



Asia-Pacific  
Economic Cooperation

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Session: Can the Asia-Pacific Adjust?

2.5.4

## **Competition for Skills**

Purpose: Information

Submitted by: Tom Bentley

Policy and Cabinet, Victorian Department of Premier & Cabinet



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Upskilling industrialised economies in order to move up the value chain has been a visible policy goal for at least a decade, but in the last 5 years it has entered the mainstream of global economic reform, mainly because of the impact of China and India's impact on global trade in goods and services.

While the case for higher skills is driven by the emergence of new manufacturing powers and the movement of low skill and traditional manufacturing jobs away from their 20<sup>th</sup> century locations, global competition is also influenced more broadly by a human capital dimension.

China and India are now making huge investments in their R&D and education systems, and producing vast numbers of highly qualified graduates and technicians. The shift towards service and knowledge-based sectors in the US, Europe, Australia and so on creates huge new skills demands. Even the surge in primary industries and mineral extraction caused by China's growth and felt in countries like Australia and Chile is driving demand, not primarily for labour, but for technical, problem solving and information processing skills.

What does this mean for skills competition?

APEC countries are contending, like other regions, with the need to invest and reform on multiple fronts simultaneously, moving from general commitments to improve education output and collaboration between government and employers, to explicit strategies designed to grow new industries, reshape existing education provision and attract skilled workers, but despite the general correlations between educational attainment and GDP growth, the specific relationships between learning, productivity and innovation need to be made clearer.

Different APEC countries are in very different relative positions, but specific policy priorities standing out over the next five years include:

- 1 Creating sectoral skills strategies which bind employers into governance and investment
- 2 Engaging low skill mature workers to increase economic participation
- 3 Defining a distinctive 'innovation skills' agenda beyond Science, Technology and Engineering
- 4 Scaling up skilled migration systems and improving skills mobility around APEC
- 5 Creating more radical models of education service innovation.

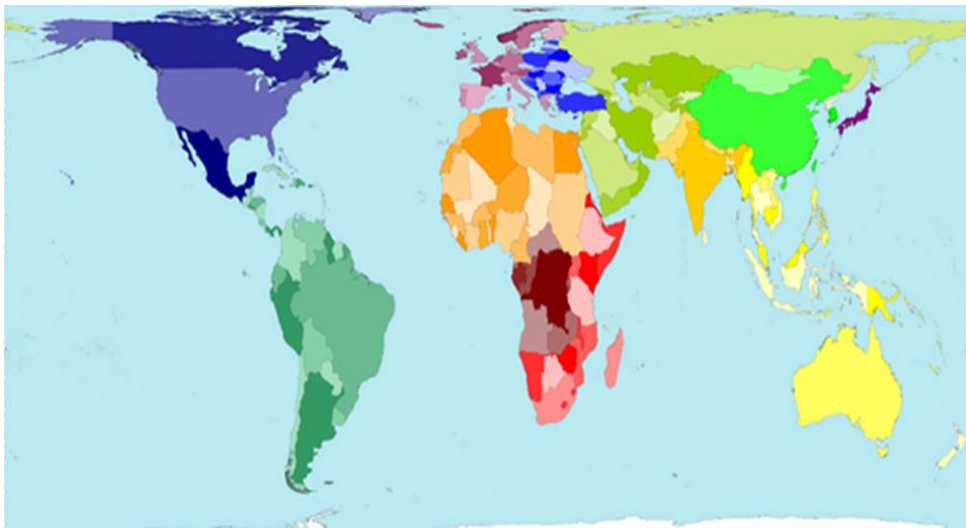


## Competition for skills

**Tom Bentley**

APEC 2007  
April 20<sup>th</sup>

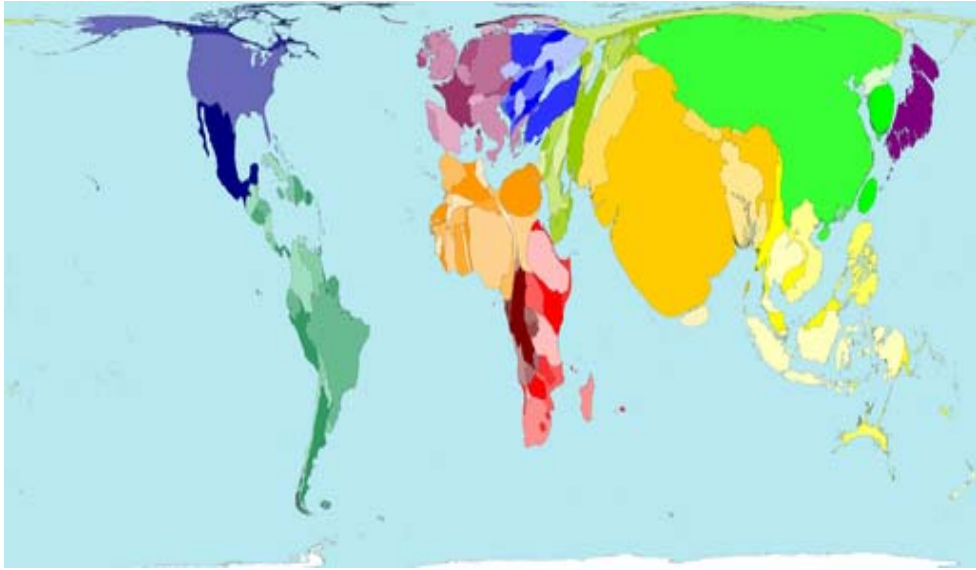
### Land area



Source: [worldmapper.org](http://worldmapper.org)

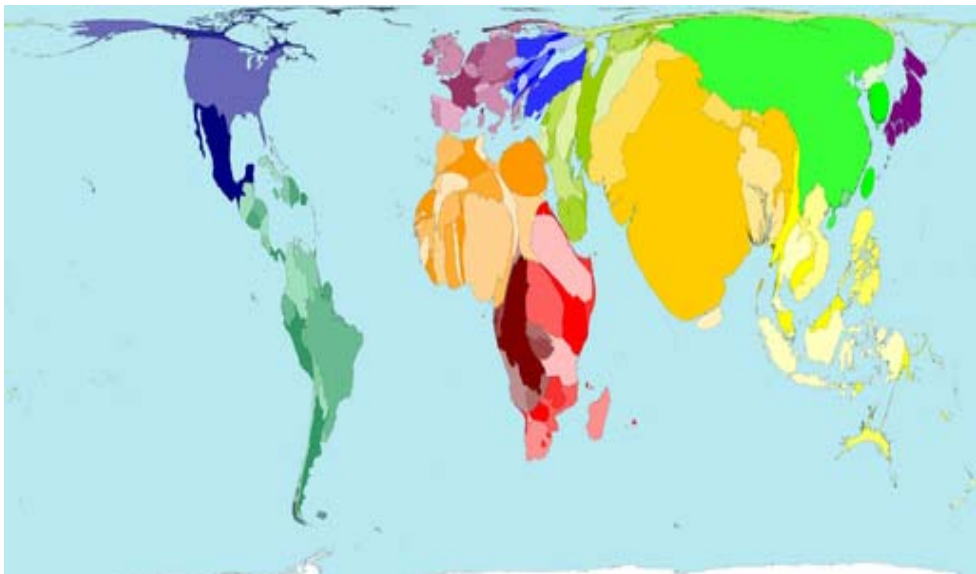
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**Population 2000**



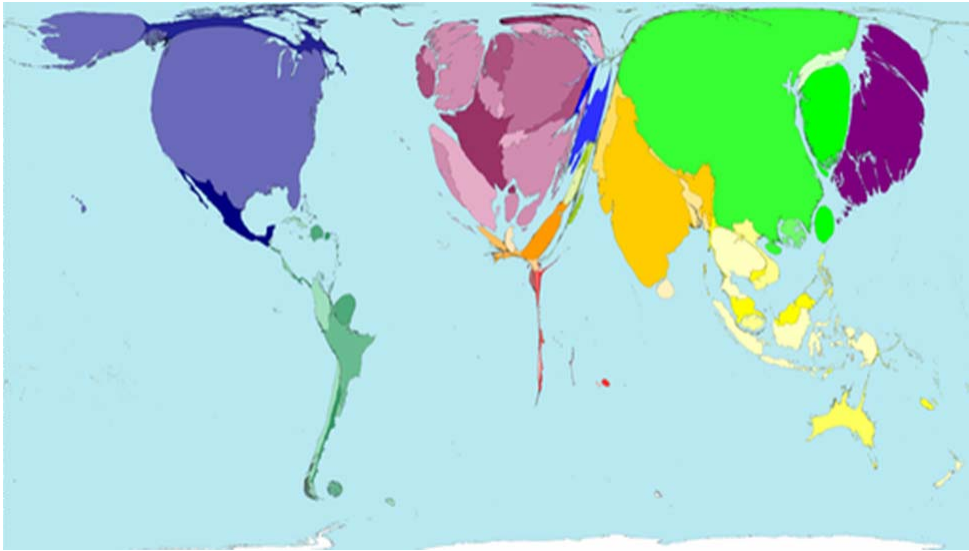
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**Population 2050**



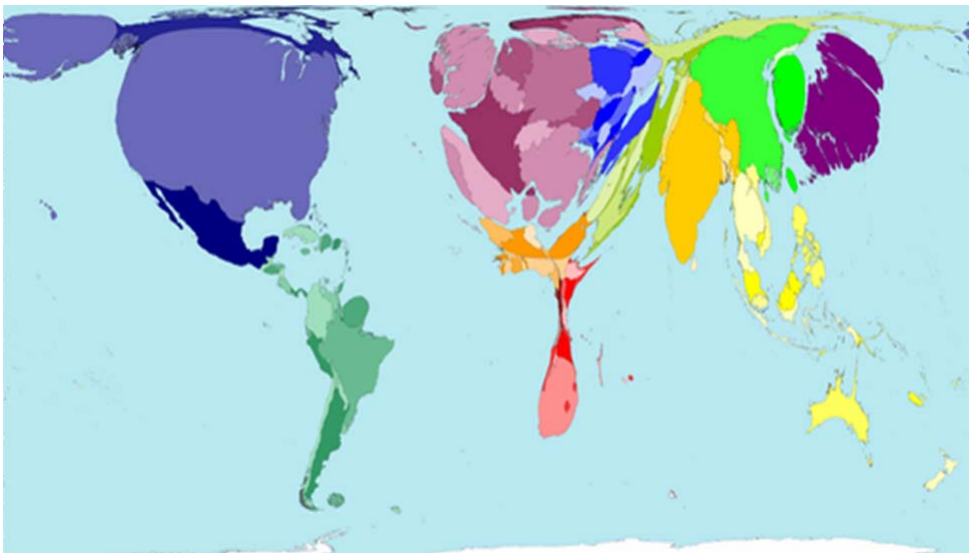
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**Wealth increase 1975-2003**



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**Primary education spending growth 1990-2001**



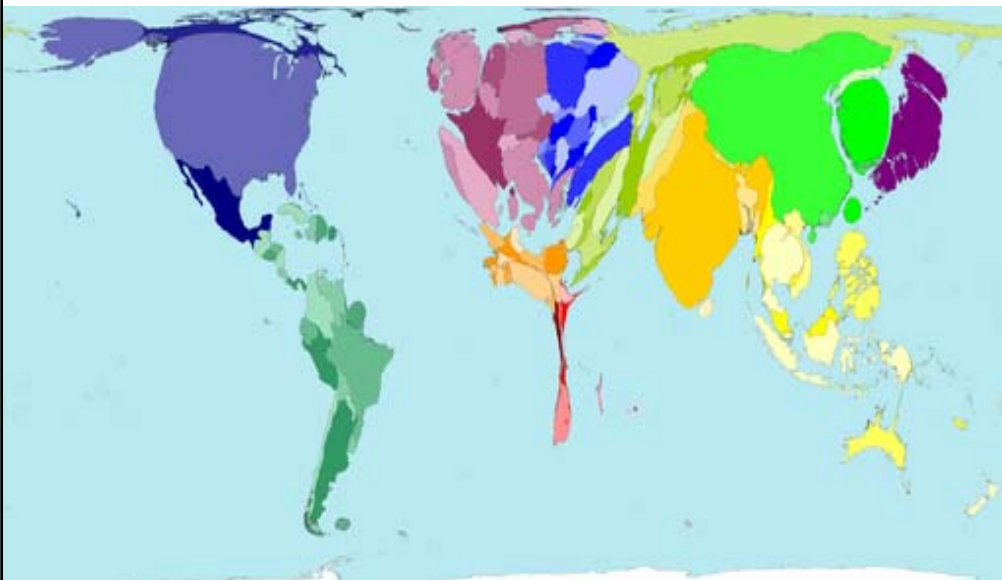
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## International licence fees and royalty exports 2002



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## Tertiary education 2002



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## **APEC Human Resources Development Ministerial 2001: priorities**

Addressing the growing skills gap and preparing our people to respond to the opportunities of the new economy through increased access to quality basic education, relevant market-driven skills training, retraining and lifelong learning;

Promoting efficient and equitable labour markets through policies and services that smooth the transition into jobs;

Maximizing our labour force potential by tapping underutilized pools of workers such as people with disabilities, women, youth, older workers, under-employed workers and indigenous people;

Increasing our collaboration with business, workers, educators and training institutions;

Building capacity to manage the transformation of our workplaces; and

Addressing the needs of informal sector workers and facilitating their participation in the mainstream economy.

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“We need an education system that turns everyone into a lifelong learner and an innovator.”

Angel Gurría, OECD Secretary-General  
27 February 2007

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## Radical change is taking place

In the 1960s, Korea ranked twenty first among the 30 OECD countries in terms of the population attaining a university qualification, now it ranks third at around 80% of school leavers.

India produces 2.5 million graduates a year in technology, engineering, life sciences

China enrolls around 5 million undergraduates a year and produces more than 800,000 postgraduates

China's share of world science publications has trebled, to more than 6%, in the last decade

Chile has established almost 2000 early learning centres since its new government was elected in early 2007

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## But systems are often fragmented and change incrementally

	Quality of core public system	Level of employer investment	Role of technology, innovation	Cumulative economic investment
Early years				
Primary standards				
Secondary priority subjects				
Tertiary, technical, vocational				
Workforce learning, participation				

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## And there is confusion about links between skills, innovation and productivity

GDP growth correlated with years of schooling, literacy, numeracy

But skills demand still hard for governments to predict

Productivity growth driven by higher skilled firms

Innovation 'infrastructure' may matter more than skill supply

Innovation relies on 'higher order' skills

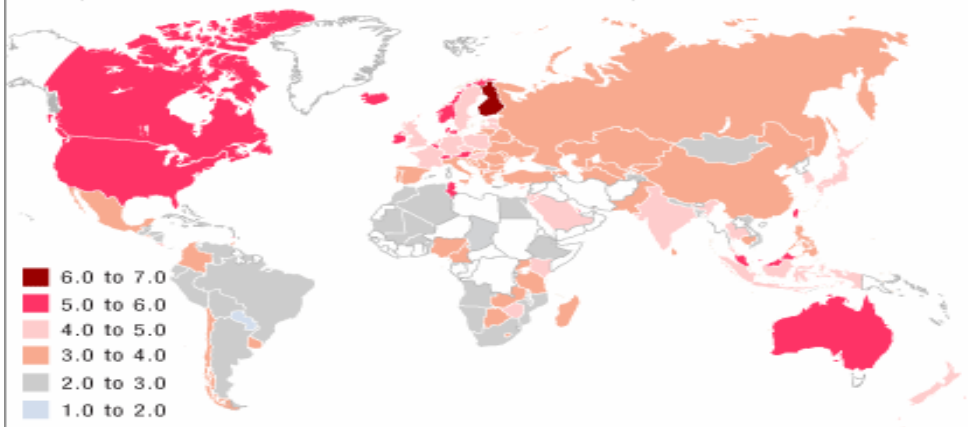
Qualifications can be 'anti-innovation'

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## WEF education rankings

### Overall quality of the education system

Countries are ranked from 1 (does not meet the needs of a competitive economy) to 7 (does meet the needs of a competitive economy)

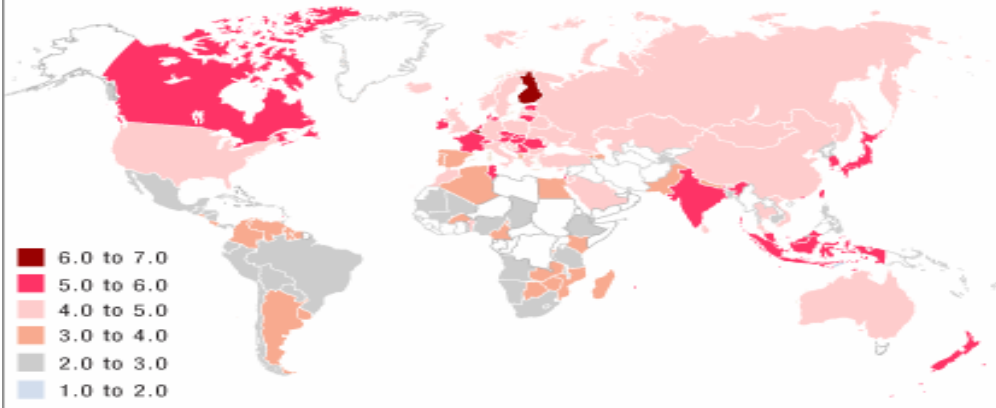


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## WEF maths and science education rankings

### Maths and science education

Countries are ranked from 1 (does not meet the needs of a competitive economy) to 7 (does meet the needs of a competitive economy)



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## Priorities and opportunities

Creating sectoral skills strategies which bind employers into governance and investment

Engaging low skill mature workers to increase economic participation

Defining distinctive 'innovation skills' agenda beyond STE

Scaling up skilled migration systems and improving skills mobility around APEC

Creating more radical models of education service innovation

[Tom.Bentley@dpc.vic.gov.au](mailto:Tom.Bentley@dpc.vic.gov.au)

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