

Institution: University of Leicester

# Unit of Assessment: 19 Business and Management Studies

Title of case study: Singapore's workforce development policies

#### 1. Summary of the impact

Collaboration between Leicester and Singapore's Workforce Development Agency has led to impacts underpinned by a 25-year history of research into skills, training and workforce development. The relationship has enabled the establishment of Singapore's first policy research centre designed to inform the government's workforce policy revaluation. Before the establishment of the Centre for Skills, Performance and Productivity Research (CSPPR), independent research in these areas was virtually non-existent in Singapore. Impacts include creating a new field of study in Singapore; contribution to government policy and direction in Singapore, and a resulting contribution to the well-being of the country's economy and society.

# 2. Underpinning research

The Centre for Labour Market Studies (CLMS) at the School of Management, University of Leicester, started research into training in the late 1980s. We established links with policy makers and researchers in Singapore and Hong Kong and later in Europe, the USA and smaller countries such as Malta. This led to a two-year ESRC (Asia-Pacific Initiative) research grant to examine the role of education and training (ET) in four fast-growing economies: South Korea, Taiwan, Hong Kong and Singapore. Using the notion of the 'developmental state', this project enabled the Leicester researchers – Professor David **Ashton** (PI), Francis **Green** (PI), Professor Johnny **Sung** (concentrating on Singapore) and Donna **James** – to deepen their knowledge of the impact of ET and how the role of ET differs from the market/liberal approaches in the West. The results were published in *Education and Training for Development in East Asia*<sup>1</sup>. This book challenged the idea that the use of markets unfettered by state intervention were the best way to organise training at the national level. It did this by providing an account of an alternative model that had been very successful in these societies.

Ashton, Green, James and Sung continued to work in this field, developing their understanding of the state in a market and globalised environment and producing a range of outputs, alongside other academic members of the CLMS, a small sample of which are discussed below.

In 2000, Ashton, Sung and Research Fellow Jill **Turbin** published 'Toward a Framework for the Comparative Analysis of National Systems of Skill Formation'<sup>2</sup>. This review of national systems identified four models of skill development: market, corporatist, developmental state and neomarket. These models help us understand why societies have different approaches to the provision of education, training and skill formation and why there are significant differences in government policies towards training as they attempt to respond to the challenges of globalisation.

In 2002, Ashton, Green, Sung and James published 'The Evolution of Education and Training Strategies in Singapore, Taiwan and S. Korea: A Development Model of Skill Formation'<sup>3</sup> which challenged the conventional explanation of the role of the state in skill formation in the high performing Asian economies as advocated by World Bank economists. It did this through an examination of the institutions which supported beneficial strategic state intervention in the process of skill formation in Singapore, Taiwan and South Korea. These enabled governments to produce a pace of skill formation so high that it achieved within the space of one generation something that took the advanced industrial countries three generations to achieve. The research identified a set of government strategies and institutional structures in the field of ET in these economies which play a crucial role in ensuring that economic growth could proceed without employers experiencing severe skill shortages. The major difference between the role of the state in most market economies and that in the 'developmental state' is that the latter took into consideration of the need to move up the 'global value chain'. And as such, the education and training system has a unique



and crucial role to play in the process of late industrialisation.

However, state policies would ultimately need a vehicle to create impact. In other words, the ET system produced the intended kinds of skills, but how do we get the skills to create the intended effects? In 2002, Sung and Ashton published *Supporting Workplace Learning for High Performance Working*<sup>4</sup> for the International Labour Organisation in response to the widespread interest in learning and training in high performance work organisations (HPWOs). It examined the role governments can play in fostering high performance and, in particular, encouraging enterprises to make better use of their employees' skills. This book contributed to the ILO's strategic objective of creating greater opportunities for people to secure decent work. The research showed how high performance work practices increase productivity and that employees in HPWOs often have more stable employment and that equity issues are dealt with in a more open and fair manner due to the commitment of managers and workers alike. The most important finding in this book is that we need a context to link skills and performance in the workplace. 'Mutual gains' are the key ingredient to this context, from which employees exercise sustainable 'discretionary effort'. 20,000 copies of the book were printed and distributed worldwide. Ten years later, the authors are still regularly receiving email requests for copies (can show emails).

In 2006, Sung published *Explaining the Economic Success of Singapore*<sup>5</sup> a book which explored the transformation of Singapore in the previous three decades. The book argued that there was more to the transformation than a simple 'right place, right time' scenario as other developing countries benefited from similar multinational corporation investment and political stability but did not achieve the same success. By developing the concept of the developmental worker the book examined the socio-political context in which workers became central to the national growth strategy and its skill formation projects. It further argued that one of the most important achievements of the developmental state is its ability to embed systematically the skill formation process through building innovative worker stake-holding while explicitly recognising the importance of social commitment for economic growth.

#### 3. References to the research

#### Grants for Research:

David Ashton, 1995-98, ESRC Asia Pacific Initiative: Education, training and economic growth in Pacific Asia: a new model of skills formation – Grant number: L324253015 Evaluation grade: Outstanding.

Johnny Sung, 2004-05 Comparative Assessment of International Policy Approaches to Skills Leading to the Development of Policy Recommendations for the UK, with J. Sung, SSDA £100,000

#### Research publications:

1. Green, F., Ashton, D., Sung, J. and James, D. (1999) *Education and Training for Development in East Asia: The Political Economy of Skill Formation in Newly Industrialised Economies*, London: Routledge.

2. Ashton, D., Sung, J. and Turbin, J. (2000) 'Toward a Framework for the Comparative Analysis of National Systems of Skill Formation', *International Journal of Training and Development*, 4(1): 8–25.

3. Ashton, D., Green, F., Sung, J. and James, D. (2002) 'The Evolution of Education and Training Strategies in Singapore, Taiwan and S. Korea: A Development Model of Skill Formation'. *Journal of Education and Work*, 15 (1): 5-30.

4. D.N. Ashton and J. Sung (2002) *Supporting Workplace Learning for High Performance Working*, Geneva: ILO, 182pp.



5. Sung, J. (2006) *Explaining the Economic Success of Singapore: the Developmental Worker as the Missing Link*, Surrey: Edward Elgar Publishing.

### 4. Details of the impact

Singapore had virtually no history of independent research into skills and workforce development. This was partly due to the large presence of foreign workers in the country, which represent one third of the total workforce, a fact which heightens the political sensitivity of any labour market research. The Asian financial crisis of the late 1990s had led to a major economic review in Singapore which highlighted the need for strategic nationwide initiative in the area of skills, training and vocational education.

So, in 2007, the Singapore Workforce Development Agency (WDA) – the organisation set up to address this need - sent a delegation of senior officials to Leicester. The Government body was attracted by the CLMS's international reputation for high quality research with direct relevance for policy-makers and practitioner communities, particularly in the area of skills, training and workforce development. As well as knowing that both Ashton and Sung had advised on the setting up of the Singaporean version of Investors in People and the first version of their national vocational qualifications framework (similar to NVQs), senior officials had read Ashton, Green, James and Sung's book<sup>1</sup> and Sung's book<sup>5</sup>, and they felt there was potential for collaboration, and a secondment was discussed.

Following that initial visit, academics built links with the WDA through a series of trips to Singapore and, in 2009, Sung was seconded to work for the WDA, drawing on his research expertise in national workforce development systems and high performance work practices. Sung set up the Centre for Skills, Performance and Productivity Research (CSPPR) within the Institute for Adult Learning (a statutory board under the WDA) in 2011. Its unique quasi-governmental position combines independent research capability with collaboration and policy influence within government and the Continuing Education and Training (CET) community. As Head of the CSRRP, Sung has used his understanding of the challenges surrounding workforce development – built on more than 25 years of high quality research at the University of Leicester - to establish the new centre. He has introduced a whole new dimension of research to Singapore in terms of new methodologies, new types of data producing new information possible and a new set of policy tools.

The CSPPR has prioritised the creation of strategic alliance and collaborative research, ensuring that research matches policy priorities. Since its inception, CSPPR has established a full research programme consisting five large-scale projects and a few smaller ones. There are now seven local researchers covering both quantitative and qualitative techniques, all of whom have been trained by Sung. There are ten international academics (all at professorial level) each of whom collaborate with CSPPR on specific projects and nurture local researchers remotely and during their regular visits to Singapore.

The CSPPR's research is already having a direct impact as illustrated by these two examples:

(a) A report on the hotel and tourism sector was presented to the Permanent Secretary of the Ministry of Manpower who immediately recommended the findings of the report to be used by the Singapore Tourist Board (STB), the lead body of productivity improvement of the tourism industry. The research team subsequently provided further discussions and support to STB to identify additional industry productivity indicators, especially in relation to greater skills utilisation.

(b) Similarly, the CSPPR completed a report on the private security industry in Singapore, one of three "low pay" sectors and a politically sensitive area for the Government as only Singaporeans can apply for jobs in this sector. The CSPPR research team was invited to provide an 'independent' source of input and a special report to the Ministry of Home Affairs (MHA) in July 2012 recommended major changes. These alter the structure of the industry in order to increase skills content, job design and productivity. While the MHA is considering some of the more



fundamental recommendations (e.g. competency-based grading system for security officers), small recommendations have already led to changes in working and contracting methodology (e.g. an outcome-based bidding system).

The CSPPR steers Singapore policy debates at the national level. In May 2012, it ran an international Experts Group under the theme of *Globalising Skills – the Implications for Singapore and Beyond*. More than 250 people attended a talk by Professors Brown and Lauder and the event hosted 'closed-door' discussions with the Ministries of Manpower and Education, unions and the WDA. A book with the same title was published in collaboration with the Singapore Civil Service College was published in October 2012. This event not only led to a further research project to create specific data for Singapore, it also created widespread awareness amongst policy makers that the 'supply' strategy could be undermined by the existence of a 'global skills web', to which most multi-national corporations have access.

The CSPPR is expected to become the national 'depository' of all skills data relevant to Singapore by 2015 – Skills Utilisation in Singapore (SU2) measuring job skills, O\*NET mapping for occupational skills and PIAAC for individual competencies – all driving and steering the direction of skills research in this country.

Three recent developments also prove impact:

(a) The Ministry of Manpower has provided official sanction for CSPPR to use SU2 data to create a set of baseline National Skills Indices. They will act as the basis for medium and long terms skills change comparisons for policy purposes;

(b) WDA has asked CSPPR to design and implement a project to assess the impact of Employability Skills (ES) training. ES training is the largest area of training (taking half of the entire public training subsidies) in Singapore;

(c) Utilising our econometric modelling skills, CSPPR will launch a pilot project to create a National Workforce Development Dashboard in 2013 – a live analytic tool that combines all training records (over 2 million), with wage data and labour market time series. The tool, if successful, is expected to support policy makers in the relevant government ministries.

By informing and guiding Government and stakeholder policy on skills, training and workforce development, this Leicester initiative impacts on the welfare of Singaporeans both economically and societally. Inequality is a huge issue in Singapore where sections of the generally affluent society had little gain in the last 10 years. For the first time, Government workforce initiatives to address this issue are being underpinned by high quality, independent research, made possible through University of Leicester expertise.

#### 5. Sources to corroborate the impact

As well as official meeting notes, the following referees can be used to ascertain our work and impact:

- 1. Executive Director, Institute for Adult Learning, Singapore
- 2. Deputy Director for Research and Planning, Ministry of Education
- 3. Director of Manpower Research and Statistics Division, Ministry of Manpower
- 4. Senior Economist, Ministry of Trade and Industry
- 5. Director of Special Projects, Ministry of Home Affairs