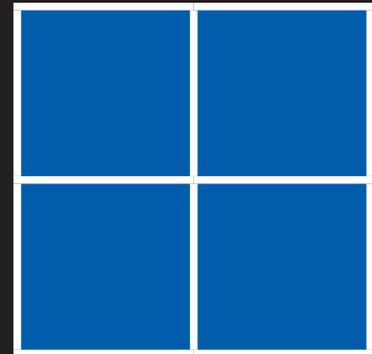


Skills for Prosperity? A review of OECD and Partner Country Skill Strategies

Mike Campbell

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Institute of Education, University of London**

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Abstract

This paper provides a high level overview of the skills strategies being pursued by the Organisation for Economic Co-operation and Development (OECD) and partner countries, based on a review undertaken by the author for OECD as part of the development of its skills strategy (Better Skills, Better Jobs, Better Lives) in 2012. It first discusses their rationale and imperatives before reviewing their coverage in terms of approach, scope and focus. It then examines the range of policy levers utilised to raise skill levels, improve supply and demand matching, and enhance skills demand and use. The sectoral and local dimensions of skills strategies are then discussed before an assessment is made of governance arrangements in terms of the mechanisms used to steer strategy, including both institutional arrangements and other tools to improve policy co-ordination. The paper concludes by identifying some lessons learned from the review, for the development of more effective skills strategies in the future

About the author

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1. Introduction

The Organisation for Economic Co-operation and Development (OECD) Skills Strategy aims to promote better outcomes from skills strategies. Skills development can make a substantial contribution to prosperity but its impact is greatest when policies are fit for purpose. The OECD has developed a skills strategy that integrates evidence and policy experience from across the OECD to support countries with identifying strengths and weaknesses in national skills systems and so develop better, more effective policies in the future. There is considerable potential for peer learning and to utilise the OECD skills strategy as a ‘mirror’ to reflect on how skills strategies can be developed to maximise their economic and social impact.

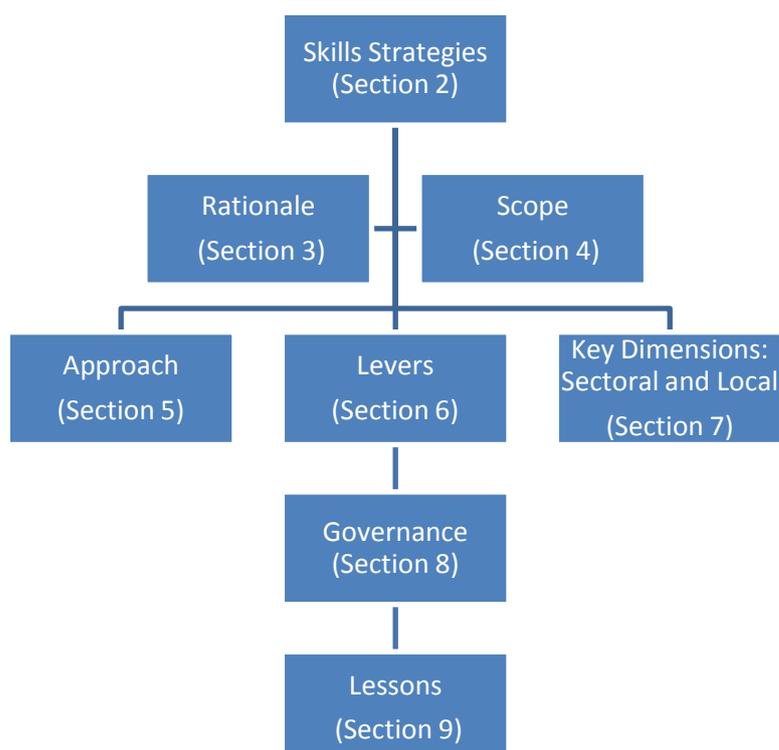
Many countries have already developed skills strategies to address key skills issues. What is their experience so far? What are the *characteristics* of the skills strategies that are actually being practiced in OECD and partner countries? What are countries actually doing? What is their focus, what are they trying to achieve, how are they trying to do it? How well do they steer their policies? This is the focus of our review. It draws attention to interesting and valuable *examples* and *practices*; illustrates some important *principles* of skills strategies; and draws some *lessons from their experiences* to inform future skills strategy development.

The review is based on a short questionnaire sent by OECD to all member countries; a literature search and review based on both on-line and hard copy materials, including several multi-country reviews of specific aspects of skills strategies (the countries and the themes reviewed are set out in Annex 1); as well as the author’s experience in advising governments on skills strategy, which includes reviewing international evidence. It proceeds as follows (see Figure 1).

First, in section 2, we consider the potential benefits of skills strategies, before outlining the *skills strategy frameworks* adopted by the main relevant international bodies, the OECD, European Union (EU) and International Labour Organisation (ILO) and noting which OECD countries actually have skills strategies. We then go on to examine the elements of ‘actually existing’ skills strategies, illustrating these through practical country examples. We consider the *rationale* for, and *scope/coverage* of, strategies – the ‘why’ and ‘what’ (in sections 3 and 4); the overall *approach* that countries adopt to their policy design (section 5); the main policy *levers* at their disposal – the tools, mechanisms and instruments that are used (section

6); the key dimensions of policy other than national, i.e. *sectoral and local* (in section 7); and the *governance* of the system – how the skills strategy is coordinated (in section 8). Finally, we conclude, in section 9, by drawing out a number of *lessons* from the review as a guide to the more effective development of skills strategies in the future and thus the building of more effective skills systems across the world.

Figure 1: Outline of Review



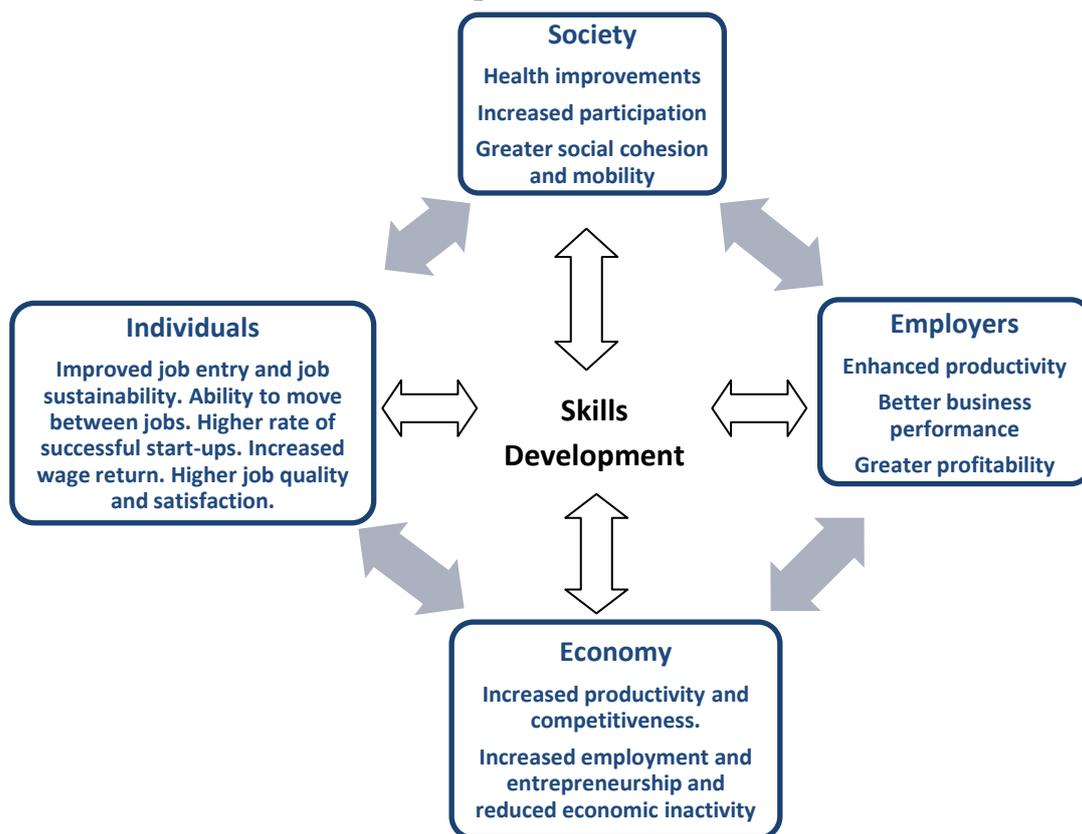
2. Skills Strategies

Skills development can make a very valuable contribution to prosperity (see Figure 2). But these beneficial economic and social *outcomes* are not automatic. In order to maximise the impact of skills development, a strategic approach to the design, development and management of skills systems is valuable. Indeed without such an approach a coherent ‘system’ is unlikely to develop at all, with policy limited to potentially unconnected and uncoordinated action which risks expectations being unfulfilled or even policy failure. Moreover, substantial public resources are invested in skills development and it is essential that these are used effectively.

A skills strategy requires the setting of a goal and preparing a plan of action to achieve it. They should provide a clear sense of direction – a purpose, and more specifically perhaps, objectives that we actually seek to achieve – together with policies which are specifically designed to secure them. They go beyond individual initiatives, programmes or policies to ensure that they combine well and are appropriate and sufficient to achieve the goal. They also need to be founded on a strong evidence base to provide a means of making ‘big’ decisions with regard to priorities, giving focus to action based on the most pressing aspects of the agenda in a particular country. Strategy is the means through which skills development is *steered*.

What skills strategies are advanced by the main international bodies?

Figure 2: The Benefits of Skills Development



The OECD Skills Strategy, in draft form at the time of writing, proposes a balanced approach covering the three interconnected domains of skills development.

- *Demand for skills:* Understanding the current demand for skills and the factors shaping the demand for skills in the future is an essential component of skills strategy. Meeting current and future demand for skills is only part of the challenge. The demand for skills can also be shaped by policy so that greater demand for higher-level skills can lead to higher value-added production and *vice versa*.
- *Supply of skills:* Ensuring that the stock of skills is sufficient in both quantity and quality to meet current and emerging needs is a key goal of skills strategies. Supply can be ensured by developing the right mix of skills through education and training of both young people and adults, and influencing the flow of skills into the labour market by attracting and retaining talent.
- *Use of skills:* Successful skills strategies need to ensure that the available skills are used effectively, so that investment is not wasted. This means skilled people being employed and in jobs that utilise their skills effectively.

The final report did indeed cover this terrain, but organised them around the three pillars of skills development; skills supplied to the labour market and effective skill use(including matching and demand)

The European Union's *Europe 2020* approach embeds skills strategy in a wider growth strategy, providing a common framework and agenda, with agreed priorities and the establishment of targets at EU and national levels (see Box 1) designed to help coordinate policy across countries. The European Commission have also developed a series of flagship initiatives to help secure the goal.

The International Labour Organisation (ILO) has developed a training strategy on behalf of the G20 countries, which presents both a strategic framework and a set of building blocks of what constitutes a strong strategy (ILO, 2010). The framework seeks to bridge training and the world of work. It advocates a focus on clear objectives; the matching of skills to skill requirements; and a lifecycle perspective. They consider it particularly important to view skills and employment issues together, to foster institutional arrangements that are responsive and to increase capacity for effective policy coordination. The essential building blocks include: labour market intelligence and the anticipation of future skill needs; social partner participation; a sectoral approach; high quality providers; better access to training; assessment of system/policy performance; and the sharing of experience across countries.

Box 1: Europe 2020

Education and training targets

- Less than 10% early leavers from education and training
- At least 40% of 30 to 34 year olds should have tertiary educational attainment or equivalent

Other targets include:

- *Raise to 75% the employment rate* for women and men aged 20-64, including greater participation of young people, older workers and low-skilled workers and better integration of legal migrants
- Improve conditions for research and development and raising combined public and private investment to 3% of GDP
- *Promote social inclusion* by reducing poverty by lifting at least 20 million people out of the risk of poverty and exclusion

Flagship initiatives include:

- *'Innovation union'* to improve conditions and access to finance for *research and innovation to turn ideas into products and services that create growth and jobs*
- *'Youth on the move'* to improve the performance of education systems and ease the entry of young people into the labour market
- *'A digital agenda for Europe'* to speed up the roll-out of high-speed internet and reap the benefits of a digital single market for households and firms
- *'An industrial policy for the globalisation era'* to improve the business environment, notably for small- and medium-sized enterprises, and to support development of a strong, sustainable and globally competitive industrial base
- *'An agenda for new skills and jobs'* to modernise labour markets and empower people by *developing their skills throughout life to increase labour participation and match labour supply and demand better*, including through labour mobility
- *'European platform against poverty'* to ensure social and territorial cohesion that shares the benefits of growth and jobs widely so people experiencing poverty and social exclusion can live in dignity and take an active part in society.

Of course, skills strategies in individual countries will differ from each other in terms of specifics. A country's previous experience of skills strategies, its level of economic development, its economic structure and current economic conditions, its political environment, as well as the particularities of the skills issues that need to be addressed, will all mean that there is no unique, ideal or "off-the-shelf" strategy that will be most appropriate. But a strategic *approach* is essential.

So, which OECD and partner countries currently have a skills strategy? Twenty one countries replied to the OECD's questionnaire. Twenty five countries (over 80%) have a self-declared skills strategy and one is currently in the process of development (Italy). In two cases the situation is unclear and in one case whilst there is no national, there are state, strategies (USA). In only two cases is there no skills strategy. It should also be noted that skills is a 'devolved' responsibility in several countries, including those with federal arrangements e.g.

in Canada, Belgium, Australia, the USA, Germany and the United Kingdom. Nonetheless responsibilities may be shared. In Switzerland, for example, responsibility is shared between the confederation, cantons and communes. It is also interesting to note that in several countries skills strategies are either currently under review, or have recently been reviewed or refined, in the light of changing economic and political circumstances e.g. Australia, New Zealand, England, South Africa and India.

3. Rationale

In addition to recognition of the benefits of skills development, why have countries developed skills strategies? Skills strategies have been developed under a variety of economic and political conditions and for a range of purposes. Most often a political imperative arises from economic and social concerns which may emanate from within the education and training system (e.g. lack of responsiveness, quality concerns or low achievement levels) or outside it (e.g. low productivity or social exclusion). Sometimes an independent review, academic or government research, may generate such a need. For example, in the UK the Leitch Review of Skills (Leitch, 2006) and UKCES's international benchmarking (UKCES, 2009a, 2010a). In the twenty-seven EU countries, the development of, first, the Lisbon Strategy and latterly, Europe 2020, have stimulated thinking and approaches to raise skill levels, especially as it was shown that many EU countries had a long way to go to achieve the goals of the strategy.

More specific work (European Commission, 2010b) has also raised the profile of the skills agenda at the European level and the forecasting work of CEDEFOP, the European Centre for the Development of Vocational Training (CEDEFOP, 2008, 2009), has shown that skills availability across large parts of the EU is, and will continue to, lag the evolution of skills requirements, so constraining jobs growth and competitiveness. Recognition of such skills gaps and their potential consequences acts as a powerful driver of, and rationale for, the development and adoption of skills strategies, for example as in Ireland and Australia. Analysis at sectoral and regional levels can further solidify the case for action as can increasing recognition of the value of skills.

In the Scandinavian countries much concern has centred on the risk of skills and labour shortages, given relatively high levels of employment, whilst in France, Spain and the UK,

for example, there is a preoccupation with low educational attainment amongst a significant proportion of the workforce, especially when combined with a recognition that many future jobs require higher skill levels. Many countries are also concerned about equity issues arising from the uneven access to, and participation in, especially Vocational Education and Training (VET), e.g. in small compared to large companies; by age; ethnicity; previous qualification level; and, sometimes, gender. Most countries also recognise the challenges and opportunities arising from globalisation and ongoing rapid technological change (both of which feature in Denmark's strategy) including in information and communication technologies. Some countries are also experiencing demographic changes (including declining numbers of young people and an ageing workforce e.g. in Poland, Italy, Greece, Spain and Japan) which require the workforce to enhance its skills. In several countries, e.g. Australia, the strategy is driven by the need to sustain a strong economic recovery and long-term sustainable growth. In Ireland it is in part driven by the need to adapt to rapid changes and increase productivity.

Sometimes the need for a skills strategy comes from the 'problem' of a specific group, for example, particularly high levels of youth unemployment or youths not in education, training or work. In Poland there is a serious concern with the risk of a 'brain drain'. In the USA, states focus their workforce development efforts on retrenched workers or the skill needs of key sectors or inward investors, as well as the unemployed. They rarely consider the skills of incumbent workers – those already in employment.

So, the existence of skill deficiencies, inequalities in skill levels, unemployed people with skills unused, and concerns over economic performance, can all contribute to the need for a skills strategy. How these specific drivers are articulated will affect the scope, coverage, and policy actions envisaged in the strategy. Ideally a thorough analysis or 'diagnosis' of the challenges affecting supply, demand, mis-match and use of skills should be undertaken to help set the agenda, identify key problems, inform objectives and establish priorities, so that strategy is evidence-led and the rationale effectively articulated. In particular, an assessment of levels and changes in skills supply relative to demand, is especially important if we are to identify where mis-matches are most likely to occur and therefore where the need for action is greatest. A number of countries exhibit features of such an approach e.g. the UK, Australia and some parts of the USA.

4. Scope and coverage

What do countries' skills strategies cover? Countries differ in the specifics of the scope and coverage of their strategies and in some cases this is reflected in the terminology they use and what they mean by 'skill'. In many strategies the term is not clearly specified, defined or always measured. However, most commonly we can distinguish three types of skill:

- (i) *Technical or professional skills*: the competencies required to undertake a specific job or occupation
- (ii) *Generic or core skills*: comprising cognitive (e.g. literacy, numeracy and problem-solving) and interactive (e.g. teamwork and communication), which can be applied in a range of jobs/occupations
- (iii) *Employability skills*: the attitudes and behaviours required in the workforce.

Skills strategies, in practice, usually focus particularly on the first of these, especially when supply-side focused. Where employers are heavily involved, there is also often emphasis on the others too. The orientation of the OECD Skills Strategy, and of this review, is to focus on *outcomes*: rather than focussing on the different education and training *pathways* towards the acquisition of skills (VET, lifelong learning, higher education or whatever) we focus on what is attained, acquired and what one can do as a result, not on how it is acquired and what is taught. Skills refer to the 'end result'.

The language and terminology that countries use differs and this is, at least in part, a reflection of their thinking and scope. Whilst many, especially English speaking countries, use the term skills itself, others do not. For example, Germany, Austria, Flanders, Norway and the Czech Republic have *lifelong learning* strategies; Poland, a *human capital development* strategy; many US states have *workforce development* strategies, as do Australia and Singapore; and New Zealand has a *tertiary education* strategy. Some countries refer to a competency agenda/strategy e.g. Norway and Mexico. Indeed the term 'competence' is the French term for skills. Poland, interestingly, uses the term *intellectual capital*, to comprise four components: human capital, structural capital, social capital and relationship capital. Many countries, in their response to the OECD questionnaire, referred primarily to their VET strategy e.g. Spain, Germany, Korea and the Netherlands. Several countries do not have a single skills strategy at all, but several strategies focussing on different parts of the skills system. For example, in Sweden there are strategies for upper secondary VET, adult learning and advanced VET; in Switzerland there are strategies for VET and for professional training

(PET); in Poland there are nine strategies. Sometimes higher education is dealt with separately, as in England, for example. Reference is sometimes made to ‘education and training’ or ‘post-compulsory education’.

A preliminary analysis of fourteen OECD country strategy documents (Hoeckel, 2010, unpublished) illustrates the variation in coverage especially in terms of priorities (see Table 1).

Table 1: Priorities for action in national skills strategy documents

| Country | Priorities |
|--------------------------|--|
| Australia (2010) | <p>Raise workforce participation</p> <p>Raise level of adult language, literacy and numeracy skills</p> <p>Increase productivity, employee engagement and satisfaction by making better use of skills in the workplace</p> <p>Support the tertiary sector to deliver skills for the new economy</p> <p>Develop partnership approach to workforce development at government, industry & enterprise level</p> |
| Czech Republic (2007) | <p>Improve recognition of the results of non-formal and informal learning</p> <p>Support availability and equal chance in access to educational opportunities</p> <p>Develop functional literacy and other competencies including the ability to learn throughout one’s life</p> <p>Through cooperation with social partners, promotes harmonization of the range of educational opportunities offered</p> <p>Stimulate demand for education in all groups of the population throughout lifetime</p> <p>Promote provision of a good range of educational opportunities (quality)</p> <p>Develop information and counselling services</p> |
| Denmark (2007) | <p>95% of all young people shall complete a general/vocational upper secondary education by 2015</p> <p>50% of all young people shall complete a higher education programme by 2015</p> <p>Everyone shall engage in lifelong learning</p> |

| | |
|--------------------|---|
| | <p>Guidance and counselling</p> <p>Recognition of prior learning</p> <p>Cohesion and transparency in the education system</p> <p>Global perspective in education (incl. English learning)</p> <p>Partnership in education and training and lifelong skills upgrading</p> |
| Estonia (2005) | <p>Opportunities for lifelong learning for all adults incl. those with special needs</p> <p>A transparent adult education financing system</p> <p>Guarantee for quality of adult training, information on adult training quality</p> <p>Database on adult learning and training opportunities, used for career guidance</p> <p>Professional qualification system to guarantee free movement of labour force</p> <p>Involvement of public, private & third sector in development of adult education/adult education policy</p> |
| Ireland (2007) | <p>Raise qualification levels</p> <p>Target the low-skilled and educationally disadvantaged</p> <p>Integrate migrant workers</p> <p>Prioritise basic skills (literacy and numeracy)</p> |
| New Zealand (2008) | <p>The effective use and retention of skills to transform work and workplaces</p> <p>Increase in the quality of demand from employers and workers</p> <p>Influence the supply of skills and create a more responsive education and training system</p> <p>A unified approach to defining, valuing and measuring skills</p> |
| Norway (2007) | <p>Basic skills and basic competence for lifelong learning</p> <p>Documentation and assessment of non-formal and informal learning</p> <p>Flexible learning (to be combined with other activities)</p> <p>Career guidance</p> <p>Working life as learning context</p> |
| Poland (2007) | <p>Increasing the quality of education</p> <p>Focusing the system of education on the needs of the labour market</p> <p>Activating senior citizens</p> |

| | |
|------------------------------|---|
| | <p>Ensuring synergy of science, business and culture; creating vacancies with high added value</p> <p>Increasing the quality of legal operations, procedures and infrastructure for business</p> <p>Regular measurement of intellectual capital indicators</p> |
| UK – England (2010) | <p>Apprenticeships to be at the heart of the system with flexible vocational qualifications.</p> <p>A Growth and Innovation Fund and Employer Ownership Fund to support employers</p> <p>Limits on non-EU migrants</p> <p>Changes to entitlements and funding by level of qualification and age so that responsibility is shared</p> <p>Simplification of funding</p> |
| UK – Northern Ireland (2006) | <p>Raising the skills of the current workforce</p> <p>Enhancing the knowledge base of those entering the workforce</p> <p>Addressing the employability skills of those not in employment</p> |
| UK – Scotland (2007) | <p>Firm foundations for skills development in young people</p> <p>Equipping individuals with the skills Scotland needs</p> <p>Skills for the workplace</p> <p>Information, advice and guidance</p> |
| UK – Wales (2008) | <p>Basic skills (literacy and numeracy)</p> <p>Getting into work; getting on at work</p> <p>Apprenticeships</p> <p>Business and workforce development</p> |

Source: Adapted from Hoeckel (2011, unpublished)

The table shows that there is an emphasis on the supply side of the skills agenda. A number prioritise fostering basic skills, including language skills for non-native speakers; others prioritise specific elements of the system such as apprenticeships (Denmark, Wales) or higher skill levels (Australia, Denmark) . Some strategies are also concerned with improving the matching of skills supply with demand (Czech Republic, Denmark, Norway and Scotland). Relatively few countries adopt a strategic, comprehensive and balanced approach as articulated in the OECD strategy, though some public agencies have sought to do so (see

UKCES, 2009a); the new Australian Workforce Development Strategy (Box 2) aims to, as do Singapore and South Africa (see Box 3).

In broad terms, the skills strategies in most countries focus largely, explicitly or implicitly, on VET. Both initial (young people's preparation for entry to the world of work) and continuing (adults already in the labour force) aspects are often covered, usually up to and including ISCED level 4 but sometimes up to level 5 (higher education). However, some strategies focus primarily on adults while others place more emphasis on young people. Both are essential. Whilst better preparation of 'new' entrants to the labour market is important, not least because of prevailing high levels of youth unemployment, the skills of the existing workforce also need adaptation over time, to adjust to changing job requirements and labour market opportunities. Skills depreciate over time and need therefore to be continually maintained, developed and upgraded throughout working life. Whilst this is a crucial dimension of a skills strategy, it is less comprehensive and balanced than that envisaged in the OECD skills strategy, which not only covers (all) post-compulsory education and training, but also labour market participation, migration, and aspects of economic policy insofar as they affect skills demand and use. The VET dimension in respect of *young people's initial education and training* has been recently comprehensively reviewed in a study of 16 countries, by OECD (see Box 4) and a policy review of post-secondary level VET was launched at the end of 2010. The former is helpfully reviewed in Hoffman (2011). The OECD has also undertaken a review of tertiary education (OECD, 2008b).

Box 2: Building Australia's future workforce

The strategy establishes a comprehensive, industry-led approach to workforce development, including 'Skills Connect', a new service providing information, support and funding to meet business needs. The strategy establishes a new National Workforce Development Fund (NWDF) to provide 130,000 industry-focused training places over 4 years, to be co-financed with employers. It reforms the Apprenticeship programme; reviews the national agreement on skills and workforce development to secure improved outcomes; increases the migration programme for the highly skilled by 10%; establishes a 'whole of government' commitment; and sets up a new National Workforce and Productivity Agency incorporating the functions of, to be abolished, Skills Australia, focusing on intense engagement with industry, the sector councils, employer associations and unions. It will administer the NWDF.

Skills development primarily occurs either through the acquisition of qualifications or through participation in (non-certified) training, either 'on-the-job' (workplace learning e.g. through apprenticeships) or 'off the job'. Both are normally in scope in country skills strategies. The 'flow' of skills into the labour market usually focuses on young people rather

than the hitherto inactive (e.g. women) moving into the labour market, while the ‘*stock*’ of skills, the current workforce, is also usually addressed. In some countries, e.g. the USA, the interpretation of the latter is usually more narrowly seen as just the unemployed or recently ‘retrenched’ (redundant) workers. The ‘incumbent’ (employed) workforce is not the focus of attention, unlike in most European countries and Australasia. In some countries measures to bring the unemployed back to work are seen separately from skills strategies.

Box 3: A strategic approach in Singapore and South Africa

The Workforce Development Agency (WDA) in **Singapore** provides strategic leadership on skills development. Its objective is to “enhance the employability and competitiveness of everyone in the workforce”. It develops the Continuing Education and Training (CET) infrastructure, leveraging the network of industry skills and development councils in each sector. The WDA works in close collaboration with employers and unions with the aim of increasing both productivity (e.g. through the Skills Programme for Upgrading and Resilience – SPUR) and inclusion (e.g. through the Workforce Training Support for low wage workers – WTS). With the recovery in full swing, emphasis is now less on inclusion and adaptation and more on professional, managerial and technical skills, under the Skills Training for Excellence Programme – STEP.

The National Skills Development Strategy in **South Africa** is now in its third iteration and explicitly works to support the priorities in the New Growth Plan, the Industrial Policy Action Plan, and of course, the SETA’s development plans. The 21 Sector Education and Training Authorities are the key means of implementation and now universities also have an increasingly important role. Their priorities include: greater responsiveness to labour market needs and equity; better addressing skill shortages and mis-matches; an increased emphasis on intermediate level skills; and greater cooperation between providers and the SETAs. A National Skills Fund acts as the catalyst to develop strategies beyond meeting sector needs, including innovation and building strategic partnerships.

Sources: www.wda.gov.sg and www.dhet.gov.za

As for what is meant by skills in terms of *measurement* (crucial in determining the extent, nature and prioritisation of problems to be addressed), *qualification levels* are a widely used proxy for skills, not least by the OECD itself (OECD, 2011a), and international comparisons/benchmarking is a key tool (e.g. UKCES, 2009a and 2010a). But *training* activity (the proportion of the employed workforce, or the proportion of companies, engaged in training) is also important, but less widely referred to. The OECD, through its PIAAC (Programme for the International Assessment of Adult Competencies) programme, is developing a suite of consistent, direct measures of skill, for example, measuring foundation skills, providing scores grouped into five levels. It is hoped that these will be utilised by countries when the full results are available as they provide evidence of the outcomes from

both educational attainment and required, non-accredited skills. Taken together with the results from the PISA (Programme for International Student Assessment) and AHELO (Assessment of Higher Education Learning outcomes), this data provides valuable, comparable measures of skills outcomes.

Box 4: Learning for Jobs: The OECD Review

How to make VET for young people respond better to labour market requirements? The focus is on initial VET in schools, colleges, workplaces and other institutions, offering policy messages for all OECD countries, alongside concrete advice on policy reform in reviewed countries. A program of analytical work drew on evidence from all OECD countries, including a questionnaire on VET systems, literature reviews of previous OECD studies and the academic literature on topics such as costs and benefits, career guidance and VET during the economic crisis. The results of both the analytical work and the country reviews fed into the comparative report.

Country policy reviews were carried out in Australia, Austria, Belgium (Flanders), the Czech Republic, Germany, Hungary, Ireland, Korea, Mexico, Norway, Sweden, Switzerland, the United Kingdom (England and Wales), and the United States (South Carolina and Texas) between the end of 2007 and 2010. Special studies were also conducted in Chile and the People's Republic of China, Canada, Denmark, Finland and the Netherlands have also contributed financially to the work.

Source: OECD, 2010

A common tension in several strategies, e.g. in Canada (Gibb and Walker, 2011), the UK and South Africa, is that between growth and distribution/equity issues. Whilst not *necessarily* in tension (increased participation of the low skilled in skill acquisition will increase labour force participation and possibly productivity) a policy focus on upskilling and higher skill levels is likely to generate the highest returns, productivity benefits and 'match' the jobs of the future. In some countries e.g. Portugal, Spain, Turkey, Mexico, Belgium and Italy, there is a long tail of low-skilled. Some are particularly strong on high level skills e.g. Canada, Japan, USA, Korea, Finland and Scotland; while others are particularly strong at intermediate level skills e.g. Czech Republic, Slovakia, Poland, Austria, Germany, Switzerland and Sweden (OECD, 2011a). These conditions affect the scope and focus of strategy and the balance between growth and equity issues as do prevailing economic and labour market conditions. The existence of lower returns to skills acquisition at lower skill levels combined with market failures means scope for government intervention to act at this level, so as to reduce labour market exclusion and to create the lower rungs of a 'ladder' of opportunity to access better jobs. High returns and higher skill levels may mean less need for intervention, unless to better align skill acquisition to evolving labour market requirements.

Finally, it is interesting to note that the European Commission has recently set out what could be the strategic components of their 2020 agenda in the future. Those most relevant to the scope and coverage of skills strategies are: strengthening the link between labour market and economic policy; increased workforce productivity; quality jobs; and inclusive labour markets (European Commission, 2011).

5. Approach

Before turning to a consideration of the main levers that countries use in pursuing their skills strategies, we outline the different broad approaches that are potentially available to them and that they tend to use (Green and Green, 2012). We identify four stylised types:

- 1) *Market oriented systems*, as for example in England and the USA states. Here the focus is primarily on how to respond to market-determined needs. These tend to use market incentives as key mechanisms for achieving objectives and to encourage high levels of information available to actors to inform their own choices and behaviour e.g. in reducing skill mis-match or stimulating participation in education and training. Emphasis is also placed on competition to improve quality and choice. Mis-matches tend to be viewed as supply-side (rather than demand-side) weaknesses, with providers not fully adapting to labour market/employer requirements. Information, advice and guidance are key to choices and matching and there is limited ‘shaping’ of employer demand, with a focus on meeting existing skill needs as articulated by employers.
- 2) *Social partner-led co-ordination systems*, as for example in Germany, Austria and Switzerland. These tend to exhibit more active co-ordination of supply and demand, especially through initiatives managed by social partners – employers and unions/workforce representatives. While information is seen as important, regulation and stronger signals are made available to actors. Mis-matches are actively managed through collective action and prioritisation. Attempts are made to shape and stimulate employer demand.
- 3) *State-led social partnership systems*, as for example in Scandinavian countries, where the state also plays an important role in funding and regulation, using social partnership approaches to achieve wider governance objectives. This shares many of the features of social partner-led systems, but may tend to see labour market practices as a cause of mis-match and so may promote changes in work organisation and industrial/innovation

policies that stimulate employer demand, move up the value chain and tackle the possibility of a ‘low skill equilibrium’.

- 4) *Developmental skill systems*, more common in East Asian countries and South Africa, often pursue more interventionist lines, driving the skills system towards wider economic development goals of, for example, changes in economic structure and thus the shaping or stimulation of demand. In consequence there may be more limited employer/stakeholder involvement than in other systems. Actions are taken to stimulate supply and demand in the direction of economic and industrial policy goals, so reducing the possibility of skills mis-match and weak demand and using skills strategies to secure economic development priorities.

In practice many countries pursue a more mixed approach than implied by these idealised types. There tends in many countries to be less of a system and more a pragmatic, piecemeal approach, a result often of years of policy history, reform and institutional change. There may even be some convergence of approaches as countries learn from each other and from their own experiences with, for example, market oriented systems increasingly seeing the benefits of social partner systems when encouraging employer engagement, and social partner-led systems increasingly seeing the way market incentives encourage change. Nevertheless skills strategies are informed by these orientations and they lead to differences in approach to skills strategy formulation, including the relative emphasis placed on supply, mis-match, demand, and the locus of action; the tools that are utilised; the engagement of stakeholders; and the extent/nature of government intervention, including regulation and financing.

There are two other related aspects of approaches to skills strategies in different countries worthy of mention. First, the identification and pursuit of specific *priorities* that generates differences between countries. More or less emphasis might be focused on *individuals or employers* (and sub groups within these e.g. young people or small firms) and more or less emphasis may be placed on specific issues e.g. qualifications reform; quality of provision; utilisation of skills. Second, objectives (particularly measurable ones) not only differ between countries but are not always articulated, specified or measured. These tend to be associated with the broad approach the country follows, though the temptation to change or abandon targets, based on objectives that are unlikely to be met (either because of policy failure, excessive ambition or individual/employer resistance) is great.

6. Levers

What tools, instruments and measures do OECD countries actually use to pursue their skills strategies? We provide an overview here of (largely) *non-financial* mechanisms. The financing of skills is dealt with separately (OECD/CTP, 2012), particularly in relation to issues of fees and charges, loans, grants, vouchers, subsidies and taxes. Financial incentives can be utilized in ways so as to ‘bend’ supply or demand, to encourage/discourage and to prioritise by level of qualification, content of course, and status of learner (e.g. age and employment status).

We first deal with the available *levers to increase skills supply* and increase the number and range of participants in learning. This has been the traditional territory of skills strategies, is extensively covered in the OECD Skills Strategy, the Learning for Jobs Review (see above) and the thematic review of Tertiary Education (OECD, 2008b). We will then cover measures to improve the *matching of skills supply and demand* before concluding with coverage of tools to increase their use, demand and *employer investment* in skills.

Increasing participation in skills development is important. Throughout OECD countries (though to different degrees), participation tends to vary systematically across social groups with the already low-skilled, older workers, part-time workers, those in non-unionised enterprises and those in small firms, the least engaged, as well, of course, as the unemployed and economically inactive. Raising skill levels therefore has a strong equity as well as economic component. Moreover, skills obsolescence due to technological change and the need to adapt to new industries and occupations make adaptation throughout the life-course particularly important. To increase participation means having knowledge of the factors that influence participation and the barriers that separate individuals from learning so that policy responses can be appropriate to tackling the most substantial barriers. Most countries have taken considerable steps to increase the participation of young people in VET programmes, including through apprenticeships (see page 17), and in higher education (OECD, 2008b, 2010b).

Measures to include adult participation include (apart from financial support): awareness, motivation and confidence building; time off work to learn (paid/unpaid) through a ‘right’ to learn; workplace based initiatives; and community based initiatives. For example, in Norway, employees have the right to unpaid training leave after being with an employer for three years and this is also the case in Sweden. The NOSTE programme in Finland (see Box 5) sought to

encourage the training of older workers. Union Learn in the UK (see Box 6) is a successful programme which has engaged nearly a quarter of a million workers, through more than 20,000 ‘union learning representatives.

Box 5: Programme for increasing educational standards of adults, NOSTE (Finland)

NOSTE is aimed at adults who lack basic vocational skills and was launched in 2003 by the Ministry of Education in cooperation with the Ministry of Labour and other social partners. The programme finished in 2009. NOSTE was targeted at working adults aged between 30 and 59 with no post-compulsory qualification. The target group consisted of approximately 350,000 people and the programme aimed to reach about ten percent of them. The programme included a number of targets around employability, but also targeted the improvement of adults’ chances of entering ordinary publicly financed VET and to increase the intake of adults on VET programmes.

The NOSTE programme was delivered through 60 network projects, varying in size and composition. Key features included:

- The programme was cost free, which was identified as one of the key factors which led to NOSTE attracting high numbers of participants. The number of participants tripled from 2003 to 2007, with round 16,000 adults starting NOSTE training by the beginning of January 2007. The cost issue was also very attractive to employers.
- Representatives of SAK (the main trade union for blue-collar workers) were recruited as ‘learning agents’ to encourage low-skilled employees to undertake training and to act as contact points with education and training providers.
- Outreach was not simply used as a marketing and recruitment tool, but as a means of helping people to define their own learning needs. Specific funding for outreach meant better opportunities to visit workplaces and share information about study possibilities with employers and employees.
- Research on the effectiveness of the outreach activities emphasised the significance of personal contact, particularly as it often requires more time, motivation and encouragement on the part of older adults to get them to engage.
- The programme tackled one of the main barriers to learning, particularly amongst older workers – the lack of adequate learning skills.

Action to raise training levels in small firms is illustrated by the TSS scheme in Ireland (Box 7), whilst the establishment of Group Training Associations (GTOs) is illustrated in Australia, by the bringing together of small employers in rural, low population density areas, to share the costs associated with training.

Action can also focus on the skills of the unemployed to aid their reintegration into the labour market (Meager, 2009). The emphasis on training in *active labour market policies* has been diminishing in many countries, except perhaps in Scandinavia, as the evidence of effectiveness is limited, unless the programmes are specifically targeted at the particular skill

needs of the individual and provide strong labour market connections through work experience or job placements.

Box 6: UnionLearn UK

The Trade Union Congress (TUC) established UnionLearn, a network of ‘learning representatives’, to provide a high-profile strategic framework and support for union work on skill development. UnionLearn promotes collective action to increase learning in the workplace. Although UnionLearn representatives are well-positioned to deliver information and advice and other support to colleagues they are themselves volunteers and full-time workers. As a result UnionLearn does not seek to become a specialist provider of information, advice and guidance, but cooperates with specialist agencies to broker learning opportunities in the workplace.

A related catalyst for trade union involvement in learning was the Union learning fund that aimed to build union capacity to sustain work on learning issues and make this a core activity in trade union agendas. Unions encourage employers to provide for the learning needs of their staff and sign up to a ‘skills pledge’, which commits them to training their staff to a specific qualification level. Unionlearn argues the case for social dialogue around the way in which costs for raising skill ambitions should be shared between the state, employers and individuals, for increased collective bargaining over training, secured with a statutory framework, and for sustained capacity building for unions to enable them to continue to take this agenda forward.

Box 7: Training Support Scheme (Ireland)

The Training Support Scheme (TSS) was established by the Training and Employment Authority (FAS) in 1990 to encourage and promote training in SMEs. The broad objective of the TSS was to improve the skills of existing employees at all levels from operative to management. This was to assist companies to improve their skills base in order to improve efficiency and enhance employability, adaptability and mobility of workers. The scheme was open to firms engaged in the manufacturing industry, internationally traded services and distribution. Initially, the rate of subsidy for firms with less than 50 employees was up to a maximum of 80 per cent of training costs and 50 per cent for larger companies.

The initiative was targeted at employers, and companies were required to develop a business development and training plan based on a review of the company's activities and an analysis of its strengths and weaknesses in relation to markets, finance, production and human resources, prior to taking part. The programme involved over 17,000 employees in more than 1200 companies in the first year at a cost of around €6 million.

Over 60 per cent of smaller firms surveyed showed that they would have engaged in either no training or in less training than they actually conducted without TSS. However a degree of 'deadweight' occurred as it had little effect on the training plans of larger companies.

Some of the key determinants of success were:

- *Demand-led structure* – whereby firms identified their training needs and received grant aid to purchase that training on the market.
- The linking of training to a *development and business plan*.
- The focus on *smaller companies*.

However key bottlenecks to the success of the initiative included:

- *Weak awareness* of the need for training amongst managers (an integral part of the TSS process).
- *High administrative costs*.
- The fact that the *training received was often short in duration* which led to the suggestion that it did not meet the objectives of the programme.

The programme was discontinued in 2003.

We now turn to the key measures to improve the *matching of skills supply and skills demand*.

The existence and effective dissemination of *labour market intelligence* to individual providers, employers, intermediaries and public agencies is an essential foundation stone to inform policy direction, aid alignment between supply and demand, secure transparency, inform choices and behaviour, and generally keep participants well informed. Information, particularly employment, earnings and learning outcomes, provides market signals and, as such, acts as the 'oxygen' of markets.

Whilst most countries collect extensive information on the skills and qualifications of their population (the supply side of skills) through labour force surveys and educational/training attainment, not all collect parallel data on employers' skill needs (the demand for skills). Employer surveys can provide a valuable insight into current/expected requirements,

especially if conducted on a regular and systematic basis, with a sample size sufficient to disaggregate results effectively by sector and geography. The National Employer Skills Survey (NESS) in England has done so since 1999 and now covers the whole of the UK (UKCES, 2012). It is crucial, however, to ensure that such LMI is effectively utilised and actually informs and influences provision, learner behaviour and public agency decisions.

The US approach is especially interesting and instructive. It rests on the three pillars of O*NET (to identify the skill requirements of occupations); OES (the Occupational Employment Statistics Survey) and the BLS (Bureau of Labour Statistics) labour market projections (see Box 8).

Box 8: The US LMI system

The O*NET (Occupational Information Network) nationwide LMI system is particularly interesting, providing occupational competency information. It looks at things from both an individual and employer perspective and covers: worker characteristics; worker requirements; experience requirements; occupation-specific information; workforce characteristics; and occupational requirements. Over 800 occupations are covered and this level of detail gives it considerable power.

The system is freely available to all on-line (www.onetcenter.org) and a range of tools are available to maximise its use, including one for business and one for career exploration. It also draws on the sectoral and occupational projections from BLS.

The OES provides information on changing patterns of labour demand and ages (which are also used to identify occupations for which there is a case to allow inward migration). It is based on a survey of 400,000 businesses established annually. The occupational data forms the core of the system for both the projections and O*NET.

The BLS projections cover the labour force, sectors and 800 occupations.

Source: Wilson (2010)

The examples of Ireland, UK, Brazil and Korea (see Box 9) also illustrate valuable practices in skills *anticipation* that are used to inform skills strategy, in particular the identification of skill needs.

Box 9: Anticipating skill needs

Ireland's Expert Group on Future Skill Needs (EGFSN) analyses future skill needs and develops proposals for how to meet them, through a broad membership including business representatives, educationalists, trade unionists and policy makers. The breadth of participation enables EGFSN to identify changing occupational profiles within sectors and the demand for different occupations. EGFSN identified the key elements to be included in a generic skills portfolio for the future: basic or fundamental skills (literacy, numeracy, ICT); people-related skills (communication, team-working); and conceptual/thinking skills (collecting and organising information, problem-solving, planning and organising, learning to learn, innovation and creative skills). They provide advice on how to improve the awareness of job seekers of sectors where there is demand for skills and the qualifications required.

The UKCES regularly publishes "Working Futures", a series of forecasts of occupational, sectoral and regional change designed to provide labour market actors with an understanding of the changing shape of the labour market. It has recently been augmented by a Strategic Skills Audit examining current/future skill needs, based in part on detailed qualitative work.

The wide replication of Brazil's national training institution, SENAI, is a good measure of success. SENAI is run by an association of industries funded by a levy on the industrial payroll, and has sister institutions serving different sectors (agriculture, small enterprise, service sector, etc). SENAI's 'Prospecting Model' adjusts training provision based on an analysis of take-up rates of emerging technologies and of new forms of work organisation. The model generates estimates of job requirements over a five-year period based on studies of technological and organisation prospecting, tracking of emerging occupations and monitoring demand trends for vocational training. The quality of basic education is challenging the share of young people able to take advantage of training opportunities.

At the core of the Republic of Korea's sustained growth pattern lies a government-led skill development strategy. The rapid progress in closing the productivity gap reflected an economic development strategy based on investment and research and development. Investment in a well-educated and highly skilled workforce was an integral part of encouraging adoption of new technologies. A current challenge is to avert shortages in the higher-end vocational occupations by increasing the attractiveness of non-academic skill development paths.

Source: ILO (2010)

Labour market information can also be accessed to inform career pathways. For example the Czech Republic has created a website which provides information on educational options and their labour market outcomes in one place (www.infoabsolvent.cz). Users can learn about the range of programmes provided by secondary and tertiary institutions, including entry requirements, qualifications, and the jobs these programmes lead to. Information is also provided on employment conditions and employee satisfaction in different occupations, supported by data on employment/unemployment rates and salary by educational attainment and field. Users can also learn about various occupations by using video material available on the website, and read about employer needs and their expectations in terms of the skills and competencies of potential recruits. For a review of career guidance services and their use of LMI, see CEDEFOP (2011a). Box 10 provides further illustrations from Switzerland and Mexico.

Box 10: Career guidance in Switzerland and Mexico

In Switzerland attending career guidance and information sessions is mandatory for students in compulsory secondary education. In years 7, 8 and 9 of lower secondary school, students learn in their own schools about their career options; all teachers receive some training in labour market opportunities so that they are knowledgeable about the labour market. The students in those years are introduced to the main institutions for guidance and counselling, the centres for occupational information (*Berufsinformationszentren, BIZ*).

The BIZ are free-standing institutions providing unbiased information and counselling for all levels of the VET system. In these centres individuals can see generalist counsellors, and may then be directed to specialists with more knowledge of specific institutions. They work closely with schools, and indeed may provide some services at the school rather than at the BIZ site.

The Mexico Ministry for Education has developed “Career guidance in my memory” (*Orientación vocacional en mi memoria*) a USB stick distributed to students and also available through the internet. It includes tools that help students to identify their strengths and interests, information on institutions offering particular programmes, and data on labour market outcomes.

Data on outcomes is collected by the Mexican Labour Market Observatory (*Observatorio Laboral Mexicano*) so students can compare different career options, exploring whether graduates work in an occupation related to their training, how much they earn and their average working hours. Currently it does not cover all occupations and levels but is an example of a user-friendly, interactive guidance tool, which takes advantages of new technology.

Source: SEMS (2010) *Orientación profesional en mi memoria*, Subsecretari de Educación Media Superior, www.orientaciónvocacional.sems.gob.mx.

Matching is also enhanced by labour market mobility and the transparency of qualifications across different countries. Under the Copenhagen process, countries in the EU have established a series of tools to aid this process by providing a systematic way to validate and document their knowledge, competencies and skills. They are all based on learning outcomes (i.e. what the holder of the qualification knows, understands and is able to do), and provide recognition for those outcomes (see Box 11). Twelve countries have now linked their national qualification levels to those under the EQF. Moreover, under the Bologna process, reforms have been made to enable higher education to be more compatible, comparable and coherent across EU and other countries and the European Higher Education Area was formally launched in 2010.

Reducing the number of ‘drop-outs’ from vocational programmes (and school) is important and combining study with work (rather than study first then work) is a key means of doing so. This approach is especially prevalent in, for example, the Netherlands, Australia, Switzerland

and Denmark. The school leaving age has also been raised, e.g. in the Netherlands, Ontario (Canada) and England.

The experience of *apprenticeships*, especially under the *dual system* – where schooling is combined with the workplace – particularly prevalent in Germany, Switzerland and Austria – is instructive, not only as a key means of increasing skill levels for both young people and adults, but also in securing a better *balance* between the skills available and skills required, especially as it pertains to young people. In Germany, Switzerland and Austria at least 40 per cent of school leavers are taken on by employers in (usually) three year apprenticeships leading to a recognised qualification, compared, for example to six per cent in the UK with an average duration of around one year (Steedman, 2011). Recruitment is decided by individual firms and the (non-school) costs fall on them.

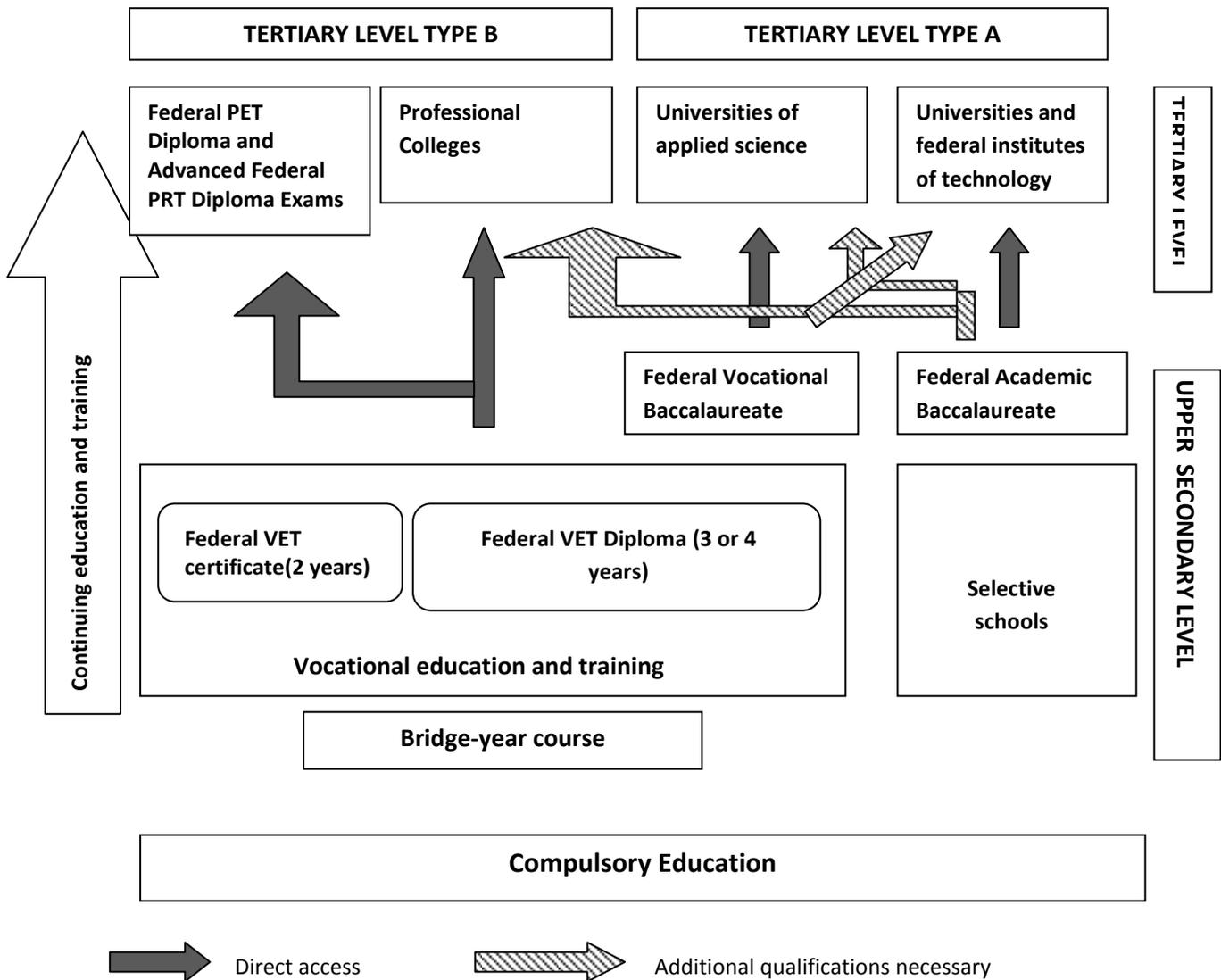
| Box 11: Common European tools | |
|--|---|
| <p>European Qualifications Framework (EQF) The EQF supports lifelong learning and mobility by being the common reference framework for qualifications. It has eight levels, which enables national qualifications (general and higher education and vocational education and training) to be compared with each other and those of other countries. Setting up the EQF has triggered development of national qualifications frameworks (NQFs) in many European countries that see them as the best way to link national qualifications to the EQF.</p> | <p>Europass Europass is a portfolio of documents which supports mobility by helping people to communicate their knowledge, skills and competencies acquired through education, training or work experience, as well as in informal settings. Europass includes the Curriculum Vitae, Language Passport and the Diploma Supplement which records additional information on learning from a stay in another European country, linked to a VET qualification and higher education diploma.</p> |
| <p>European Credit System for Vocational Education and Training (ECVET) ECVET promotes geographical and professional mobility. It helps validate, recognise and accumulate work-related skills and knowledge acquired during a stay in another country or in different situations, so that these experiences contribute to vocational qualifications.</p> | <p>European quality assurance framework for vocational education and training (EQAVET) EQAVET aims to help countries improve the quality of their VET systems, increase the transparency, market relevance, consistency and transferability of vocational education and training qualifications across Europe.</p> |

Source: CEDEFOP (2011c) *Shaping Lifelong Learning*

In Switzerland more than half of adults of working age have a VET or PET (ie upper secondary or tertiary 'B') qualification. In addition the Fachhochschulen (universities of applied science) offer vocational education and tertiary 'A' level (see Figure 3). The dual system combines part-time study at a vocational school with part-time apprenticeships at a host company. Over 250 occupations are defined and offered through VET 'ordinances' and training plans. The system is steered at the national level by a collaborative partnership of the confederation, the cantons and the professional organisations.

In Germany, the Federal Ministry of Education and Research has overall responsibility for VET strategy. The 'dual' VET programmes (based on both the workplace and a school) are available in more than 350 trades taking between two and three and a half years to complete. Apprentices spend 3-4 days a week in a training firm, providing practical training based on a training plan following guidelines set out in the 'ordinances' (regulating the direction, profile and assessment requirements) for each qualification. Small firms that cannot provide comprehensive training form 'training alliances' with others. Practical training is complemented by part-time VET schools for around 12 hours per week. The social partners are closely involved in design and provision, through the development of the ordinances. Structural improvements to the system were set out by the 'innovation circle' in 2007 (see Box 12). Whilst the state establishes parameters, the delivery is the responsibility of employers; it is they who recruit the apprentices and the (workplace) costs fall primarily on them. They contribute to the cost of local chambers of commerce via a levy. Around 600,000 apprenticeship places are available annually.

Figure 3: The structure of Switzerland's VET/PET system



Source: OPET (2009), *Facts and Figures. Vocational and Professional Education and Training in Switzerland*. OPET, Bern

Box 12: Ten guidelines of the Innovation Circle on VET in Germany

1. Encouraging completion of school education – improving training maturity.
2. Optimising training preparation for the disadvantaged – reorganising funding structures.
3. Optimising transfers – securing paths to company training.
4. Strengthening the occupation principle – making vocational education and training more flexible.
5. Broadening the training basis – making effective use of training.
6. Enhancing transfer opportunities – securing the employability of vocational skills.
7. “Second chance” education – promoting qualifications for young adults.
8. Greater openness towards Europe – improving mobility and recognition.
9. Strengthening dual training in European comparison – securing potential on the international education market.
10. Providing a basis for future-oriented vocational training policy – strengthening cooperation between industry, science and politics.

Source: BMBF (2007) *Ten Guidelines for the Modernisation and Structural Improvement of Vocational Education and Training*. Innovation Circle on Vocational Education and Training, BMBF, Berlin.

We now turn to action to raise the demand for skills and *employer investment* in them. This component is, overall, less well developed across OECD and partner countries. As with individuals, a range of market failures (including capital market imperfections, short termism, bounded rationality, imperfect information, poaching, transaction costs, access and external spillovers) can prevent employers investing in the skills of their workforce. This may mean that demand is sub-optimal. Policy action is then justified to stimulate employer investment in workforce skills. Whilst less widespread than policies on the supply side to raise individual participation and investment, there is a trend of increasing interest and commitment in a number of countries to the agenda (UKCES 2009b) including in England (see Box 13)

Box 13: Raising employer ambition in England

The UK Commission for Employment and Skills, led by a team of commissioners including large and small employers across a wide range of sectors, trade unions and government representatives, has argued that “the future employment and skills system will need to invest as much effort on raising employer ambition, on stimulating demand, as it does on enhancing skills supply”. There is little value to an organisation having a skilled workforce if the skills are not well used. Action includes:

Investors in People: Investors in People is a quality standard which seeks to transform business performance through people by aligning business planning and goals with people management. In April 2010, responsibility for Investors in People passed to the UK Commission, placing it at the heart of their agenda to strengthen management, leadership and skills use across the United Kingdom. Investors in People provides organisations with a framework to help deliver growth and business impact, improve performance and ensure the skills and capabilities of their people are fully used. Sixteen per cent of all workplaces in the UK are currently recognised as Investors in People.

Employer Ownership of Skills: The Employer Ownership Pilot offers all employers in England direct access to up to £250 million of public investment over two years to design and deliver their own training solutions, including apprenticeships, training courses and pre-employment opportunities. The pilot is jointly overseen by UKCES, the Department for Business, Innovation and Skills and the Department for Education, and will test new employer-led delivery models. The prospectus invites employers to work with employees, trade unions, colleges and training providers, and other partners to develop proposals that set out how they will invest in skills to drive enterprise, jobs and growth within a sector, supply chain or locality.

Growth and Innovation Fund: The Growth and Innovation Fund (GIF) helps employers to develop their own innovative, sustainable skills solutions that have the potential to transform growth in their sector, region or supply chain by raising the capacity of employers to collectively up-skill their workforce. Successful bids have included proposals to set up new employer-training networks and group-training associations, to develop new industry standards and talent-development programmes. GIF will co-invest up to £35 million with employers in 2012-13, with comparable levels of investment planned for the following two years.

Source: www.ukces.org.uk

This type of approach can also help enable increased employer involvement and commitment as well as a greater role for the private sector, and private funding, in skills strategy.

As always, it is desirable to focus policy action on the specific barriers/market failures that actually exist in a given country context. The least invasive action taken is to establish the *evidence that investing in skills is beneficial* to employees and, in particular, to employers and the economy. This material then needs to be made accessible and widely available, preferably backed up by a campaign of materials and events to ‘make the case’ to employers, and connected to the availability of advice and guidance services, especially for small firms.

Training levies are perhaps the most prominent and prevalent policy lever, having been established, at one time or another, in at least 30 countries across the world. They are used, for example, in France, Belgium, Spain and South Africa and, on a sectoral basis, in the Netherlands, Denmark and the UK. A smaller number of countries have established *rights to training leave* e.g. Denmark, Norway, Finland, Netherlands and Belgium (see OECD, 2005). The introduction of *quality standards* (e.g. ISO9001, which contains a training clause, or Investors in People across the UK) can increase employer investment through raising quality, public commitment and a distinctive customer image.

Collaboration between employers in training design and delivery, especially at a sectoral or local level, e.g. through group training associations, trade associations or supply chains, can be very powerful. *Establishing networks* can encourage higher collective standards, improve organisation, provide scale economies and stimulate wider employer engagement. Such collaboration and networks are common in, for example, Canada, the USA (e.g. Wisconsin), Australia and Germany, as well as at a sectoral level in many countries (on which, see below).

Occupational licencing, where practitioners have to demonstrate a minimum competence level for an occupation to enable them to be granted ‘permission to practice’. Common in professions in most countries (e.g. law and accountancy) and in occupations where there is a high safety risk (e.g. health care), it can be extended to directly address skill gaps in other occupations e.g. in adult and child social care (in the UK), gas installation or security personnel, or others where there are actual or potential concerns about quality and public safety or when the end user of a service has a limited voice (e.g. some mental health or adult social care services). Indeed, in publicly owned or regulated industries, compliance is important and the ‘scandal’ of mis-selling in financial services has led to strengthening of professional standards amongst financial intermediaries/advisors, at least in the UK.

Tax incentives (common in the R and D field) lower the financial cost of investment to employers and tax credits have been or are used in, for example, Austria, Korea, Japan, Spain and France. Credits can be calculated according to the volume of (incremental) training undertaken and the costs become tax deductible. *Subsidies* towards the cost of training programmes also reduce the costs for the target employers e.g. Train to Gain in England. *Public procurement* can also be used in the award of contracts to suppliers using training

behaviours or standards as a prerequisite for action or award criteria (subject to competition rules in EU countries).

Perhaps the central issue is how to engage more small employers in continuing training. A preoccupation with the short term (often even survival), limited resources with a high opportunity cost, lack of specialist staff, fear of poaching, and limited access to, and knowledge of, providers, present a formidable array of barriers to increase employer investment in skills. A recent study (Stone, 2011) examined policy initiatives in nine countries: Australia, Canada, Denmark, Finland, France, Ireland, New Zealand, Norway and the Netherlands. It provides a range of examples of interesting initiatives, including job rotation (to tackle the issue of staff absence) in Denmark; group training associations in Australia; making the ‘business case’, e.g. in the New Workplace Development Programme, Finland; and fiscal incentives (as in France and Belgium).

Overall the key to increasing employer skills initiatives is to grow a skills/training/learning culture. This means developing a persuasive narrative and business case, with employers committed to engaging with their peers, sectorally, locally, in networks and in their supply chains, in particular with respect to low training firms. The Canadian Chamber of Commerce has recently launched an interesting initiative in this regard (Box 14).

Box 14: The Canadian Chamber of Commerce and Skills Development

This is the main focus of the Chamber’s network of over 400 chambers across the country in 2012 with two government departments, Human Resources Canada and Citizenship and Immigration Canada, participating in the outreach in terms of thousands of small and medium-sized businesses. The Chamber will encourage engagement in every community involving employers, educators, unions and local governments and their website, www.chamberstop10.ca, will be a resource for all. Roundtables with members across the country will target improvements to strategies and programmes so that solutions can be tailored to local needs that will make a real difference.

Source: *Top 10 barriers to competition (2012) Skills Development*, The Canadian Chamber of Commerce

This initiative is of particular interest as it is private sector-led and explicitly seeks an integrated approach. Already there are significant skilled labour shortages in Canada which will worsen as the ‘baby boomers’ retire, and a productivity gap. An ageing population means that most labour force growth is from migration. Participation can be increased, and shortages reduced by tapping the underused segments of the population, including older workers, aboriginal peoples, people with disabilities, and recently arrived migrants. In these ways

inclusion and productivity objectives can both be addressed, alongside encouraging lifelong learning and even early learning.

This takes us into one important final aspect of our review of policy levers. The mechanisms outlined above, designed to encourage employer demand, will, even if they are wholly successful, only raise investment and demand to the optimal level that is required by employers *under existing economic and organisational conditions*. Yet these conditions themselves are potentially open to change, as the economy and businesses themselves change in a wide range of ways. This is especially important to recognise because skills supply and demand may be in equilibrium (workers have the skills they need in *current* labour market conditions and employers have the skills they need in *current* economic and business conditions) but these may be at a level which is ‘too low’ in the context of a changing economy, competitiveness, globalisation, technology or government aspirations for the economy in the future. Almost certainly, countries that have ambitious development, growth or sustainable recovery goals, will want to *improve* the economy by increasing productivity and competitiveness and perhaps by moving up the value chain and/or rebalancing the structure of the economy (or by moving the labour market towards ‘better’ jobs with higher earnings). In other words, we should not necessarily take the *current* (even optimal) demand for skills as a given. This insight takes us into wider policy and strategy territory by considering how to shape, or raise demand, and encourage better use of skills, through adapting the economic and business environment within which skills are currently developed. There are two related aspects of this – *external* to firms and *internal* to firms.

Externally, it should be recognised that the demand for skills is actually a ‘derived’ demand: depending on the *level* of economic activity in an economy, sector or locality and the *structure/composition* of the economy, sector or locality, as different products/services require different levels and types of skills in their workforce. Economic development policy is primarily concerned with these issues of economic growth, structure and competitiveness, e.g. through industrial policy, innovation policy and regional and local economic policies. So, a key means of increasing skill levels is actually through these economic policies and, conversely, enabling such policies to be successful, requires skills strategies to meet the *changing* needs of the economy, as a result. We need to secure a ‘virtuous circle’ where supply and demand are mutually intertwined and interdependent, with each driving the other to higher skill levels, higher and better employment, and greater productivity,

competitiveness and growth – a ‘high skill, high productivity’ economy. There is explicit recognition of this agenda in, *inter alia*, Singapore, Australia and Scotland.

Internally, employers’ skill requirements are similarly a ‘derived’ demand. They depend on the product/services the organisation makes/provides, the technology they use to do it, the markets in which they operate, the business strategies they pursue to achieve their goals, and the management and human resource practices they utilise as they strive to succeed. So, a key means of skills development, and of using existing workforce skills more effectively, is actually through employers’ business and human resource strategies. This is crucial because we know that some countries’ firms are better managed than others and that there are substantial variations in management practices within countries and sectors (Bloom *et al*, 2011). Moreover the same exhaustive study of over 10,000 organisations in 20 countries showed that both manager and workforce skills are associated with better management practices, which, in turn, are associated with superior business performance. I refer to this external and internal ‘demand’ agenda as one of *raising ambition*: the ambition of employers and policy-makers.

Key to this agenda is recognition of the interdependence between skills and *innovation*. The OECD’s Innovation Policy (OECD, 2010c) calls for a change in emphasis from supply-side policies focussed on (scientific) research and development technologies, towards one that takes account of the range of ‘factors and actors’ that influence innovation performance. The strategy is based on five priorities for action including that people should be empowered to innovate as human capital is the essence of innovation. It emphasises the value of skills such as critical thinking, creativity, communication, team working and entrepreneurial skills. But it also recognises the importance of the *workplace* per se (see also OECD 2010d) so that designing organisations and management practices that are conducive to innovation become important. The creation of a ‘learning organisation’, valuing employee autonomy, task discretion and supporting learning/training opportunity, gives the capacity to adapt. Yet there are substantial variations in learning forms of work organisation across, for example the European Union with high levels, as well as policy commitment, displayed primarily in the *Nordic countries*. In short, investing in the workforce needs to be paralleled by investing in the workplace, in order to fully utilise the skills of the workforce and turn the potential of skills into real improvement in performance.

Recognition of these issues has led several countries to begin to pursue policies in this area. For example, *linking workforce and economic development*, through encouraging better quality jobs and access to them as in the regional industrial clusters and workforce innovation initiative in Texas.

A recent study (Stone, 2011) has reviewed approaches to improving *skill utilization*, primarily through action to encourage ‘high performance working’ in organisations, in seven countries: Australia, Canada, Finland, Germany, Ireland, New Zealand and Sweden. Most often the focus is on increasing employee involvement in the organisation of work and encouraging greater commitment to high levels of performance. Action to encourage so-called ‘high performance’ workplaces or practices (HPW) has been sustained in Finland through its Workplace Development Programme (Tykes, now Tekes) and smaller, often pilot, programmes have taken place in, e.g. Flanders (the Synergy programme), New Zealand (the Workplace Productivity Project) and Ireland (the Workplace Innovation Fund). Often the aim is to build team working, enhance employee engagement and generally adapt the organisation of work to one which encourages the fuller *utilisation* of workers’ skills, tackling skills under-use/under-employment. A strong message from the review is that a focus on the use, rather than just the development, of skills is essential to maximise its impact on productivity and innovation. A good review, and prospects for the future, is also provided by Warhurst and Findlay (2012).

A *wider focus* incorporating the external environment within which firms operate, is provided through the development of ‘*skills eco-systems*’. A skills eco-system is an interdependent, mutually reinforcing network of firms, providers, people and initiatives and policies, in a given locality or sector.

‘Skills eco-system’ approaches attempt to integrate skills development within a broader business development agenda, usually in a specific geographical area and/or sector of the economy. They recognise the importance of the demand for skills and, in particular, how a range of factors – firms’ products and business strategies, individual behaviour, provider behaviour and the institutional and policy setting – may combine to create a ‘low skill equilibrium’, where low skills combine with poorly trained managers to produce low quality goods and services. To secure a ‘high skill equilibrium’, a range of mutually reinforcing mechanisms need to be established to create a positive ‘web’ within which skills can be developed and used (see Box 15 on Silicon Valley in the USA and Box 16 on recent

initiatives in Australia, Scotland and Scandinavia). Some activities focus within the firm or the workplace itself (e.g. management, high performance working, employer engagement) while others focus on the external environment (e.g. economic structure, partnerships, policy integration), but the central issue is the interdependency of multiple actors and policies in creating the conditions under which skills are developed and used. Hence, the development of networks, local and sectoral, and of effective partnership working between different public agencies, providers and employers, provide an opportunity not only to join up policy but to create synergy and innovation through mutual understanding. Skills strategies have a key role here, acting as a catalyst in their establishment and effective development.

In all this, the role of employers is crucial. It goes well beyond ensuring that the content of training and qualifications is appropriate to their needs, but rather focuses on how they ‘frame’ the agenda by their behaviour, relationships, the products/services they make/provide, how they organise the workplace and so on. This also puts employees, including managers, centre-stage. Their commitment, their contracts, their ‘trust relations’ with their employer help to create the ‘frame’ within which skills are developed and used too.

For example, as part of the ‘better not cheaper’ campaign in the manufacturing sector in Nord Rhine Westphalia in Germany, trade unions have promoted new forms of production that use the skills of the workforce to generate innovative, high quality products (see Haipeter, 2011; Warhurst and Findlay, 2012). The approach is grounded in the recognition that competitive advantage increasingly depends on quality rather than price. The campaign is driven by the works councils, supported by the unions and makes ‘demands’ on companies in respect of workforce development, participation, work organisation, research and product development. Over 500 companies have become involved. This is taking place within an existing culture of dialogue and co-determination. Overall, the objective is to raise employer *ambition*. There is considerable scope to develop skills strategies orientation to this range of activity in the future.

These approaches also mean that the *governance* of skills strategy becomes particularly important. Achieving successful *coordination* across policies and initiatives can add real value to strategy, but it becomes more demanding as the ambit of skills strategies widen (on which see section 8 below).

Box 15: Silicon Valley, the original high skill ecosystem

According to Finegold (1999), there are four elements required to create and sustain high skill eco-systems (HSEs):

- a catalyst
- fuel of nourishment
- a supportive host environment
- a high level of mutual interdependence.

He argues that in Silicon Valley, a surge in government spending on military research and hardware provided the *catalyst* for the aerospace industry to take off. Another critical factor for both the aerospace and biomedical clusters was the interaction between researchers and industry, with regional universities acting as *catalysts* and *sources of nourishment* establishing well-trodden pathways between universities (including their management schools) and high-tech local firms.

Once established, the HSEs began to attract overseas-born workers often bringing family and personal networks that further strengthen global reach and viability.

Features of the *supportive environment* that made it attractive to ‘knowledge worker’ include:

- Infrastructure (transportation, telecommunications and serviced business parks)
- A regulatory environment that made it easy to start a business and take it public, and also bankrupt without severe penalties if the business does not succeed.
- Flexible work arrangements.

Key are the *inter-linkages* within the HSEs that made them ‘knowledge-sharing networks’ rather than just companies located in the same region, with frequent partnering with others that had complementary expertise.

In addition, the employment system – highly paid, short-term contracts – encouraged the circulation of people across organisations, as did the ‘wealth of intermediate institutions that provide a forum for people to meet and exchange learning’.

Firms came together through intermediaries to pursue initiatives such as improved technical training that were to their mutual benefit. However, the main way professionals and technicians developed their skills was through informal means. The organisational form of the HSEs facilitated this form of knowledge creation and diffusion.

Source: Finegold, D (1999) “Creating self-sustaining, high-skill ecosystems”, *Oxford Review of Economics*, 15 (1)

Box 16: Skills eco-system initiatives in Australia, Scotland and Scandinavia

In Australia, the Commonwealth Government worked together with the New South Wales State Government to introduce nine demonstration projects since 2003, focussing on a number of sectors and, for example, improvements in quality working through the supply chain and seeking to re-shape the nature of work/jobs (New South Wales Government, 2008; see also Hall and Lansbury, 2006).

In Scotland, the Scottish Funding Council undertook to fund £2.9 million of twelve projects designed to test different approaches to the use of skills in the workplace and, in particular, the role of universities and colleges in improving skill utilisation. An interim evaluation (Payne, 2011) found a positive potential but a need to build capacity and ensure sustainability.

In Finland and Denmark, the focus has long been on work organisation, building on the national workplace development and innovation programmes aimed at improving productivity and the quality of working life, using experts and consultants to support social innovation and smart ways of working (Ramstad, 2009).

The underuse of skills can also occur in the wider *labour market*. We have already seen, in section 6, how mis-matches between the supply of, and demand for, skills may take the form of under-employment, when workers undertake work for which they are over-qualified or over-skilled. But unemployment and economic inactivity mean that the skills they have available are not utilised at all. Some groups in the labour market, including *recent migrants*, *women*, people with a *disability* and some *ethnic minorities* may also face systematic discrimination leading to labour market segmentation and the underuse of their skills in the labour force and the workplace. Skills strategies could usefully incorporate measures to increase labour force participation, bring the unemployed back into work and ensure people whose skills are under-used secure jobs more suitable to their skill levels.

Finally, one more generic lever that can be deployed is the setting of *targets* either for the strategy as a whole or its component parts. This is especially important in the context of strategies that focus primarily on *outcomes*. Setting clear objectives which are measurable, mean that baselines can be established, progress tracked and comparisons made (especially if benchmarked internationally). Targets involve, additionally, establishing the measurable progress that countries aim to achieve by a specific date. For example, the EU has established a series of targets for its Europe 2020 Strategy, including headline targets for skills: reducing school drop-out rates to less than 10 per cent and ensuring 40 percent of 30-34 year olds complete a tertiary level education. A suite of much more detailed targets (or rather success indicators) were monitored under the previous Lisbon Treaty. The UK, both in the 1990s (the National Targets for Education and Training) and following the Leitch Review, from 2006-10, adopted a set of targets (see Box 17) which were assessed annually by UKCES (UKCES, 2009a, 2010). South Africa has also had explicit targets since its first National Skills Development Strategy. Initially it included 70 per cent of all workers to be qualified to at least Level 1 and now, in its new 2011 strategy, it includes targets to be set out in annual implementation plans. India has also, recently, set a daunting target of skilling up 500 million people by 2022 and Denmark has set targets for the proportion of young people to complete both upper secondary and higher education.

Such targets provide a focus for action and hold government to account for the progress being made. When there are clear objectives and success measures, these can act as a powerful lever for action and a stimulus to effective monitoring and evaluation. It is important however to ensure that the objectives and success measures are appropriate and aligned with the strategy. For example, the above measures, it should be noted, relate to skills supply. The

pursuit of targets can also, in certain circumstances, lead to skewed policy and resource deployment.

Box 17: The Leitch Ambition for the UK by 2020

- To be in the top quartile of OECD countries at every skill level.
- 95 per cent of adults of working age to have functional literacy and numeracy.
- More than 90 percent of adults of working age to be qualified to at least Level 2.
- Shifting the balance of intermediate skills from Level 2 to Level 3, with 4 million adult Level 3 attainments.
- More than 40 per cent of adults of working age qualified to Level 4 and above.

Source: Leitch, S (2006)

7. Key dimensions: sectoral and local

Skills strategies are sometimes pursued not only at the national level. Indeed given the variety and distinctiveness of different economic sectors and localities, especially in relatively large countries, skill levels, skill needs, and skills issues vary considerably, so it is understandable and appropriate that sectoral and local strategies can be a key dimension of successful skills strategies.

7.1 The sectoral dimension

The dominant orientation of skills development at the sectoral level is the establishment of sector bodies, unsurprisingly led by employers with a broad remit to identify and meet the skill needs of the relevant sector. In this sense it encourages a more demand-led approach and provides the opportunity for employers to be more influential in the development of skills strategies.

A tri-partite ILO Global Dialogue Forum (*Upskilling in the Downturn*, Geneva, 29-30 March 2010) on strategies for sectoral training and employment security concluded with four consensus-based recommendations for how sectoral approaches can be most effective:

- 1) Base sectoral approaches on *close collaboration between the social partners at national and local levels*.
- 2) Use bi-partite or tri-partite sectoral councils to *match demand for skills* in sectors with training provision, *anticipate future labour market and skill needs*, and assess the quality and relevance of training programmes.

- 3) *Recognise each stakeholder's roles, rights and responsibilities in promoting a lifelong learning approach to meet sectors' skill needs.*
- 4) *Embed sectoral approaches to skills development within long-term national growth strategies* thus linking top-down and sectoral bottom-up training strategies.

Several countries have adopted a sectoral approach (Sung, Raddon and Ashton, 2006; INSSO, 2010). In Canada, HRSDC oversees more than 30 pan-Canada government-funded sector councils, which focus on the development of training standards and building a training culture in their sectors. Individual provinces also have their own sector bodies e.g. in Quebec and Nova Scotia; and one 'skills table', the Asia Pacific Gateway, established in 2008. In the Netherlands, there are 19 'knowledge centres' (Kenniscentra) which lead sectoral skills development and they are mirrored by 19 sector provider groups within BE Rand (the Dutch Council for Vocational and Adult Education) representing regional colleges (ROCs) and specialist training institutions. The knowledge centres identify the competencies required and these are fed via BE Rand to the ROCs who actually deliver the training and assessment to meet these requirements (see Box 18). In New Zealand 38 Industrial Training Organisations (ITOs) arrange training, set the standards for qualifications and work with employers to determine skills development needs. They are funded through the Tertiary Education Commission. They increasingly provide industry leadership and a means for government to engage with employers. The system is currently under review. In South Africa there are 21 *Skills and Education Training Authorities (SETAs)*. Membership, as with most sector bodies in other countries, whilst led by employers, often includes employee representatives. They are responsible for collecting and disbursement of the training levies paid by all employers (the levy also funds the SETAs themselves). Each develops a sector strategy/plan, ensures access to training, assists companies with skills training and development plans/practice, and provides information on current and future skill needs in their sector. In the UK there are currently 21 *Sector Skills Councils* (see Box 19). In several countries the sector bodies are networked into an alliance (e.g. the Industry Training Foundation in New Zealand).

Sector bodies are also being developed in India, drawing on the UK model, and are apparent in several US states where the establishment of Workforce Boards under the Workforce Investment Act has led to the 'bottom-up' development of sector approaches. The WIRED initiative (Workforce Innovation in Regional Economic Development) and the (now ended) High Growth Job Training Initiative (which covered 14 sectors) have also encouraged them. Both, incidentally, encouraged the integration of workforce with economic development. The

National Networks of Sector Partners (NNSP) provides networking, support and promotion of the approach.

Box 18: Skills development in the Netherlands: Sectors and social partners

Vocational education is a shared priority of government, enterprises and workers. The popularity and the effectiveness of the Dutch system of vocational education may be attributed in part to the important role played by the social partners in both initial training and lifelong learning, both of which are organised largely by the industrial sector.

Initial training is organised in three levels: lower secondary level, combining general education and elementary vocational education; intermediate level, focusing on labour market qualifications, through a mix of classroom and workplace learning; and tertiary education. Costs borne by employers include student allowances, coaching time by company trainers, training the trainers, guest teaching in schools, providing equipment to schools, and contributing to school curriculum. The apprenticeship system is partly financed by the government and partly by enterprises.

Seventeen national expert-centres for vocational education and business are organised by sector e.g. construction, health care, engineering professions, administrative professions, logistics and transport, agriculture. The government finances these centres. Centres' boards comprise educators, employers and trade unions. The centres' tasks typically include advising the government of the qualification structure and competence profiles for the sector, training of company trainers, and monitoring changes in skill demand.

Lifelong learning is supported through some 100 bi-partite sectoral funds for training and development. Most are financed according to collective agreements between social partners in the sector, usually between 0.5 and 1.0 per cent of companies' wage bill. The funds are increasingly invested in research on new skill needs, career guidance information, training materials for the sector, etc. The funds are especially relevant for SMEs who normally do not have in-house training professionals.

Key areas of competitiveness and long-term growth for the Dutch economy have been identified through a bottom-up process, organised by the Innovation Platform, a high-level council chaired by the prime minister.

Source: ILO (2010).

The *International Network of Sector Skills Organisations (INSSO)* draws members from Australia, Canada, India, Netherlands, New Zealand, Pakistan, South Africa and the USA, to share ideas and good practice.

A review of sector skills policy approaches in eight countries (Australia, Canada, Netherlands, New Zealand, South Africa, France, Singapore and the USA) identified a number of common elements that appear to contribute to the success or failure of the approach (Sung, Raddon and Ashton, 2006):

- Employers should play the central role in identifying skill requirements and designing the competences required. When combined with a degree of control over funding, as in New Zealand and the Netherlands, this ensures delivery agencies work to the sector's agenda.
- At least some public training funding should be directed through the sector bodies (e.g. as in the Netherlands and New Zealand, and currently being piloted in England).
- The consent of employees is required not only to enable a consensus view, workforce involvement and legitimacy, but skills need to reflect an element of transferability for individuals.
- The use of financial incentives, statutory regulation and state funding/subsidies, help share the cost of training.
- Government funding for the sector bodies themselves to ensure they take account of longer term government objectives and have the potential to challenge employers (e.g. move to higher value-added production/services or pursue equity objectives) using the government leverage.
- Acknowledge tensions between government, sectors and localities/regions due to differing needs/priorities.

Important foundation stones to underlie the system are the research and intelligence capacity of the sector bodies and appropriate performance monitoring to secure both accountability and continuous improvement.

Box 19: Sector Skills Councils (SSCs) in the UK

Established in 2002 as successors to the previous National Training Organisations (NTOs), SSCs are independent, employer-led organisations which provide the employer leadership to address the skill needs within their sector. Their roles are to:

- Analyse the skills their sector needs.
- Articulate the voice of employers on skills
- Develop innovative skills solutions to sector needs.
- Galvanise employer ambition and investment in skills
- Develop national occupational standards (NOS) that set out occupational competencies which also underpin the design of vocational qualifications.
- Develop and issue Apprenticeship frameworks.

There are currently 21 SSCs in the network, largely funded by government through the UKCES which is responsible for their funding, performance management and continuous improvement.

Source: www.sscalliance.org

7.2 The local dimension

There are substantial variations within countries in the supply, matching, and the demand for, skills. The ‘peculiarities’ of some areas’ economic structure, economic conditions and location, provide a rationale for a local dimension to skill strategies, so that action is well aligned with actual local economic, labour market and skills conditions. Moreover, many labour markets, and learning markets, are actually essentially local in nature, in terms of jobs, workers and learners, especially at lower and intermediate skill levels. In some countries there is a strong country-wide local approach (see, for example, Box 20).

Box 20: Workforce Boards in the USA and Local Enterprise Partnerships in the UK

The Workforce Development system in the USA was established under the 1997 Workforce Investment Act. Around 550 business-led Workforce Investment Boards (WIBs), all rejoicing under local nomenclature, are the stewards of local labour market strategies and they commission a range of employment and job training services according to local need subject to their available resources. Their relationships with local service providers and education and economic development stakeholders are therefore key. Several were engaged in the federally funded WIRED programme and many oversee the One-Stop Career Centres, where job seekers get employment and career development training information. The National Association of Workforce Boards (NAWB) networks the WIBs, prepares policy papers and campaigns for workforce development.

Local Enterprise Partnerships (LEPs) in the UK were established in 2010 to replace the former Regional Development Agencies (RDAs). They are locally owned partnerships between local authorities and businesses, providing an integrated approach, determining local economic priorities and undertaking activities to drive growth and job creation. Thirty nine have been announced so far. A network has recently been established. In most there are Employment and Skills Boards as a key component of their operation.

Source: www.nawb.org; www.bis.gov.uk

A review of local practices in OECD countries (Froy et al, 2009) showed that local strategies often focus on *three areas of action: attracting and retaining talent; integrating disadvantaged groups into workforce development; upgrading the skills of the low qualified*. The interest in attracting talent from elsewhere, through immigration, and seeking to retain it, is an interesting aspect of this work, rarely addressed in national skills strategies, yet vital in many labour markets where migrants are, or could be, a significant force. Box 21 illustrates this agenda in the case of Shanghai, a very rapidly growing locality.

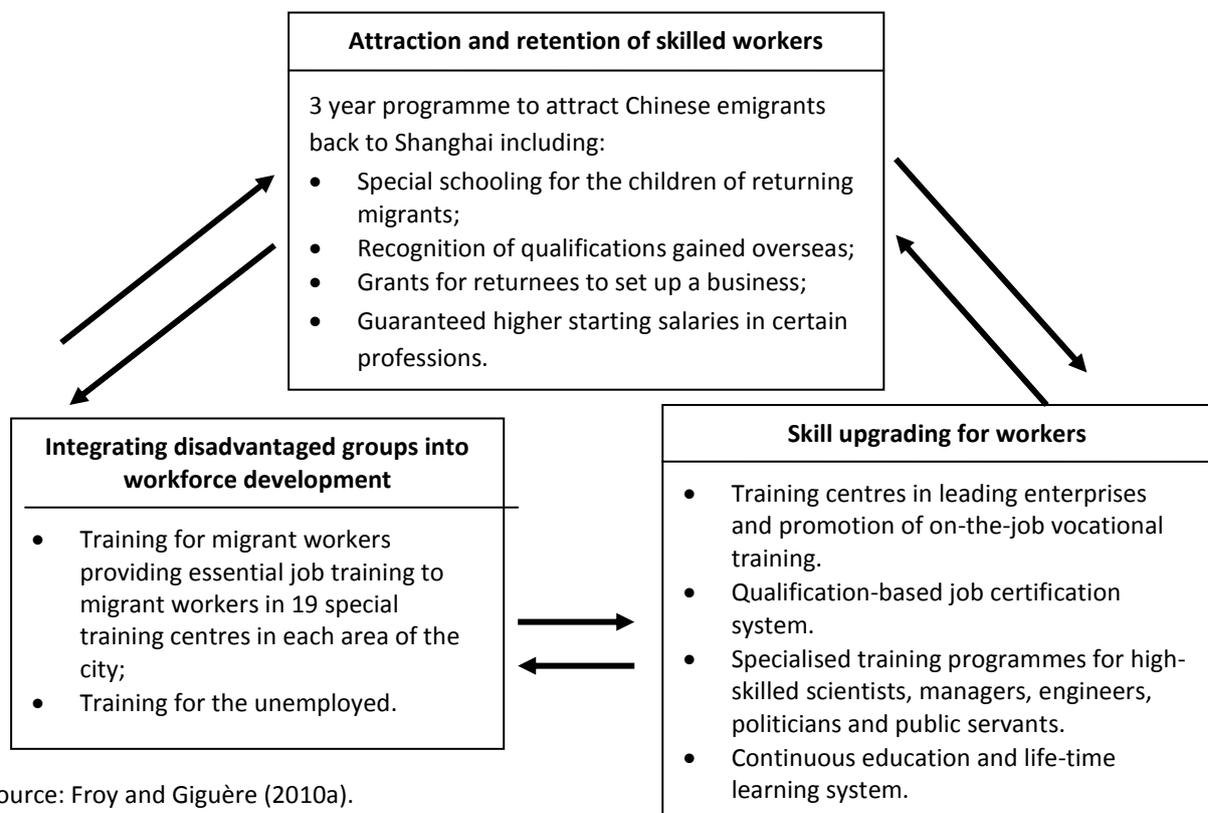
Nevertheless such approaches do not constitute a fully coherent or comprehensive skills strategy. They help build a skilled workforce but, on its own, this is insufficient as it is largely oriented to the supply-side of the labour market, even if the skills development is demand-driven. Drawing on nearly thirty years of research and practice in local employment and economic development policies, the LEED programme at OECD have identified five

principles that are required to secure an integrated approach to effective local strategies (Froy and Giguère, 2010b.).

- 1) *Creating a skilled and adaptable labour force* (as above). A balanced approach is required, addressing both stocks (the existing workforce) and flows (those joining it including migrants); both youth and adults. In particular a focused effort is required to reduce skill mis-match and meet labour market requirements with the skills that are developed.
- 2) *Better utilisation of skills and improvements in the quality of jobs*. While increasing the volume of job opportunities is crucial, a focus on the quality of those jobs is important, so as to ensure that a skilled labour force actually has ‘skilled jobs’ to do. Otherwise there is a risk of under-employment where skills are under-used. Under-use may also arise if the organisation of work, technological conditions or products themselves require further development to move up the value chain and raise productivity and earnings.
- 3) *Support employment progression and career opportunities*. An orientation towards not just accessing, but securing, job opportunities which enable people to progress through the labour market into better jobs over their life-time, is important. Career pathways, ladders and ‘clusters’ can help make the labour market more transparent and offer real long-term opportunities for the low-skilled in traditionally relatively low-skill sectors such as retail or hospitality.
- 4) *Foster and anticipate new sources of growth*. Anticipating and encouraging future areas of likely economic and employment growth addresses demand side issues. Opportunities in health, adult and children’s social care, energy, transport and construction, ‘green’ jobs, and others, mean that communities can help prepare their workforces for the jobs of the future (see, for example, European Commission, 2010b; CEDEFOP, 2008). Managing the transition from ‘jobless’ sectors is also important.
- 5) *Establish and develop good local governance*. Strategies need to be effectively managed to avoid the existence of policy silos and fragmented interventions while maximising synergy and co-ordination between related policies. Clear priorities, a strong evidence base, partnership working, leadership and capacity building are all important to secure success.

Box 21: Shanghai Highland of Talent Initiative, China

The Shanghai Highland of Talent Initiative is an example of a balanced bottom-up city-wide skills strategy. The municipal government launched its first skills development initiative in 1995 to develop Shanghai into a ‘highland of talent’ in mainland China. However, effective efforts to implement a concerted strategy did not occur until the municipality launched a detailed ‘action framework’ in 2004. The action framework defined ten priorities to be addressed between 2004 and 2010 based around the attraction of high-skilled Chinese returnee emigrants; specialised training programmes to train high-skilled scientists, managers, engineers, politicians and public servants; and wider programmes to reform the vocational training system and upskill Shanghai’s labour force. In 2006, these were further consolidated down to five key tasks, with priority given to training migrant workers and rural surplus labour arriving in Shanghai. Training is now delivered on the basis of an annually reviewed ‘Talent Development Catalogue’ which lists skills in demand. The outcome of such a balanced and targeted approach has been encouraging. The proportion of highly skilled workers as a percentage of Shanghai’s total skilled workers increased to 15 per cent by 2005, compared with 6.2 per cent in 2002 and 9.4 per cent in 2003.



Source: Froy and Giguère (2010a).

Figure 4 illustrates this joined-up approach, a balanced strategy addressing both the supply of, and demand for, skills. These five principles and strategic priorities could constitute an agenda of relevance not only for local, but also for national skills strategies and aligns well with the conceptual framework of the OECD’s skills strategy.

The LEED programme, as a key part of the local skills strategies work, has just commissioned a series of case studies to gain greater insight into ‘joined-up’ approaches to local skills development. A selection of these are identified in Table 2, to illustrate their range and focus.

| Table 2: OECD LEED Local skills strategy studies | |
|---|--|
| Case study | Focus |
| Barcelona Activa, Spain | This case study will examine the work of Barcelona Activa, Spain, on skills supply (a new apprenticeship programme for young people which has just been set up), demand (new city-wide agreement on quality jobs) and matching (profiling local jobs and matching to job seekers through an initiative called Porta 22), and taking a balanced approach. |
| EduCluster, Finland | <p>Central Finland has a long history of stakeholders building up interaction and entrepreneurship in a model called a Learning region, with dynamic structures and stakeholder relations to support continuous learning. Central Finland has based its regional development on this connection of learning for ten years, in a region concentrated on natural resources and heavy industry. The Learning Region provides a platform to cultivate all capital to create innovation and includes many projects. The main impact has been the creation of a unique network of education and business – the EduCluster – a cooperation framework for labour models and matching business needs. It has created effective models for business development and is looking at creating learning clusters and business networks. This study is focussed on the city of Jyväskylä but also reflects other municipalities in the region. The main pillars for building the Learning Region are:</p> <ol style="list-style-type: none"> I. Strategic cooperation based on committed interaction and joint will II. Strong educational collaboration between public and private sectors III. VET innovations enriching on-the-job learning and world class skills IV. Open and wide innovation systems to generate innovations and competitiveness V. Strong and inspiring regional culture and mind-set to support entrepreneurship VI. Forecasting future needs to support well-functioning labour markets. |

| | |
|--|--|
| <p>Skills Development Strategy, Sweden</p> | <p>Gavle’s approach to skills strategy development is integrated into a wider strategy (Vision 2025), and cuts across other policy themes. It engages a broad cross-sectoral alliance of stakeholders and builds on the supply and demand side of the labour market. There are several initiatives which engage employers in workforce development and it has recently published an Innovation Strategy focused on citizen involvement in innovation and skills needed to achieve this.</p> <p>The strategic goal for the whole education and training system is to ensure a supply of skilled workers for the region and the strategy is embedded within Vision 2025 and the annual workplans – not a separate document. It aims to match skills and education with employers’ demands – all parts of the education system work with a ‘Sector Skills Programming Committee’ which comprises representatives from business and industry, higher education and the municipality. Responsibilities include creating opportunities for cooperation between schools and the workplace, identifying workplace based education and training opportunities (for everyone) and apprenticeships.</p> |
| <p>Maryland Clusters, USA</p> | <p>In the United States, local and regional government agencies have increasingly adopted industry cluster approaches to economic development and a similar approach is surfacing in the workforce development field in, for example, Maryland on career sectors/career clusters. 350 business executives in ten different sectors were brought together in 1995 to inform education policy makers about their bottom line – how they made money and what they needed to be successful. Within each county, a Cluster Advisory Board (CAB) focused on different industry clusters, for example, biosciences, Health Science and Medicine cluster. Administrators, counsellors, and faculty members are using the system to develop programmes that extend from high school to two and four-year colleges/universities, graduate schools, apprenticeship programmes and the workplace.</p> |
| <p>Talent Network, USA</p> | <p>In June 2011 the New Jersey State Department of Labour and Workforce Development issued grants to establish six separate state-wide Talent Networks in key industries believed to have the special potential for job growth in the coming decade e.g. in Transportation, Logistics and Distribution, and in Life Sciences. Each Talent Network shares the common goal of (i) helping job seekers obtain employment in their target industry, and (ii) helping employers in that industry find qualified employees with relevant skill sets for critical occupations.</p> <p>The key concept of the Talent Network approach is to create a lasting framework for aligning state and local workforce/education services with the particular economic development goals of the six targeted industry sectors.</p> |
| <p>Strengthen the Strength Strategy, Germany</p> | <p>Since 2004 the state of Brandenburg has abandoned a policy of promoting the economy based on the ‘watering can’ principle and has switched to one based on the principle of ‘strengthening strengths’. The Brandenburg region is focusing on systematically building up existing spatial and sectoral strengths, and is trying to build up a globally</p> |

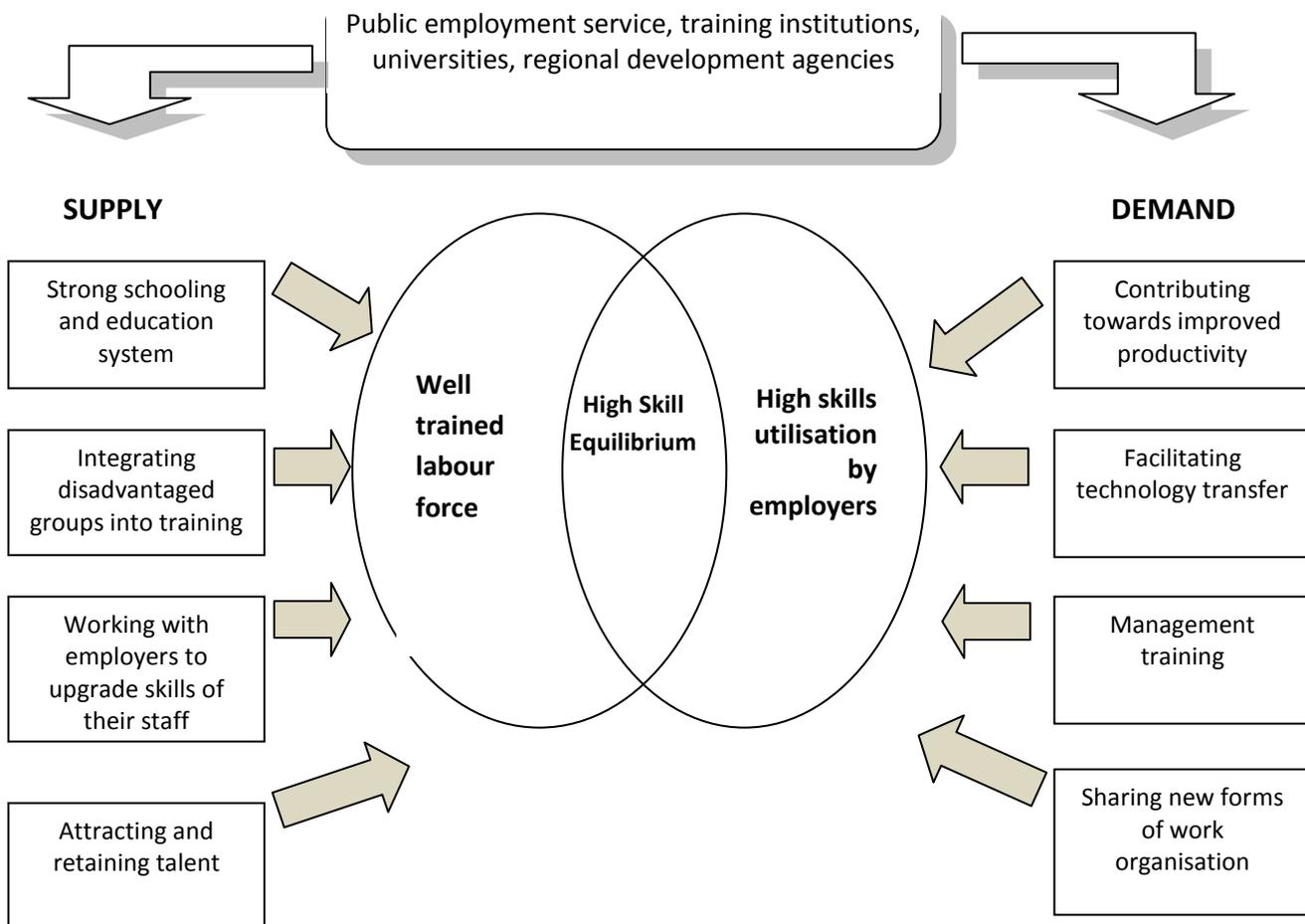
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| | <p>competitive knowledge-based economy. It is focussing systematically on innovation, green technologies, modern energy and industry, sciences and research.</p> <p>Both Luckenwalde and Prignitz have experience of securing skilled labour force. This is done as part of a local development strategy in Luckenwalde, a regional economic development company in rural Prignitz. This is connected with the metropole region's cluster strategy – Strengthen the Strength – which designated both localities as Local Growth Poles.</p> <p>The study will compare the approach to up-skilling in both localities with the region and draw on the rich evidence base for skills which includes statistical profiling, surveys of firms and students, and local networks to implement local action plans. It will look at additional activities such as innovation potential analysis and specialised skill services to help companies attract the required skills.</p> |
| Queensland Skills Formation Strategies, Australia | <p>This study includes a review of 52 Queensland Skills Formation Strategies. There has been significant reform of the VET system with the intention of increasing Queensland's qualification levels through improved access and support for difficult to engage cohorts and programmes tailored to specific priorities. The SFS were a component of this and were an outcome of research designed to accurately 'name and frame' the skill shortage issues reported by industry and overcome bureaucratic obstacles to creating a holistic response. SFS were piloted in 2003 and were introduced in 2006 as one of several new industry engagement mechanisms. By 2006 they were very favourably viewed by industry because of their potential to address the grassroots causes of skills/labour shortages. In excess of 60 SFS have now been introduced with varying degrees of success. This report focuses on two SFSs:</p> <ul style="list-style-type: none"> • Regional Development: Western Downs Skills Formation Strategy. Established 2005 in response to looming skills crisis, it is a regionally based SFS managed by the community • Health Skills Formation Strategy. Set up in 2007, it is of particular interest as it was implemented in a complex and fraught environment. It established multiple subsidiary SFS projects to effect change in priority areas. |

These illustrate the importance of skills strategies connecting to and integrating with, wider components of economic development and the contribution of networks and partnerships to effective strategies. They also show how strategies can simultaneously address the issues of skills supply, mis-match and demand as exemplified in the OECD skills strategy.

We pursue the issue of *governance* in more detail in the next section, but we should note here that it is essential, specifically for local strategies to be well aligned with national and sectoral

approaches so as to create synergy rather than dissonance and to ease ‘vertical’ governance arrangements.

Figure 4: Balancing strategic priorities on the supply and demand of skills



Source: Froy and Giguère (2010a)

8. Governance

A central issue is *how* government actually goes about pursuing skills strategies. How are the processes, systems and resources actually managed so as to achieve positive outcomes? In capitalist economies, most economic relationships occur through markets, but skills strategies involve intervening in markets, if only to assist market operations, through plans, goals, policies, actions, incentives, institutions and the deployment of resources. So, how these mechanisms and relationships are actually handled is a key factor in their success. Skills strategies are more than paper documents; they have to be organised and managed. We will refer to these issues as the *governance* of skills strategies, a word that, interestingly, derives

from the Greek word meaning ‘to steer’. We focus in particular on the *co-ordination* of skills strategies, i.e. the institutions and tools that seek to give coherence to them. This is crucial to the effectiveness of skills strategies so as to ensure alignment and synergy in policy and delivery.

Coherence is required *within* skills strategies, as defined by the different countries, where the component relationships need to be managed effectively e.g. between youth and adults; and between the unemployed and the employed. It is also required across different stages of the life-cycle – between schools, colleges, universities and other providers of lifelong/continuous learning. ‘Horizontal’ coherence, i.e. with policy areas that impact on more narrowly defined skills strategies, is also important with areas such as innovation, labour market or migration policies. Given the existence of strong local and sectoral dimensions to skills policy these too require consideration.

The OECD sent a questionnaire to member governments, which asked what institutions were involved in the preparation and implementation of their skills strategies and who was responsible for the co-ordination of skills strategy. Twenty nine countries provided information on these issues. The institution most often charged with responsibility for preparing the skills strategy is, what is seen as, the ‘relevant’ ministry. This is most often the Ministry of Education (e.g. in Finland, Norway, Spain and New Zealand) and, within it, the lead is usually the Directorate responsible for VET or LL. In a small number of cases the Ministry may be the Ministry of Labour or sometimes, given the scope of ministerial responsibilities, it may be a ministry with wider responsibilities e.g. the Department of Education, Employment and Workplace Relations (DEEWR) in Australia or the Department of Business, Innovation and Skills (BIS) in England. There are also examples of cross-ministry, and even ‘whole of government’ approaches to skills strategy development, sometimes with a relevant advisory body or council. Partner ministries may include the Ministry of Labour (e.g. in Spain and the Czech Republic). Denmark, under the new coalition government, has an explicit ‘whole of government’ approach led by the Prime Minister’s office; and in some countries a specialist body is in charge e.g. KRIVET in Korea; the National Institute for Vocational and Adult Learning in Hungary; or a national group of experts nominated by the Ministry of Education, as in Slovenia.

In a number of countries there is a specific body responsible for coordinating skills policies at the national level. Sometimes these are established for that specific purpose e.g. the

Workforce Development Agency in Singapore, and in Australia and the UK (see Box 22). Most commonly, however, it is the Ministry of Education (e.g. in Austria, Czech Republic, Netherlands, Norway, New Zealand and Turkey) or, if organised differently, the ministry that incorporates education (like DEEWR in Australia; the new Department of Higher Education and Training in South Africa; and the Ministry of Education and Research in Sweden). However, in Korea coordination is handled by the Skills Policy division of the department of Employment; in Denmark and Poland, by the Prime Minister's office. In Australia, the establishment from 2012 of the National Workforce and Productivity Agency (replacing Skills Australia) provides an interesting example, where it will oversee coordination, and arrangements include an implementation steering committee with representatives from all responsible agencies. It will report to government as a whole. In Spain and the Czech Republic, there is no specific organisation responsible for coordination. In terms of implementation, the usual arrangement is for the same body to be responsible as for coordination, though sometimes expert bodies have an important role to play e.g. BIBB on VET in Germany. The Tertiary Education Commission is the responsible body in New Zealand. Most countries, in fact, see implementation as being the responsibility of agents on the ground i.e. the providers and other relevant institutions.

It is clear that practices vary and that there is no dominant model other than, perhaps, individual ministerial control. The precise ministerial organisation, responsibilities and formal institutional relations is perhaps less important than recognition of the potential actors (see below, Table 3) and of clarity of purpose, responsibilities and coverage.

A recent paper (Schwalje, 2012) has indeed proposed a framework to analyse skill development systems in different countries through the roles of the institutions involved, in particular: the education and training system; the business community; government; and individuals. Consultation on the development of strategy, with social partners as well as across government, will aid a joined-up approach and can enable greater coherence and integration in the skills strategy through the recognition of connections and interdependencies across different policy areas. This helps avoid policy 'silos' and brings together the main strategic components of a skills strategy – skills development, skills matching and skills demand and use. This is perhaps enabled or encouraged by the establishment or use of a coordinating body which can provide a whole of government perspective but most crucially, whatever the institutional arrangements, there needs to be a willingness and agreement to adopt a strategic approach, connecting narrowly defined skills strategies e.g. on VET with

strategies on higher education, employment, productivity, inclusion and economic development.

Box 22: Skills strategy coordination in Australia and the UK

In Australia, *Skills Australia* is an independent statutory body, providing advice to the Minister for Education, Employment and Workplace Relations on Australia's current, and future workforce skills need. It analyses current and emerging skills needs across industry sectors, assesses evidence from commissioned research and industry stakeholders and provides government with recommendations on current and future skills needs to help inform decisions to encourage skills formation and drive ongoing reforms to the education and training sector. Skills Australia is being replaced from 2012 with the National Workforce and Productivity Agency.

In the United Kingdom, the UK Commission for Employment and Skills (UKCES) was established in 2008, following the recommendations of the Leitch Review assessing UK's skills needs (Leitch, 2006) which also set skills targets for the UK in 2020. The UKCES assesses the UK's progress towards the skills targets and advised ministers on strategy, targets and policies, and monitors the VET system and oversees the Sector Skills Councils. It is mainly composed of business leaders, but also includes trade union, third sector and provider representatives. The remit of UKCES was modified in 2011 to have a greater emphasis on driving employer investment and ambition and using public investments on a competitive basis to increase employer investment in skills.

Sources: www.skillsaustralia.gov.au; www.ukces.org.uk

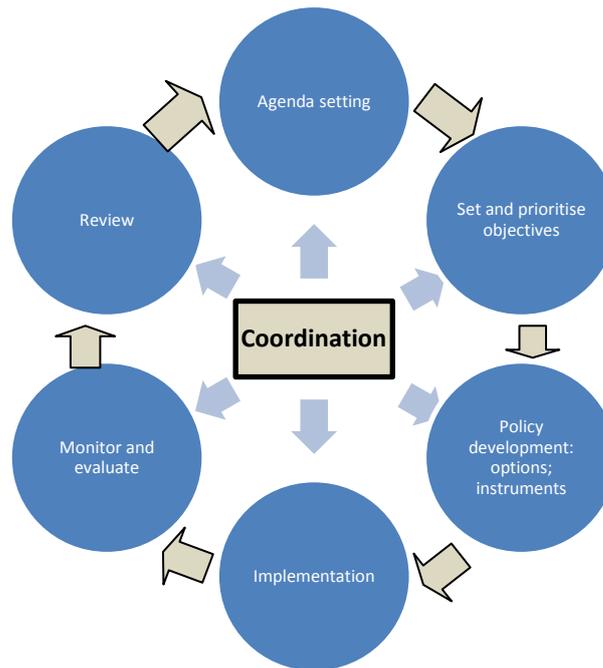
Ultimately, however, governance of the system goes beyond more effective alignment across government and its agencies. It is also important to ensure the participation, engagement and, ultimately, commitment of the social partners as well as providers (schools, colleges, universities, private training organisations) and committees.

Table 3: Potential actors involved in skills strategies

| | Policies | National government | Sub-national government | Social partners | Others |
|------------------------------|--------------------------|---|---|---|--|
| Skills formation | Initial education | Education Ministry (schools) Labour Ministry (VET) Science, Technology and Innovation Ministry (HE) | Local government Regional governments | Employer organisations Trade unions Firms (apprenticeships) | Schools Colleges Universities Providers |
| | Further education | Education Ministry Labour Ministry Finance Ministry | Local government Regional governments | Firms Employer organisations Trade unions | Colleges Providers Universities |
| | Migration | Immigration ministry Labour ministry | | Firms Chambers of commerce | NGOs Charities |
| Skills demand and use | Activation | Social Policy Ministry Family Ministry | Local labour market office Career guidance service | Private contractors Firms | |
| | Matching | Education Ministry Labour Ministry | Local labour market office Career guidance service | Sector skills councils | |
| | Demand-side | Economics Ministry Industry Ministry | Municipalities Regional governments | Economic development agencies Firms Employer organisations | NGOs |

The value added of an explicit recognition of the role of good governance in enhancing policy effectiveness and thus improving policy outcomes and increasing value for money, is considerable. Going beyond policy silos to a coordinated, integrated approach can help fully realise the potential of sound policies. And it can add value at all stages of the policy process (see Figure 5).

Figure 5: Coordination in the Policy Process



However, institutional, organisational arrangements are not the only means of securing better coordination in skills strategies. Three sets of tools in particular can help bring things together. First, labour market information and intelligence (see section 6) is the ‘oxygen’ of markets and provides transparency for all the actors in the system – ministries, agencies, employers, workers, learners and providers. High quality, accessible labour market information (LMI) provides a means of encouraging behaviour consistent with resolving real world skills issues: skills mis-matches, strategies, gaps and over-skilling; where the returns are high and low, increasing or decreasing; where demand and supply are growing or declining. Indeed, in an idealised ‘perfect market’ blessed with ‘perfect information’, most skill problems would be resolved. Disseminating LMI effectively will help tie the interests of all actors together and make them cohere. The same applies to evidence of policy success and failure. Thorough evaluation, sound monitoring arrangements and clear performance management data, will enable policy makers (and citizens) to know what works well and what doesn’t, thereby enabling them to adapt all aspects of skills strategy: stopping doing some things, continuing to do some things and starting to do other things. Many countries have developed LMI systems as was discussed in section 6, but the dissemination and utilisation of them could be much improved. Monitoring and, especially, evaluation, arrangements are also generally in need of being put in place and of improvement. And governments need to ensure there is effective feedback so that they do indeed learn from the results.

Second, the judicious use of success measures and targets help to align actions, especially when they are clear and appropriate to the objectives of the strategy. Several countries have experience of using success measures and/or targets, including Denmark, England and South Africa. The EU 2020 strategy (European Commission, 2010a) provides a major illustration of the potential value of a suite of indicators and targets allied to tools to utilise them. Five headline targets of the strategy have been established (including two related to skill levels). Member states translate them into national targets and develop *national reform programmes* setting out measures designed to achieve them. Guidelines are established at the EU level to help drive national long-term action (including the so-called employment guidelines). Annually the European Commission reports, based on the national reform programmes, progress made by the member states and proposes country-specific recommendations. Finally, mutual learning and exchange of good practices are encouraged and supported through the European Employment Observatory. Such a model may be of wider interest to countries outside the EU.

Third, incentives can be used to better align different policy spheres. Financial incentives or regulations can stimulate/discourage behaviour e.g. outcome-related funding; subsidies to individual/employer investment; or the establishment of quality standards. The UK has also begun to experiment with ‘nudges’ to influence behaviour in more appropriate, rational, directions by taking seriously the mechanisms that influence people and organisations in the real world e.g. *who* communicates (the ‘messenger’) is important; how *others* (especially those close to us or those we value) behave influences us (‘norms’); we also value reciprocity; and we tend to follow the paths of least resistance (‘default positions’) (Cabinet Office, 2010). A ‘behavioural insight’ team has been established in the Prime Minister’s office. An upcoming research project funded by CEDEFOP is examining the behavioural factors influencing individual and employer engagement in VET.

A recent study by the OECD LEED programme (Froy and Giguère, 2010b) of eleven countries (Bulgaria, Canada, Croatia, Denmark, Greece, Italy, New Zealand, Poland, Portugal, Romania and the USA) drew a number of conclusions regarding coordination at the national level: (1) Ministries responsible for VET and for employment policy are the most likely to collaborate at the national level, with economic development policy often seeming to act in isolation; (2) in many countries, cooperation remains at a relatively formal level, not translating into real policy integration of joined-up strategies; (3) still less frequent are

common targets which would encourage joint working between different ministries towards common goals.

Governance matters. Better coordination of skills strategies means better outcomes and better value for money.

9. Lessons: Towards more effective skills strategies

This review has explored the experiences of a range of countries. What can we conclude from these examples and practices and the patterns and trends they display? In short, what can we say about what may be the chief characteristics of successful skills strategies? What considerations could shape the development of skills strategies in the future? We conclude then, by drawing on the material of this review to identify a set of *critical success factors* in effective skills strategies. These policy pointers could be used as a ‘mirror’ to hold up against existing strategies so as to enable critical reflection, to assist in their review and development, and as possible design criteria in establishing a skills strategy.

A strategic approach adds value to skills policies

Skills are hugely important in securing prosperity but successful outcomes from skills interventions by government depend on having a well functioning skills strategy which guides the design, development and management of a skills system. Such a strategy needs to be based on sound analysis and empirical evidence – effective treatment requires the correct diagnosis. A clear goal and action plan are the core of a skills strategy.

Strategies need to address all three ‘big picture’ issues – skills supply, skill matching, and skill demand and use.

Skill levels need to be improved through the use of the full range of channels: improving the skill levels of the ‘flow’ of *young people* into the labour market; improving the skill levels of the *existing workforce*, both employed and unemployed; increasing the skill levels, and labour market participation, of the *less economically active*; and harnessing the skills of *migrants*. Few strategies encompass the use of all these channels.

But even all this, on its own, is insufficient. Skills also need to be better *matched* to current and future labour market requirements, so as to ensure a better balance between supply and demand, to reduce skill shortages and gaps on the one hand (‘excess demand’) and unemployment and under-employment on the other (‘excess supply’), where skills are mis-

matched with labour market needs. The levels of *skill demand* in the economy may also be deficient in aggregate to effectively use all the skills available or to achieve higher growth, and these skills may also be poorly utilised in the workplace. These are the three building blocks of a comprehensive skills strategy and constitute a ‘whole system’ approach which recognises the interdependencies between different parts of the skills system.

We need to go beyond a focus on Vocational Education and Training

Most strategies are relatively narrowly focused on either, or both, raising skill levels in the existing workforce (the ‘stock’) and/or raising skill levels amongst the young (the ‘flow’). Some exclude higher levels of vocational education and training in universities and some exclude academic education. Skills strategies need to consider all levels, and both elements, and for the whole of the existing, and future, workforce. A focus on outcomes helps skills strategies focus on the ‘end game’ rather than on the pathways to achievement.

The purpose and objectives need to be identified, transparent and measured

While the specifics will differ between countries, clarity on goals, the identification of objectives, and the articulation of measures of progress, would be valuable. If we are unclear on the destination, direction of travel is hard to determine and knowing how far we have come is difficult. Monitoring and evaluation (what’s working, what’s not) provide valuable feedback to improve strategy effectiveness, yet many countries do not publish evaluations or have explicit measures of progress.

Priorities need to be established but strategies should be balanced.

Country conditions and goals will vary, so setting priorities is important. Explicit identification of key target groups is required to focus and align action. These should relate, for example to: socio-economic groups (e.g. low-skilled, women, unemployed) particularly in respect of equity issues; approaches (e.g. individuals or employers); and to the key dimensions of action (e.g. which localities and sectors). However a balanced approach is also required across key groups so as to ensure comprehensive action to meet needs.

Employers need to be at the heart of the skills system but wider stakeholder engagement is important too.

The workplace is where skills are recruited, developed and used. Employer decisions on the jobs to be filled, who to hire and how people are managed, mean that it is their requirements

which the skills system, and individuals benefiting from it, ultimately have to meet. Placing their needs at, and securing their effective involvement in, the core of the strategy is key. But this does *not* mean that their needs alone should drive the skills system. The needs of individuals and individual employers will not always coincide, as individuals change employers, occupations and sectors, and have potentially more interest in portable qualifications. And employers may also need to be challenged if their demand for skills, or use of them, is insufficient. Trade Unions, or other employee representatives, also therefore need to be involved. Mobilising both employers and workers, probably through their representatives bodies, can also assist their collaboration and commitment, and build trusting relationships in a policy area that offers considerable scope for mutual benefit. Involving other key stakeholders, particularly providers of education and training, can also assist in securing both consensus and effective strategy implementation.

A wider range and better mix of policy levers can be deployed to achieve our goals.

The need to address skill matching, skills demand and the use of skills, widens the potential for policy action considerably. In particular, *skills matching* can be improved by the intensive deployment and use of excellent labour market intelligence to improve transparency in both the learning and labour markets, for individuals, employers and providers, to ensure all actors are aware of the value of skills.

An increased focus is required on *skills demand and utilisation* and on the relevant available policy instruments. Means of increasing ‘economic pull’, to create a virtuous circle of skills supply and demand, can be an important focus as can approaches to improving the *utilisation* of the skills we already have available. Consideration of the issues around high performance workplaces, including management and leadership skills, and business strategy, is important. The range of available policy instruments is also wider than is commonly used, particularly in respect of employer investment in skills. There is a strong interdependency between workforce and workplace development and policies to raise demand e.g. innovation policy, sectoral policy and local economic policy, can act as powerful levers to skills development, raising the ‘equilibrium’ level of skills. Skills eco-system approaches offer a potential route to more integrated approaches.

We need more high skilled jobs for high skilled people to do, not only as a major route in itself to improved competitiveness, productivity and growth, but so as to ensure the full use of higher skill levels.

A sectoral dimension to national skills strategy is valuable.

The skill needs of different sectors of the economy differ: the skill mix, type of companies, and even the policies that may be most appropriate. A sectoral approach enables strategies to have greater granularity in tackling specific problems. They also provide an important means of: engaging employers, who often more easily associate with their own sector through networks than at the national level; understanding employer needs; enabling them to influence relevant provision; the enabling of partnership working; and the opportunity to challenge their skills investment, demand and use. A desire to re-balance an economy, or to adapt to change, will also necessarily have a strong sectoral component.

Local skill strategies are a vital component of national skills strategies.

Localities across a nation experience very different economic and labour market conditions as well as substantial variations in the extent and number of skill issues. Flexibility of response is not only important in tackling the specificity of skills issues, but in ensuring that national strategy works on the ground. The LEED programme of OECD has secured many insights into the development of local skills strategies which also have considerable potential to contribute to building more effective strategies at the national level, including on issues of policy development, integration and governance. However, it is also essential to ensure alignment between the national (and indeed sectoral) and the local, so as to ensure synergy rather than confusion, especially for large national employers.

Greater focus on the effective coordination of skills development is essential to the success of skills strategies. Governance matters.

Joined-up action is required if we are to extract the maximum leverage from the pursuit of skills strategies which address skills mis-match, demand and use, as well as skills upgrading. A more integrated approach requires going beyond the various policy silos and fragmented system, to coordinating action across the board. Active management of the system as a whole, and of the balance and relationships between the component parts, is required in order to align all components of the strategy. In doing so, attention needs to be paid to both the institutional issues and to the tools that are available to encourage integration and coherence across all stages of the skills policy process. Attention to the means by which effective partnership working is achieved would be valuable, with a focus on bringing the world of education/training and the world of business, closer together, including perhaps through 'skill eco-system' approaches. Effective engagement of the social partners is valuable in raising commitment and securing ownership.

Skills strategies can be enhanced through regular review and learning from each other.

Strategies can always be improved. Greater systematic monitoring and evaluation would assist their review. They may require adaptation as economic and labour market conditions change, as fiscal conditions change, and as the monitoring and evaluation of strategies illuminates opportunities for development. The OECD's skills strategy provides an opportunity to share know-how, for mutual learning, to learn from others' experience and to use the OECD strategy as a stimulus to strategy review and development, so that we can build ever more effective skills systems as a key means of increasing prosperity, jobs, growth and social inclusion.

Annex 1: Multi-country reviews

| Review | Focus | Country coverage (number and identity) |
|--|---|--|
| Buchanan, J. <i>et al</i> (2010) | Skills demand and utilisation | 7: Australia, Finland, Flanders, Ireland, New Zealand, Scotland, USA |
| CEDEFOP (2009a) | Vocational education and training | 4: Australia, Canada, Japan and USA |
| CEDEFOP (2009a) | Vocational education and training | 4: China, India, Russia and South Korea |
| CEDEFOP (2011) | Workplace learning | 20: Most EU countries |
| Cully, M. <i>et al</i> (2009) | Vocational education and training | 6: Australia, Canada, Germany, Spain, UK, USA |
| Econ Poyry (2008) | Adult training | 5: Denmark, Finland, France, Sweden, UK |
| Froy, F. and Giguère, S. (2010a) | Local skills policy | 11: Bulgaria, Canada, Croatia, Denmark, Greece, Italy, New Zealand, Poland, Portugal, Romania, USA |
| Giguère, S. (ed) (2008) | Local skills policy | 7: Australia, France, Germany, Japan, Korea, UK, USA |
| Martinez-Fernandez, C. <i>et al</i> (2011) | Skills policy | Several: south east Asian countries |
| Martinez-Fernandez, C. and Powell, M. (2010) | Skills policy | Several: south east Asian countries |
| Meager, N. (2009) | Skills and active labour market policy | 26: Most OECD countries |
| OECD (2010a) | Youth transition from school to work | 16: Australia, Belgium, Canada, Denmark, France, Greece, Japan, Korea, Netherlands, New Zealand, Norway, Poland Slovakia, Spain, UK, USA |
| OECD (2010a) | Vocational education and training (initial) | 17: Austria, Australia, Chile, China, Czech Republic, Flanders, England & Wales, Germany, Hungary, Ireland, Korea, Mexico, Norway, Sweden, Switzerland, USA (South Carolina) |
| Policy Research Institute (2008) | Vocational education and training | 5: Australia (New South Wales), Austria, Czech Republic, Sweden, USA (California) |

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| Stone, I. and Braidford, P. (2008) | Employer engagement policies with small firms | 9: Australia, Canada, Denmark, Finland, France, Ireland, New Zealand, Norway, Netherlands |
| Stone, I. (2011) | Skill utilisation (High performance working) | 7: Australia, Canada, Finland, Germany, Ireland, New Zealand, Sweden |
| Sung, J., Raddon, A. and Ashton, D. (2006) | Sectoral skills policy | 9: Australia, Canada, France, Germany, Netherlands, New Zealand, South Africa, Singapore, USA |
| Willmott, G. <i>et al</i> (2011) | Vocational education and training | 4: Australia, New Zealand, Singapore, UK |

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- CEDEFOP (2009b) *World class competition in training. Emerging Economies*. Publications Office of the European Union
- CEDEFOP (2011a) *Lifelong guidance across Europe: reviewing policy progress*. Publications Office of the European Union
- CEDEFOP (2011b) *Learning while working: Success stories in workplace learning in Europe*. Publications Office of the European Union
- CEDEFOP (2011c) *Shaping lifelong learning*. Publications Office of the European Union
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- OECD (2010b) *Learning for jobs*. OECD Publishing
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