base 18%						
Qualification Level None Level 1 Level 2	Base 17% 12%	(Cumulative) Base 17% 29%	Base 18% 12%	(Cumulative) Base 18% 30%						

Walker and Zhu also looked at the wage returns to apprenticeships in Scotland compared to those with no qualifications and those with Level 3 vocational qualifications. Compared to the former, apprentices earn an average hourly wage premium of between 8 per cent for females and 22 per cent for males. But these are lower than the returns to Level 3 vocational qualifications. These results are broadly in line with evidence from elsewhere in the UK.

Overall, based on the evidence there may be some validity to the concern raised in the Wolf Review about the public resources in England that have been channelled into NVQ Level 2 qualifications, since these have been shown to generate poor/ no labour market returns (other than when gained in very particular circumstances e.g. as part of an apprenticeship).

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⁵ Walker, I. and Zhu, Y. (2007) The Labour Market Effects of Qualifications.

Employer perspectives

The recently published Skills in Scotland 2010 report presents the results from the Scottish Employer Skills Survey 2010 (SESS 2010) and contains information from employers about:

- the importance of skill-related issues compared with other challenges facing employers;
- the types of jobs in which skill shortages and gaps are most and least prevalent;
- the causes of skill shortages and gaps, their consequences and employers' response to them; and
- the nature and extent of training paid for by employers.

Business Challenges

As in 2008 cash flow remains the biggest challenge faced by employers, however attracting new and keeping existing customers is a concern ranking 2nd and 3rd respectively. Employers still believe that attracting appropriately skilled staff will be a challenge for them over the next 12 months, however this was mentioned by fewer employers than in 2008 (7 percent compared with 12 percent) and this has moved down the rankings from 4th to 7th.

Vacancies and Recruitment

There were 43,900 vacancies in Scotland at the time of the survey, compared with more than 2 million employees, giving a vacancy rate of 1.9 per cent. At the time of the survey 13 per cent of establishments had at least 1 vacancy. The absolute number of vacancies, and the vacancy rate, has fallen since 2008, potentially reflecting the impact of the economic downturn on the labour market. Of the 43,900 vacancies, 35 percent were hard to fill, while 18 percent are skill shortage vacancies. At the time of the survey around 3 per cent of establishments had a skills shortage. Hard to fill and skill shortage vacancies are more common among the very smallest workplaces (those with less than 5 employees). At a broad sectoral level, vacancy rates were highest for the voluntary sector (2.6 per cent) and lowest in the public sector (1.0 per cent). The vacancy rate across the private sector was 2.2 per cent.

Skill shortages

Where an establishment had a skill shortage, respondents were asked to list the specific skills in which they found applicants to be deficient. A lack of 'softer' core skills among applicants can cause skill shortages:

- customer handling skills (was cited by 64 per cent of establishments with a skill shortage vacancy);
- planning and organising skills (62 per cent); and
- oral communication skills (61 per cent).

Technical and practical skills were cited by 60 per cent of workplaces with a skill shortage. These skills are clearly important to establishments and cause shortages in a number of instances. Basic literacy and numeracy skills were less likely to be cited as skill shortages than 'softer' core skills.

Both basic and advanced IT skills were cited by relatively small proportions of establishments. This does not necessarily mean that these skills are not valued by employers but rather that applicants are more likely to have such skills.

Skills Gaps

Different from skill shortages, skill gaps refer to those already in employment and occur where employees are judged by their employer to be not fully proficient. Skill gaps affect 139,100 (or 6 per cent of) employees; and 15 per cent of workplaces reported at least one employee with a skill gap. Most skill gaps are transitory, resulting because the employee has not been in the job very long (for 61 per cent) and/or because they have not yet completed their training (47 per cent). For 4 in 10 workplaces with skill gaps, these have arisen as a result of what could be viewed as positive developments in the workplace such as the introduction of new working practices, new technology or new products or services.

Nearly 3 in 10 employers with skill gaps report that these have no impact on their business. Of those who do report a negative impact, the majority (57 per cent) perceive this impact as minor. Skill gaps disproportionately affect those occupations which generally require lower levels of skills and qualifications. Similarly to skills shortages, skill gaps arise mainly because of weaknesses in softer core skills such as planning and organising, customer handling, problem solving and team working. Employers are active in their response to skill gaps - most commonly providing further training for staff.

Recruiting from School, College or University

Most employers who have recruited someone straight from school, college or university thought that the recruit was well prepared for work. 63 per cent of all the establishments in the survey had recruited employees in the two to three years prior to the survey. Of these:

- 27 per cent had recruited an employee into their first job on leaving a Scottish Secondary School.
- 19 per cent had recruited an employee into their first job on leaving a Scottish Further Education College.
- 20 per cent had recruited an employee into their first job on leaving a Scottish University.

Employers who had taken on an employee whose first job it was on leaving school, college or university are generally satisfied that both college leavers and university graduates are well prepared for work. The level of preparedness among school leavers is felt to be lower.

- 59 per cent of workplaces that had recruited a school leaver into their first job reported that they were well prepared or very well prepared for work.
- 74 per cent reported that college leavers were well prepared or very well prepared.
- University graduates were reported to be well prepared or very well prepared by 79 per cent of workplaces.

There is a marked difference in the preparedness for work of school leavers when compared with both college and university graduates. Over a third of establishments who had recruited a school leaver considered them to be poorly prepared for work (similar to previous surveys). In comparison, 22 per cent of workplaces thought that college leavers were poorly prepared for work, while 14 per cent of employers stated that university graduates were poorly prepared.

Key sectors

Based on the SESS results, employers in the energy, financial and business services, and food and drink sectors are not reporting significant differences to the overall Scottish levels of skill shortages or skill gaps. The tourism sector has high levels of vacancies but few are hard-to-fill. Skill gaps appear to be more of an issue for this sector. Employers in the creative industries sector report difficulties in filling vacancies, with most hard-to-fill as a result of skill shortages.

A wider review of evidence available from Sector Skills Councils, Industry Advisory Groups, and other stakeholders provides a more detailed overview of skills needs of the key sectors.

Creative Industries

The Creative Industries, through the Digital Media Advisory Group, the ICT Advisory Group and the Technology Advisory Group, have not reported on a quantitative approach to assessing their future skills needs, but are focussing on the challenges of improving the perceptions of careers in the sector, ensuring that these are demonstrated within the curriculum to equip young people with appropriate expertise and attract them to future vocations. They have considered that it is important that there is a clear understanding of skills that the industry needs and of the benefits that can be achieved through business start up. This should help attract and retain talent, particularly home-grown graduates required for growth. They have also noted the need to ensure and improve graduate levels in the science and engineering disciplines. To do this there will also be the need to attract and retain suitably qualified experiences individuals in academia and business, from both within and outwith the sector, to grow and develop the industry in Scotland. Work has begun to increase the interacting between industry and universities with the SFC through the first join SE/SFC Horizon workshop aimed at better aligning industry and core university funding. The Scottish Government published a Creative Industries Strategy in March 2011 to help ensure that the public sector acts in a co-ordinated way to support and develop growth across the sector. A Skills Investment Plan is being developed to set out the actions necessary to improve the creative industries skills base.

Energy

The Skills Investment Plan for the Energy Sector identifies the potential for up to 95,000 job opportunities up to 2020. This comprises a mixture of replacement demand to sustain more established energy sectors as well as new jobs in emerging sectors such as offshore wind and carbon capture and storage. The main skill requirements identified relate to engineers (civil, marine, engineering, structural and mechanical), leadership and management, project managers,

welders, turbine technicians and divers. The majority of these jobs are forecast to be at technician level (SVQ level 3) although a broad based approach covering graduates, apprentices and the existing workforce is recommended. This requires a focus on both up-skilling the existing workforce, those in work but considering a career or job change, and attracting new employees into the sector. It also requires a renewed focus on increasing sector attractiveness to young people moving through the education system, increasing the number of apprenticeship places available to enable new, technician level entrants and ensuring adequate higher education provision to meet the growing demand in STEM graduates, and providing short courses to allow those moving into the sector to apply their existing skills in a new context.

Financial and Business Services

Access to skills and development of a talent pipeline remain key issues for the sector. 'People' (strengthening the world-class workforce) is one of the three main pillars focusing on skills and labour market development; raising the appeal of the industry as a career choice; and delivery of financial education in school and beyond. Improving the views of existing staff and potential new entrants around current and future career opportunities and progression within the industry is a key challenge identified by the sector. Recent events have had a negative impact in terms of the appeal of the industry as a career choice. Talent retention is also a key focus as employers look to retain the best and brightest talent and skills. A Skills Demand Statement has been developed by the Financial Sector Skills Gateway following consultation with industry to address emerging skills themes and issues within the sector. A number of other skills activities are being undertaken across the sector to mitigate job losses; retain talent; provide IAG; up-skill individuals and promote careers within the sector.

Food and Drink

The key challenge for the industry is to increase investment in skills and innovation to support the industry's growth ambitions. There are currently low levels of investment in skills with this being mainly reactive and focused on compliance rather than long term strategic skills (i.e. leadership, marketing, internationalisation, innovation, sustainability, scale and collaboration). Industry strategy offers an opportunity for a step-change in Food and Drink skills, by driving improvements through activity to exploit growth market opportunities and through building other key capabilities like innovation and improving productivity. SDS is leading on the development of a Skills Investment Plan, supported by a restructured Skills working group, with an increased focus on sub-sectors with the greatest skills needs and opportunities for growth. This will complement existing activities included the recently launched Scottish Food and Drink Skills Academy which is linking supply and demand needs to achieve the industry's growth ambitions.

Life Sciences

Various employer skills surveys covering the life sciences sector have been completed recently, increasing the evidence base on future skills needs of the sector. Information from LiSAB identifies that the key skills challenge will be

ensuring the continuing supply of appropriately qualified staff at all levels from technician to CEO, and attracting, retaining and developing Board level and senior managers with relevant international commercial experience in life sciences to both grow spin-out firms and help develop critical mass within the industry. Another key challenge is ensuring Scottish graduates and junior managers with aspirations to stay in Scotland to pursue their careers.

Tourism

As set out in the Tourism Framework for Change skills strategy, the key priorities for skills development in the sector are to: improve the appeal of the sector and attract new talent; improve skills to protect against future skills shortages and improve employer access to up to date information on qualifications, funding and skills provision; to focus on customer service ensuring that this is at the forefront of the sector; and support businesses within the sector to professionally develop managers and with ongoing continuous professional development. A refreshed Tourism Skills Strategy is currently being developed along with a Skills Investment Plan addressing four priority areas: the appeal and attractiveness of the sector; improving skills at all levels; customer service; and management and leadership.

Universities

Universities are recognised as a key sector in part to acknowledge that the success of the other sectors in dependant on the availability of high level skills. Investment in universities will continue to develop higher level skills, research and knowledge exchange that will drive forward innovation and higher rates of productivity and economic growth. The challenge for universities will be to continue doing this in the context of reductions in public spending.

Investment in skills and training

College places

In response to the recession and weak labour market conditions the Scottish Government has increased college provision particularly in those areas where unemployment has increased most. Individuals have understandably chosen to embark on longer courses with an increasing proportion embarking on full-time study. Such opportunities will in general be more appealing and – depending on course relevance – be of more long term benefit to younger people. However such a change will have reduced the number and range of shorter, part-time options which appeal more to older people seeking to re-enter work quickly.

Over the 10 years to 2010-11, funding for FE colleges (excluding capital funding) in Scotland increased from £329m to £584m – up 77% in cash terms or 37% in real terms.

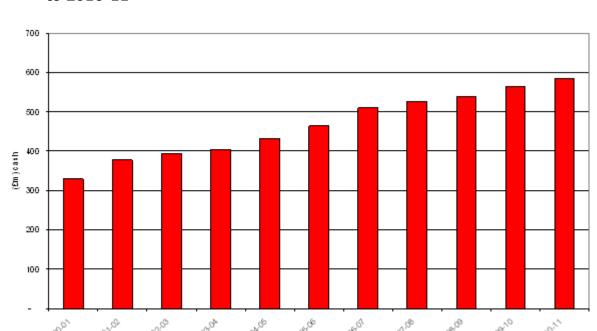


Chart 7: Revenue funding for FE Colleges in Scotland, cash terms 2000-01 to 2010-11

There are currently no outcome-based funding incentives offered to colleges through the current funding model. It is difficult to track job outcomes among college students due to an absence of robust data. Furthermore a move to outcome based funding could threaten the financial stability of a high number of colleges in the short to medium term.

Figure 2: Overall funding to Scottish Colleges from SFC, funded entrants and completions (assessed and successful) for HE and FE activity: 2000-01 to 2009-10

	- :				All		
Academic	Funding	All	Funded	Funded	Completions	FE	HE
Year	(£	Funded	FE	HE	(assessed	completion	completion
i eai	million)	Entrants	entrants	entrants	and	S	S
	-				successful)		
2000-01	N/A	455,838	405,521	50,317	117,496	93,022	24,474
2001-02	369	495,541	443,125	52,416	167,186	139,753	27,433
2002-03	404	470,407	422,393	48,014	165,740	140,875	24,865
2003-04	380	448,273	403,460	44,813	180,808	155,592	25,216
2004-05	425	431,226	388,617	42,609	163,575	139,951	23,624
2005-06	473	425,313	384,786	40,527	161,251	138,394	22,857
2006-07	587	445,641	406,756	38,885	165,829	142,927	22,902
2007-08	601	466,236	428,854	37,382	178,322	156,476	21,846
2008-09	549	457,644	419,492	38,152	172,878	149,930	22,948
2009-10	617	411,988	373,365	38,623	163,923	140,699	23,224
2010-11*	575	N/A	N/A	N/A	N/A	N/A	N/A

Source: Scottish Funding Council, 2010-11 data is forecast

Modern Apprenticeships

With broad political support the Scottish Government has expanded the number of apprenticeship places available. SDS is on track to deliver 20,000 MAs for the second consecutive year while a record 25,000 starts will be available for 2011-12.

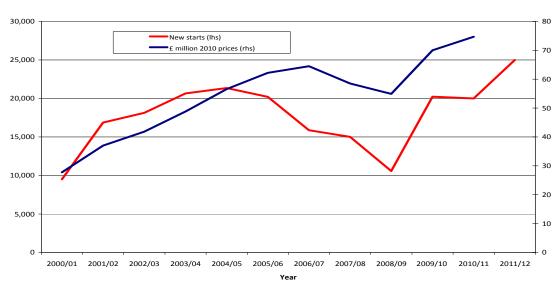


Chart 8: Modern Apprenticeship starts and funding (2010 prices)

These fall into two types of opportunity. For those moving into employment – particularly for the first time – they combine a continuation of vocational education and job specific training with paid employment. For those already in the workplace they offer job specific training with a prospect of employment progression.

Of the two options the former is of higher value in terms of both employment and productivity. The latter offers some productivity benefits within those sectors where skills shortages are most profound. Moving forward the approach of the current administration has been to pursue the former path where possible. This fits well with high levels of employer satisfaction and high completion rates in relation to younger apprentices.

Modern Apprenticeships in Scotland are always offered in conjunction with permanent employment. Training is provided by a range of mainly private training providers who are incentivised through the funding model to deliver successful completions. Despite the expansion in recent years, positive employment outcomes have increased and employers have expressed a high level of satisfaction with the current employment focused system.

Pre-employment Training

General pre-employment training for adults and young people in Scotland are primarily offered through the Training for Work and Get Ready for Work programmes respectively. These are primarily offered through a range of private training providers with some focus on those areas with the highest levels of adult and youth unemployment. Programmes are commissioned in partnership with Community Planning Partnerships and there is close collaboration between

Skills Development Scotland and Jobcentre Plus to avoid duplication of employability support offered by the Scottish and UK Governments.

Both programmes are flexible in their nature and content with a focus on job specific skills for adults and on more generic employability skills and work experience for young people. The latter responds to evidence from employers on what they value in terms of general skills and attitudes among employees. The former focuses on the direct skills needs of those who are likely to have more experience of what is expected in the workplace. In cash terms, investment in the Get Ready for Work programme almost doubled to £25.5 million in the ten year period to 2009/10. The number of programme starts has risen over this period from around 6,500 to 10,400 while achievement rates (job outcomes, progression to other skills and training programmes) have averaged at around 40%. In terms of the Training for Work adult programme, funding (again in cash terms) has fallen from over £20 million in 1999/00 to around £8 million in 2009/10 with the number of starts down to around 6,000 over the same period. This is explained through the introduction of alternative products and services that captured significant proportions of original client groups (the New Deal for example), improving labour market conditions through to 2008, and changes to eligibility criteria. Achievement rates have risen from around one third to one half over the past five years.

Throughout the recession the Government has put in place a range of incentives to training providers and employers to support progression through the skills and employability pipeline. This has worked well with the rates of positive outcomes holding up well despite the recession and a strong response from employers to incentives to take people into work through and following training interventions.

Public finances

Since devolution Scotland faced a period of relative boom in both private and public sectors until the global recession in mid 2008. The Scottish economy emerged from recession in late 2009 but is now faced with the challenge of sustaining and strengthening recovery against the backdrop of fiscal retrenchment from the UK Government to respond to an unsustainable build-up in public sector indebtedness. So while the first decade of devolution saw an average real term annual increase in the Scottish Governments budget of over 5%, the second decade is likely to see an average negative real term annual growth. Projections from the Scottish Government's Chief Economic Adviser⁶ show real term cuts for 6 years after 2009-10 with Scottish Government DEL expenditure not expected to return 2009-10 levels until 2025-26. This represents a significant reduction in government consumption that will impact upon overall demand in the economy, and a step change from the first decade of devolution where such government consumption made a substantial contribution.

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⁶ Outlook for Scottish Government Expenditure (June 2010 Emergency Budget Update), Scottish Government

As we move forward with reduced public resources we will encounter greater pressures on budgets to support unemployed people. Already we have used ESF funding to maintain Get Ready for Work and Training for Work numbers at their current level moving into 2011/12. This has had the advantage of allowing us to drive commissioning for these programmes into a shared space between the Community Planning Partnerships and Skills Development Scotland with the resultant benefits of customising provision more closely toward the needs of different local labour markets. However at the current levels of funding, or less, we will either have to dilute provision or reduce numbers from 2012/13 onward.

In colleges we have been able to negotiate an agreement with principals to maintain the number of places for 2011/12 at 2010/11 levels despite a £40 million cut in overall funding. Clearly this reduction in funding will be met in part through efficiency savings, but even in 2011/12 there is likely to be some reduction in teaching time to help meet this reduction. Moving forward on the current funding trajectory it is likely that there will have to be a narrowing of provision and a reduction in places. This need not necessarily impact on the unemployed and young people at risk of unemployment. However to protect provision for these groups we would have to prioritise this activity over activity to support wider workforce development, with subsequent impacts on productivity.

A more direct impact on the number of people going onto the unemployment registers is likely to result from any future spending cuts at the UK, Scottish and local authority levels on public and private sector employment. At this stage we have yet to see a direct relationship between spending cuts and rises in unemployment in Scotland. However, if spending cuts begin to impact on blue collar and clerical jobs then further increases in unemployment are possible.

As well as those coming out of public sector and related private sector employment, reductions in public spending will also reduce opportunities for individuals to move into jobs. Underemployment has been a feature of the downturn, with graduates, for example, taking jobs below the level for which they are qualified. This leads to short to medium term reductions in earning potential while reducing entry opportunities to the labour market for those at the lower end of the skills and qualifications ladder

PERSONAL DEVELOPMENT ACCOUNT

Additional information

The PDA would consist of 4 elements, called Virtual, Borrowing, Saving and Cash:

- Virtual is the element of the PDA that logs entitlements and credits for tuition and training costs from third parties such as taxpayers and employers. The taxpayer is not going to place cash for tuition funding in an instant access account, given temptations to spend the funds on goods and services other than learning / training. Resources from public funding bodies and employers would be released at the point of purchase. To this extent funds are virtual rather than real. The role of the virtual element of the PDA is to express the entitlement to state funding of a type of course or programme, and allow the learner to use the same amount of funding to access the provider delivering the best course and programme outcomes. In relation to state-funded entitlements, the virtual element increases empowerment over quality rather than price.
- Borrowing is the element which could manage income-contingent style loans as well as mortgage style loans for tuition / maintenance.
- Saving is the saving element of PDA. It could take the form of both shortterm and long-term savings product. A future government could choose to incentivise saving in a PDA.
- Cash is the cash element of PDA. A basic cash account could be the vehicle to hold taxpayer support for maintenance payments. It could also be a vehicle for low-level savings for learning and a mechanism where individuals use their own income to purchase learning in cash. The cash element could be the repository for maintenance grants and loans in further and higher education. It could also have an interface with Universal Credit from 2013.
- Information, Advice and Guidance (IAG) would be the up-front wrap-around for the PDA. IAG would increase learner choice by assisting individuals to:
 - o Understand the operation of the PDA;
 - o Choose the right learning / training options;
 - o Access labour market intelligence and information;
 - o Assess employment and financial rates of return to qualifications;
 - o Access publicly funded entitlements to tuition and maintenance support including fee and maintenance grants and loans.
 - Much of the functionality required to deliver these services has already been identified and developed within the scope of SDS's 'My World of Work' portal.

To encourage the take up of PDA the proposal is that tax relief at the standard rate of 20% should be available to individuals who purchase learning or training - only through PDA. This is a reserved matter for the UK Government.

Subject to the outcome of further research and design studies, a national system of fully-featured PDA in Scotland could cover the whole post-16 education and training system, and employer and adult employee funding of workforce development by March 2020. The system could be rolled out in three phases, as the illustration below shows:

Phase 1 by 2015

- Adult further education
- ILA funding
- Training for Work
- Workforce Development support

Phase 2 by 2018

- 16-19 further education
- 16-19 schools
- 16-19 modern apprenticeships
- Full and part-time higher education in further education colleges
- Employer and adult employee funding

Phase 3 by 2020

Full and part-time higher education in universities

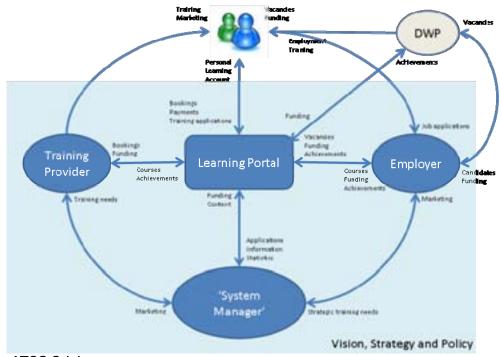
Implementation of the PDA system could be expected to bring the following benefits and impacts:

- A much clearer understanding among stakeholders and users of the post-16
 education and training system of the cost of provision, the balance of funding
 between the state, individual and employer, and the nature and purpose of
 public funding. Such improved understanding would be especially strong and
 beneficial if the new funding regime is accompanied by integration of
 currently separate funding streams and organisations across all post-16
 sectors;
- A greater sense of accountability on the part of providers and a clearer understanding of the specific role of public providers in the system;
- Empowered learners;
- Higher levels of individual and employer investment in skills development.

There are important technical and practical issues around the introduction of a PDA system in Scotland, but there is substantial expertise and experience available of introducing and managing large-scale online services

The figure below outlines the overall architecture that would be required to support the implementation of PDA in Scotland.

PLA Architecture



Source - ATOS Origin

The large light blue box shows the vision, strategy and policy as it co-ordinates, informs and, where necessary, funds learning and training activities. Supporting the overall approach is a system manager. This organisation would co-ordinate all of the activities and act as design authority for the PDA architecture. SDS currently fulfils many of these roles, and seems best placed to fulfil this role.

Central to this coordination is the Learning Portal. This provides the main window onto the PDA for the individual learner. It offers them IAG, the ability to book or apply for specific learning opportunities, visibility of the funding available, and a record of their learning history.

The Portal will also provide a window into the nation's learning ecosystem for employers and training providers. For employers it will provide access to courses, funding and, for employees undertaking training elsewhere, a records of their achievements. For training providers, it will give them a unique channel to market and access to subsidy funding. Supporting training outcomes (such as skill level

attained) rather than inputs (such as attendance) will drive long-term increases in the value derived from significant investments made in education and vocational training.

In order to maximise the return from the public funding, it will be important to capitalise on the natural self-interest of the training providers and employers. For example, training providers can be encouraged to perform their own marketing to learners (and employers) and include the portal link with, say, the offer 'Find out if you are entitled to a discount or subsidy'. Employers can gain visibility of suitably qualified and motivated trainees, subject to individual consent. Even small amounts of funding coupled with the right information flows can nudge behaviour in the right direction.

Links to the Department for Work and Pensions (DWP) would enable Jobcentre Plus (JCP) training subsidy to be paid into a PDA account and records of achievement to be passed back. This unified view of all training activities will provide a clear and auditable view for the managing agency and other relevant parties in the post-16 system.

The data and statistics the portal provides will form the information base upon which strategy and funding policies are developed and strategic engagement with employers. With suitable branding and marketing it will demonstrate a truly integrated approach to life-long learning in Scotland, which will enable the nation to meet the challenges of a dynamic and austere economic climate.

Implementing an electronic infrastructure for PDAs would require the components outlined below, with current examples from other public services used to illustrate existing resources and potential:

An online portal

- My World of Work
- VisitScotand.com
- Transport Direct

A billing and settlement engine

Payslips for entire NHS workforce in Scotland

A learning / training course brokerage capability

Royal Air Force and Army training

Savings and borrowings

Links required with high street banks

Links to DWP

- Job Seekers Online
- · State Pension Online

WORKFORCE DEVELOPMENT

A Framework for Action

The Framework identifies four Areas for Action to improve the system markedly:

- A Simplification and achieving a 'no wrong door' approach
- B Greater visibility of public support to provide a clear Scottish offer
- C Enabling the system to be better informed through shared understanding of customer demand and current and future intelligence
- D Focus on achieving customer satisfaction and national outcomes

Within these Areas for Action are a total of 12 recommendations:

- A1 The Scottish Government should take a leadership role in simplifying and better coordinating the workforce development system, including bringing the various policy streams which are connected to workforce development into one single and coherent network / working group.
- A2 SDS/SE/HIE/colleges and universities should improve customer focus of the workforce development system and establish a 'no wrong door' approach.
- A3 SDS/SE/HIE/colleges and universities, in consultation with business organisations as appropriate, should clarify the public offer so that employers can clearly identify workforce development assistance that is available, associated eligibility criteria (employer and individual) and the relevant funding source.
- A4 SDS/SE/HIE/learning providers should develop a coordinated frontline staff capability.
- B5 SDS/SE/HIE/colleges and universities should provide better information and aggregated data on public investment in workforce development-related services.
- B6 Increase the efficiency and effectiveness of the public offer.
- B7 Scottish Government/SDS/SE/HIE/colleges and universities to improve coordination and effectiveness of workforce development investment through aligned strategic / business planning and a focus on longer-term outcomes.
- C8 Public agencies, SSCs and relevant industry bodies should share and improve, where possible, labour market intelligence and specification of customer (employer / business) demand.

- C9 Limit pressure and reduce the number of policy priorities on the system so that it can deliver effectively and to its strengths.
- C10 Maximise leverage of public funding for employers and improve response of the system to achieve best value for money in service provision.
- D11 SDS/SE/HIE/colleges and universities to collaborate on the development of improved evaluation mechanisms to assess customer satisfaction.
- D12 Reporting and evaluation of public agencies on the workforce development public offer should be aligned with the Scottish Government's national outcome and priorities.



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