

ISSUES PAPER 14

August 2007

Skill ecosystems: a new approach to vocational education and training policy

*Jonathan Payne, SKOPE
Cardiff University School of Social Sciences*

Summary

One of the main challenges facing UK skills policy is the need to shift the current focus of policy debate away from a narrow preoccupation with skills supply to one that simultaneously addresses issues of skill demand and utilisation. In recent years, Australian policy makers have experimented with a broader and more integrative approach to vocational education and training (VET) policy based upon the concept of 'skill ecosystems'. This issues paper briefly examines the Australian example and asks whether it might offer some useful lessons for the UK.

UK skills policy: the need to go beyond skills supply

For the past quarter of a century, UK skills policy has focused on boosting the supply of skilled or qualified labour as the principal mechanism for achieving the goal of an internationally competitive, high productivity, high skill economy. Not surprisingly, significant progress has been made in terms of the qualifications held by the workforce, achieved mainly on the basis of an expanded post-compulsory and higher education system. Between 1994 and 2005, the proportion of working age adults qualified to degree level increased from 21% to 29%. There has been a marked reduction in the share of adults with no qualifications, dropping from 22% in the

mid-1990s to 13% in 2005. The proportion of adults who lack a qualification at level 2 (five good GCSEs or their equivalent) also fell over the same period from two fifths to around a third (Leitch 2006).

While this is acknowledged in the recent Leitch Review, the report goes on to argue that much more remains to be done if the UK is to tackle 'considerable weaknesses' in its skills base relative to its major competitors (Leitch 2006). It therefore recommends ambitious new targets for improvement in the nation's qualification stocks designed to place the UK in the top eight of the OECD rankings at every skill level by 2020. The overriding assumption appears to be that the country with the biggest stockpile of qualifications ultimately 'wins' in the global war of economic competition.

The Leitch Review, however, appears to fall into the trap of assuming that skills, once created, will automatically be utilised to productive effect. The extent to which this happens in practice, however, may depend upon range of factors. As the Cabinet Office's Performance and Innovation Unit's project on workforce development noted, skills are a 'derived demand', driven by business need, and dependent upon firms' product market strategies and approaches to job design and people management (PIU 2001). At the same time, it is often

argued that too many UK firms compete on the basis of low skill, low value added production strategies, with the danger that simply boosting our stocks of human capital risks workers' skills and capabilities being under-utilised or not utilised at all (Keep and Mayhew 1999, Wilson and Hogarth 2003). Indeed, the recent Workplace Employment Relations Survey found that over half of all employees surveyed considered that the skills they possessed were higher than those required to do their current job (see Kersley *et al.* 2005: 86).

The central underpinning assumption of the current Labour government's skills strategy – that boosting the supply of qualified labour can propel the economy onto a higher value added, higher skill trajectory – is, therefore, much disputed. This is not to say that skills are unimportant, only that their role has perhaps tended to be somewhat overplayed. Skills are best viewed as a necessary but not sufficient condition for achieving a high skills, high productivity economy. Even then, there is still the need to ask which skills at what level for which workers and/or firms are most likely to have an impact (see Keep *et al.* 2006). This suggests an important corrective to the current tendency to rely on blanket targets for workforce up-skilling.

Is there an alternative way forward? Arguably, a better approach might be to try to develop skills policies that are more closely interwoven with economic development, business improvement and innovation policies, including efforts to encourage and support organisations to re-think their current approaches to job design and people management (see Keep *et al.* 2006). Were UK policy makers to be persuaded of the need for such an approach, are there any examples of countries already attempting to do this from which the UK might learn? The rest of this paper briefly examines Australia's recent experiment with skill ecosystem projects which represents one attempt to develop a more holistic and integrated approach to skills policy.

Skills ecosystems as a new approach to VET policy

In recent years, Australian policy makers have launched two pilot programmes designed to reposition skills policy as a central element within economic and regional development policies (see Hall and Lansbury 2006, Payne 2007). One is a national project, funded by the Australian government and managed by the New South Wales Department of Education and Training (NSW DET), and operates under the banner of 'skill ecosystem' projects. The other, funded by the Queensland Department of Employment and Training, is known as skill formation strategies'. This paper concentrates mainly on the National Skill Ecosystem Programme.

The impetus

The initial stimulus for such policy experimentation was provided by a path-breaking research report, entitled *Beyond Flexibility: Skills and Work in the Future* (Buchanan *et al.* 2001), commissioned by the NSW Board of Vocational Education and Training. The report highlighted how from the 1980s onwards many Australian employers, faced with intensifying competition, short-term shareholder pressure and fiscal austerity measures, resorted to downsizing, outsourcing, labour intensification and the increased use of 'non-standard' employment, including casuals, contractors and labour hire workers (see Buchanan *et al.* 2001: 15-17).

Against this background, the authors argued that while skills and training activity were clearly vital to Australia's future development as a high skills economy, the central challenge was to 'create a new policy mindset and policy regime', capable of reinvigorating and supporting industry efforts to create and utilise higher level skills in better and more rewarding jobs. The report argued that the concept of 'skill ecosystems' offered a useful framework for such policy development, and recommended that a new 'work, skills and innovation' initiative, centred on a limited number of 'demonstration projects', be used to test and develop the idea.

The skill ecosystem concept

The concept of 'high skill ecosystems' had originally been developed by Finegold (1999) to refer to a range of mutually reinforcing factors that helped nurture and sustain the cluster of high-tech bio-medical and software firms found in California's Silicon Valley. In their report, Buchanan *et al.* (2001) argued that Finegold's concept could be usefully applied to a broader range of skill ecosystems, including not only high tech clusters but also areas of high social value, such as family support services, as well as low value added labour (e.g. cleaning). Skill ecosystems were defined as 'clusters of high, intermediate or low level competencies in a particular region or industry shaped by interlocking networks of firms, markets and institutions' (Buchanan *et al.* 2001: 21). The core insight was the same however: *the need to address the range of contextual factors that shape approaches to skill formation and usage within a particular ecosystem*, including:

- Business settings (e.g. the type of product market, competitive strategies, business organisations /relations, financial system);
- Institutions and policy frameworks (VET and non-VET);
- Modes of engaging labour (e.g. labour hire);

- Structure of jobs (job design and work organisation);
- Level and type of skills formation (e.g. apprenticeships, informal on-the-job training) (see Buchanan et al 2001: 22).

Drawing upon this analytical framework, Buchanan and colleagues argued that VET policy could not rely on stand-alone training interventions and would need to be integrated with regional and economic development measures aimed at supporting industry efforts to develop, utilise and retain a highly skilled workforce. At the same time, the willingness of some Australian policy makers to look to new ideas and approaches reflected the recognition that narrow, conventional skills supply measures would not provide a solution to the problems presented by skill shortages and the growth of low end work in an increasing bifurcated labour market. As one policy maker recently pointed out, in 2004 it was still the case that nearly half (45%) of Australians were employed in 'low skill jobs' requiring a level 2 certificate or less, including 18% of workers with a bachelor degree and 32% of those holding an advanced diploma or diploma (see Loble 2005).

The Skill Ecosystem National Programme

The Skill Ecosystem National Programme, funded by the Australian government and administered by NSW DET, has supported a suite of nine demonstration projects across Australia over a three year period, beginning in 2003 (for more detailed information, see the website at www.skillecosystem.net). The programme supports the formation of regional and industry networks, comprised of key stakeholders and industry representatives, to look at what needs to change in order to develop sustainable approaches to the skill development challenges they face.

The aim is to address skill issues in the context of wider drivers of productivity and economic development (e.g. business strategy, new technology, changing models of service delivery, work organisation and job design) and to try to implement holistic and integrated approaches that take account of the many factors affecting people's capacity to develop and deploy skills at work. A central theme therefore is that of encouraging industry parties to take more responsibility for skill development and utilisation by creating the appropriate conditions for this to take place. The projects fall into one of four main categories: addressing skill and labour shortages; the role of VET as an innovation partner; quality improvement across supply chains and networks; and reshaping work and labour markets.

An example of the latter is the *Racing Industry Labour Market Change Project in New South Wales* which has attempted to tackle the shortage of reliable track work riders in the thoroughbred racing industry by improving riders' contractual arrangements and helping with the development of better recruitment approaches, induction training, career development and mentoring practices. Other projects specifically address issues of work organisation and job design. The *Queensland Community Services and Health Industry Council Project* is an example of a project in the aged care sector which has sought to redesign the roles of allied health aides and to support this with appropriate training. Here the aim was to broaden the available job tasks and increase workers' autonomy as a way of improving service delivery and addressing recruitment and retention issues.

A recent evaluation of the programme suggests that the development of a successful project is not always easy and confronts many challenges (Windsor 2006). Conflicts may arise between professional and non-professional groups in relation to role redesign, while those involved in networks may lack the full support of the organisations they represent. The report stresses the role of effective 'project managers' who can help balance conflicts of interest as well as stimulate participants to explore new solutions and keep momentum. Most progress tends to occur where VET professionals and industry representatives display a good grasp of the problem at hand, are flexible in their mode of working and take ownership of the project, driving it forward with energy and enthusiasm rather than relying on outside consultants.

The report also notes that some projects 'found it difficult to move beyond supply-side or more traditional VET design and delivery strategies', while others became 'captive to industry development agendas and failed to actively consider how workforce capacity could facilitate the achievement of these agendas' (Windsor 2006: 15). It recommends therefore that funding criteria be tightened so that public money is channelled towards projects which address both supply and demand-side issues and have the capacity to lever real improvements in skill development and utilisation.

Lessons for the UK

Australia's recent experiment with skill ecosystem projects is an attempt to integrate VET policy within a wider business improvement and economic development agenda, thereby broadening its focus to include skill demand and usage as well as supply. At the heart of the approach is the recognition that skill development is

properly understood in the broader context of business strategies, approaches to work organisation and job design, the nature of the labour market and employment conditions, as well as the wider policy and institutional framework. The aim, therefore, is to encourage and support the formation of industry and regional networks that can pursue integrative, multi-factorial approaches to skill formation, tailored to their specific context.

This approach is clearly both ambitious and challenging, with some projects proving more successful than others. Nevertheless, there are some early indications that such a programme can make a difference by aligning skill formation with business goals and encouraging firms, workers and training providers to change their behaviour in ways that can help to avoid the wastage and under-utilisation of workers' skills. It may also support more tailored approaches to skills supply capable of addressing the specific needs of particular sectors and networks. As Hall and Lansbury (2006: 589) note, one of the advantages of such a programme is that it can help 'create an environment where more accurate information on skill demand and supply can be easily communicated between stakeholders facilitating a better matching of skill supply and demand.'

Whether policy makers in England, Scotland, Wales or Northern Ireland might be persuaded to experiment with a similar kind of approach, inspired by the Australian example, is another matter. At present, English skills policy would appear to be moving in a very different direction, with the Treasury-sponsored Leitch Review opting for a narrow skills-supply, target-led agenda. In the absence of a broader and more integrative approach to skills policy, there is a danger that current efforts to boost stocks of human capital will fail to engage fully with the skill formation challenges faced by particular firms and sectors and that the critical issue of skill utilisation will once more be neglected.

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