

Using clusters and collective learning for innovation

To achieve an innovation and knowledge-based economy in the UK, policymakers must move beyond the exclusive focus on individual qualifications and adopt a wider concept of learning, including research on regional clusters and collective learning

Policymakers have claimed for many years that the UK should develop a knowledge-based economy, based on the assumption that we required a better skilled workforce with higher levels of education. According to this analysis, individuals need to acquire measurable knowledge or skills in the form of qualifications through formal education and training.

However the literature on economic clusters - which analyses the processes underpinning successful innovation, knowledge transfer and learning in regional agglomerations of economic activity - points to a very different understanding of learning needed for a knowledge-based economy.

Innovation is stimulated and sustained through collective learning within and between firms, which is dependent upon the way work practices and production are organised. Research from the Centre for Learning and Life Chances in Knowledge Economies and Societies (LLAKES) shows that the UK needs an integrated policy framework that recognises the symbiotic relationship between individual skill development, innovation and economic development.

The Government's Innovation and Research Strategy for Growth (Department for Business, Innovation and Skills, December 2011) emphasises the value of developing an innovation ecosystem of institutions and business, which can form clusters of innovative, high productivity businesses and drive economic growth.

The challenge for policymakers is to work with firms and specialist centres in further and higher education to translate insights in economic clusters and collective learning into new measures and actions at both the national and regional level.

Key findings

- Developing skills for a knowledge-based economy continues to be seen in terms of improving inputs of knowledge in the form of qualified labour rather than supporting processes of learning or innovation.
- Although formal qualifications are important for individuals, a much broader concept of learning is needed to grow an innovative knowledge-based economy. The critical issue is the way in which work can be organised within firms and regions in order to deliver collective and individual learning that in turn leads to innovation.
- The concept of 'clusters' has been used widely in the UK at a regional level, but the full potential of the concept for skills and innovation policy has not been realised. Important insights related to collective learning have been overlooked.
- Learning is interactive, involving both individual and institutional actors. It is a collective process, and should be seen not only as the acquisition of specific technical (or 'component') knowledge but also in terms of routines and informal institutions.
- Participation in new work practices is essential if firms and regions want to radically move away from their historic strategies and create new capabilities. To be innovative, firms need to develop technically proficient workforces and an understanding of how to collaborate with other firms and draw on formal and informal resources in and beyond the region.
- To date, skills and innovation policies have fallen short because they have not integrated the insights from evidence on how clusters and social theories of learning can support innovation and economic growth.

Policy relevance and implications

There is a need to bring together and build on the wealth of expertise on innovation, regeneration and economic development that is currently spread across Whitehall, the research and development community and a range of agencies. As part of this a number of policy actions could be taken:

- Create a series of pilot projects aimed at stimulating innovative practices, supported by pump-priming funds from government. The projects could target six priority sectors: advanced manufacturing; digital and creative industries; business and professional services; retail; construction; and healthcare and life sciences.
- Reconfigure the remit of the Sector Skills Councils so they can work closely with Group Training Organisations, Further Education and Higher Education institutions, and professional bodies to introduce skill development programmes linked to the pilot projects.
- Give local authorities powers and responsibility to engage firms across different sectors in collaborations on how they can develop new capabilities, share their technical and architectural knowledge, and overcome the tendency to follow old work patterns that may now be obsolete.
- Reclaim the role of vocational qualifications as kitemarks of expertise, rather than instruments for boosting the UK's performance in international league tables.
- Enable the Skills Funding Agency and the Higher Education Funding Council to allocate funding for non-accredited courses, so that colleges, training providers and universities can support the initiatives mentioned.

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BRIEF DESCRIPTION OF THE RESEARCH

Researchers at the Centre for Learning and Life Chances in Knowledge Economies and Societies (LLAKES) reviewed the literature on clusters, which analyses the processes that underpin innovation and learning in regional agglomerations, to identify the implications for innovation and skills policies in a knowledge-based economy.

Laura James, David Guile, Lorna Unwin: *From learning for the knowledge-based economy to learning for growth: re-examining clusters, innovation and qualifications* (LLAKES Research Paper 29)

Web: www.llakes.org/wp-content/uploads/2011/07/29.-James-Guile-Unwin-reduced.pdf (PDF)

FURTHER INFORMATION

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