

The Winston Churchill Memorial Trust of Australia

Learning for work



Ian Balcomb – 2013 Churchill Fellow

The Park Family Churchill Fellowship to study ways
of enhancing the work readiness of young people

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Ian Balcomb
April 2015

The views expressed in this report are my own, based on my observations, discussions and research. Every care has been taken to accurately represent the information provided by interviewees. If anything has been misrepresented please be assured that this is unintentional and I would welcome being advised of any corrections.

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Executive summary

The 2013 Park Family Churchill Fellowship to study ways of enhancing the work readiness of young people

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Project description

To investigate strategies that can be used to encourage 15-19 year olds to learn the things they need to successfully move from education and training to work.

Highlights

- Observing Applied Learning programs first-hand in Hong Kong
- Spending time with Roland Østerlund visiting, talking and learning about the Danish education and training system
- Talking with David Raffe and Cathy Howieson at the University of Edinburgh about issues including pathways and workforce socialisation
- Spending time with the team at the Scottish Qualifications Authority visiting, talking and learning about the Scottish education and training system
- Being challenged by Yong Zhao at the Emerging Asian Young Leaders summit about the need to educate ‘entrepreneurs’ not ‘employees’
- Visiting Blenheim Palace in England where Winston Churchill was born and spent much of his life, and reflecting on why he would want travelling fellowships as his memorial. I am still thinking about this.

Major lessons and conclusions

- the highly situated and contextual nature of education and training systems for young people, but with common themes and challenges
- the critical importance of work-based learning in enhancing the work-readiness of young people
- the value in integrating literacy and numeracy learning for the workplace with vocational education
- the importance of articulating ‘clear and robust’ pathways for young people
- the value of education and training institutions looking ‘over the parapet’ to ensure positive destinations for their students
- the need for ongoing engagement and dialogue to retain settlements between education, industry and government around preparing young people for the world of work.

I have set up a blog site related by my Fellowship – [*Learning for Work – Resources and Reflections*](#). I am using this as a place for further dissemination of ideas and resources that might be useful in improving NSW and Australian systems for enhancing the work readiness of our young people.

I will also continue to bring the learning and insights from my Fellowship to decision makers through my professional roles in providing advice to the NSW state government and national intergovernmental policy forums.

Program of study and acknowledgments

This report has been made possible by the generosity of the Park Family and the Winston Churchill Memorial Trust in Australia through the award of the 2013 Park Family Churchill Fellowship to study an aspect of education and/or vocational training. My thanks to William (Bill) and Lesley Park and family for their continuing support of Fellowships in this important field.

The following section outlines my program of study and the people and organisations I visited. I would like to acknowledge and sincerely thank all these people and their organisations for the generous spirit in which they shared their time, experience and expertise to support my investigation.

Hong Kong

Discussions with Sarah Ngai, Dr Bonnie Ng and Louis Lai from the Applied Learning Section, Hong Kong Education Bureau.

Observations at the Hospitality Industry Training and Development Centre, Vocational Training Council (VTC) –and discussions with Peter Poon, Agnes Lee and students studying Hotel Operations.

Observations at the Hong Kong University School of Professional and Continuing Education (HKUSPACE) and discussions with Dr Stephen Wu and students studying Medical Laboratory Science.

Discussions with Rob Fearnside and Ted Chuck from the Hong Kong Council for Accreditation of Academic & Vocational Qualifications (HKCAAVQ).

I would particularly like to thank Bonnie Ng and Louis Lai for their wonderful organisation in arranging a program for me to see and learn more about Applied Learning in Hong Kong, for accompanying me on the visits and for their useful shopping tips.

Discussion with Pam Ryan and Chris Durbin from the English Schools Foundation, Hong Kong.

Observations at West Island High School and discussions with Rob Stitch, Paul Cooper, teachers, counsellors and students.

Participation in the Emerging Asian Young Leaders Summit, including sessions led by Professor Yong Zhao and Simon Breakspear.

I would particularly like to thank Pam Ryan for organising opportunities for me with the English Schools Foundation and for her warm welcome and hospitality.

Singapore

Discussions with William Lim from the Singapore Ministry of Education.

Observations at the Republic Polytechnic and discussions with Dr Terrence Chong and Long Tien Kian of the Office of International Relations and Alvin Tay from the Centre for Educational Development.

Observations at the Institute of Technical Education (ITE) Central College and discussions with Iris Seet, Jenn Tan, Ng Chwee Chan.

Thanks to Guojing Lin from the Ministry of Education for organising visits to Republic Polytechnic and ITE Central College and Headquarters.

Denmark

Discussions with Roland Østerlund, former Director-General, Vocational Education and Training with the Danish Ministry of Education.

Discussions with Associate Professor Pia Cort and Associate Professor Ida Juul, Department of Education (DPU), University of Aarhus.

Observations at EUC Zealand and discussion with Astrid Dahl and staff.

Discussions with Torben Kornbech Rasmusson and Jarl Damgaard former Director-Generals, Higher Education and Upper Secondary Education with the Danish Ministry of Education..

Observations at the Copenhagen Hospitality College and discussions with Søren Kristiansen, President and staff and Lars Mahler, Chair of the National Board for Vocational Education and Training.

I would like to sincerely thank Roland Østerlund for arranging such a wonderful program for me in Denmark, for accompanying me on the visits and for his warm welcome and generous hospitality.

United Kingdom

Discussions with Professor David Raffe and Dr Cathy Howieson from the University of Edinburgh.

Discussions with Dr John Allan, Dr Lena Gray, Dr Gill Stewart, Gill Mann, Margaret Miller, Margaret Tierney, Eleanor Boyd, Caroline Hunter, James Morgan and Laura Dougan from the Scottish Qualifications Authority (SQA), Glasgow.

Discussions with Peter Connelly, HM Inspector, Education Scotland.

Discussions at Glasgow Clyde College, Anniesland with Eric Brownlie and staff.

Observations at St Paul's High School, Glasgow and discussions with Rosaleen Kennedy, Deputy Head Teacher, staff and students.

I would particularly like to thank John Allan and Gill Mann for arranging a great program for me in Scotland, James Morgan and Laura Dougan for accompanying me on the visits, and all the people I met at the SQA for their generous hospitality.

Discussions with Professor Ken Mayhew, Professor Ewart Keep, Dr Susan James and Dr Cathy Statz from SKOPE based at the University of Oxford.

Discussions with Simon Perks, Office of Qualifications and Examinations Regulation (Ofqual), Coventry, United Kingdom.

Participation in the National VET Conference at the Skills Show in Birmingham.

OECD

Discussions with Simon Field and William Thorn, from the Directorate for Education and Skills, OECD, Paris.

I would also like to sincerely thank the following people in Australia who generously supported me in applying for, planning and undertaking my Churchill Fellowship:

- Professors Richard Sweet, John Polesel, Margaret Vickers and Gordon Stanley for introducing me to many of their colleagues and contacts in the UK, Denmark, Hong Kong, Singapore and the OECD
- Paul Hewitt, Tom Alegounarias and David Collins for encouraging and supporting me to apply, and for allowing me to take time out from work commitments to undertake the Fellowship
- The staff at Winston Churchill Memorial Trust National Office and the members of the NSW selection committee for their support
- Sonia Jennings for her flawless assistance in making travel arrangements
- My family Sally, Rosie, Jenny and Andy for their support and encouragement.

Lastly, I would like to thank all the people I have met and worked with in the field of vocational education over the last fourteen years – educators, employers, industry representatives, policy makers, regulators, researchers and students. It is a fascinating field; as diverse as the full range of endeavours in which people in our society engage. It is a complex and contested field; often not well understood. And it is an important field; significantly impacting on the social and economic wellbeing of our community, but generally under valued. It has kept me interested!

Success is not final, failure is not fatal: it is the courage to continue that counts.

Winston Churchill

Introduction

The topic of my Fellowship investigation – ‘enhancing the work readiness of young people’ or ‘learning for the world of work’ doesn't sit neatly within a well-defined field or educational sector. In fact, it is often characterised by its need to move across traditional educational boundaries. The best label for my topic is probably ‘vocational education’. But that also is a concept that is often not universally understood.

Unlike ‘school education’ or ‘university education’, where nearly everyone you might speak to in Australia or overseas has a pretty good idea of what you are talking about, the mention of ‘vocational education’ often brings a puzzled look. I often found myself having to give quite lengthy explanations of what field I worked in and what I was investigating.

Before I commenced my Fellowship, I was seconded from my position as the Inspector, Vocational Education with the NSW Board of Studies back to the NSW Department of Education and Communities to work on reforms of the NSW vocational education and training system for people who have left school. I took the opportunity of broadening slightly the focus of my investigation to all young people moving from education and training to work, not just school students.

One of the interesting concepts I came across in researching and preparing for my Fellowship was from David Raffe¹ from the University of Edinburgh, one of the people I was planning to meet. He talks about the limits of ‘policy borrowing’ and supports ‘policy learning’ as a more realistic and useful framework for the comparative study of education systems.

A ‘policy borrowing’ approach seeks to identify examples of a unique, ‘best practice’ from the experience of other countries that can be transferred back to your own country or educational system. Given that education and training systems, particularly vocational education and training systems, are highly situated in their contexts and cultures, such an approach is problematic.

In contrast, a ‘policy learning’ approach seeks to use the experience of other countries to identify ideas that maybe able to be weaved into the development of educational systems in your own country rather than taking policies ‘off-the-shelf’. A policy learning approach also helps in identifying common trends and pressures that affect all systems, in clarifying policy alternatives and in understanding the history and evolution of policy settings in your own country.

My investigation has followed a policy learning approach.

There are strong calls to improve the performance of education and training systems from governments in Australia and also in all the countries I visited. Quite often this is couched in terms of improved academic results and test scores, particularly in comparative international assessments such as the PISA program run by the OECD. While perhaps not as loud, there are also calls in these same countries to improve the capacity of education and training systems to prepare young people for the world of work. These calls often find less traction and support because they challenge commonly held community values about the purpose of education, particularly school and academic education, and also about the aspirations young people might have for finding their place in the workforce. Most people find no problem to support calls for education and training systems to produce more skilled people to enter the professions. But, they often find it problematic to support calls for education and training systems to produce more skilled people to enter low paid occupations in the service or manufacturing sectors.

¹ Raffe, D. (2011). *Policy Borrowing Or Policy Learning?: How (not) to Improve Education Systems*. Centre for Educational Sociology.

Finland is often held up as a top performing education system because of its results for 15 year olds in PISA assessments of reading, maths and science. However, while the employment rate of Finnish youth in 2011 was 40.4%, compared with the OECD average of 39.3%, its unemployment rate of youth was 19.8%, a relatively higher rate compared with the OECD average of 16.2%.²

Countries such as Australia need to go further than PISA in judging the performance of their school education systems.

Finding their place in the world of work is vital for all young people. Education and training systems need to find effective ways of engaging and supporting all young people to make this transition, whether it is moving into an entry level service sector job, following a traditional pathway into a job in a profession such as law, or navigating a combined training and work pathway to a para-professional job in the health care sector.

This is complex and challenging stuff and all the countries I visited are searching for better ways to meet these challenges.

I found the seven week program of visits to six countries quite exhausting, despite scheduling some time for reflection and relaxation. It has taken me quite some time to recover from my state of 'information overload' to be able to revisit, reflect and distil the significant ideas and how they might apply (or not) in NSW and Australia.

The places, organisation and people I visited allowed me opportunity to engage with a wealth of information. The scope and complexity of the policies and programs I was hearing about was vast and this report can only touch on a small part.

I have set up a blog site related by my Fellowship – *Learning for Work – Resources and Reflections*. I am using this as a place to make available some of the interesting material and online references that people so generously provided to me.

² skills.oecd <http://skills.oecd.org/informationbycountry/finland.html> retrieved 25 February 2015

Hong Kong

The Hong Kong education system has developed under a strong influence from the English system. Secondary education is divided into junior and senior years with nearly all secondary schools providing both junior and senior programs. A new academic structure (NAS) has been introduced as the outcome of a decade of reforms based on the 2000 *Reform Proposals for the Education System in Hong Kong* accepted by the Hong Kong Government. The first cohort of students completed the New Senior Secondary (NSS) in 2012 and took their Hong Kong Diploma of Secondary Education (HKDSE) examination.

The reforms aimed to promote all-round development for all students and life-long learning. This involved a fundamental change from 13 years of primary and secondary schooling to 12 years with the HKDSE examination taken at the end of Secondary 6, which has become the final year of secondary education. Undergraduate degree programs have been extended from three to four years. The old system was highly selective, with only the top third able to study for the final secondary examination, and teaching was focused on preparing students for examinations rather than supporting their wider development and learning skills.

Applied Learning programs were introduced as part of the elective studies for New Senior Secondary for students in Secondary 5 and Secondary 6. The assessment results are recorded on the HKDSE certificate.

Education Bureau

The Hong Kong Education Bureau is responsible for educational policy and implementation from pre-primary to tertiary level. It monitors the services provided by the Hong Kong Examinations and Assessment Authority (HKEAA), the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKAAVQ) and the Vocational Training Council (VTC).

At the Bureau, I had discussions with Sarah Ngai, Dr Bonnie Ng and Louis Lai from the Applied Learning Section, within the Education Bureau's Curriculum Development Institute.

We discussed:

- the aims of Applied Learning and how Applied learning courses are both similar and different to the Vocational Education and Training courses studied by senior secondary school students in NSW and Australia
- the nature of workplace learning and 'career-related experiences' within Applied Learning course
- the institutional and organisational arrangements, including the responsibilities of schools and the responsibilities of Applied Learning course providers
- issues around industry recognition
- vocational education practices in the United Kingdom, Europe, Australia and Hong Kong.

In seeing Applied Learning courses first hand, what stood out for me was an appreciation of Applied Learning courses as a quite different type of senior secondary school course to that we generally have available to secondary school students in NSW and Australia. When Bonnie, Louis and Sarah from the Hong Kong Education Bureau visited Australia and described their Applied Learning courses, I equated them in my mind to our HSC VET courses. But on learning about them first hand and in context, I now view them differently.

These courses are similar our Australian VET courses for school students in that they draw their content from the world of work, from particular industry areas or occupational roles. They are different to our Australian VET courses for school students in that they do not have the expectation of qualifying graduates for a particular job role which most of our Australian VET qualifications do.

Hospitality Industry Training and Development Centre

The Hospitality Industry Training and Development Centre (HITDC) is part of the VTC and provides vocational training for those seeking to enter the hospitality industry. It has three centres and I visited the centre at the VTC Kowloon Bay complex.

The VTC and HITDC have been involved in delivering Applied Learning (formerly known as Career-oriented Studies) to secondary school students since their piloting in 2003. I visited on a Wednesday afternoon when students from a range of schools were attending for a 3-4 hour class as part of the Hotel Operations Applied Learning course. The course covers the various aspects of hotel operations including front office, housekeeping, and food and beverage operations.

Following a lunch in the training restaurant I had the opportunity of meeting with Peter Poon, Chief Instructor, Applied Learning with HITDC and Agnes Lee, VTC Project Officer, and then visiting a number of the Applied Learning classes operating including Food and Beverage, Front Office and Housekeeping Services.

We discussed the role of the VTC generally and specifically as an Applied learning course provider.

What I found interesting was:

- the industry knowledge and the commitment of the staff to the program
- the excellent facilities simulating industry environments
- the number of learners they could productively engage in those facilities – I've never seen so many learners operating within a commercial kitchen!
- the integrated assessment and assessment moderation methods used
- the commitment to ensuring the training and facilities kept pace with contemporary and emerging industry practices.

HKUSPACE

The School of Professional and Continuing Education (HKUSPACE) is the continuing education arm of the University of Hong Kong. The School collaborates closely with other faculties and departments of the University. I visited the premises in the Admiralty area on a Saturday morning when students from a range of schools were attending for a 3-4 hour class as part of the Medical Laboratory Science Applied Learning course. The course covers fundamental scientific knowledge underpinning medical laboratory practice, sample management and laboratory safety, performance of laboratory tests and generating reliable results.

I sat in on a lesson on taking blood samples and learnt a great deal that I didn't know – this is one of the great advantages for inquisitive people working in vocational education - you get to find out interesting stuff about a whole lot of industries and occupational areas and get the opportunity of being taken 'behind the scenes'.

I had very productive discussions with Dr Stephen Wu, Head of the College of Life Sciences and Technology, the Applied Learning coordinator at HKUSPACE and some of the students about the value of Applied Learning courses to the individual and to industry seeking a skilled and flexible workforce. It

was interesting to note the enthusiasm of Dr Stephen Wu for the value of program, in spite of his own admitted initial reservations.

Hong Kong Council for Accreditation of Academic & Vocational Qualifications

The Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ) is responsible for assuring the quality of vocational learning programmes so that their associated qualifications can be entered into the Qualifications Register under the Hong Kong Qualifications Framework.

I had discussions with Rob Fearnside and Ted Chuck from the HKCAAVQ about the role of the HKCAAVQ and the development and implementation of the Hong Kong Qualifications Framework (HKQF). It was interesting to talk about a new generation Qualifications Framework in its early stages of implementation extending its scope through various industry sectors and to contemplate if they will be facing some of the same issues that more mature frameworks such as Scottish Qualifications Framework (SQF) are now facing in the granularity of their learning modularization and the complexity of users navigating pathways through such granular systems.

English Schools Foundation

The English Schools Foundation (ESF) provides English-medium education for students from Kindergarten through to Year 13 in Hong Kong. It consists of 21 schools, each with a quite distinctive culture, yet maintains common purposes, values and systems across the Foundation network.

Pam Ryan was the Director of Education at ESF, responsible for the leadership and management of the Education Department. She had oversight of the quality of educational provision across the Foundation relating to curriculum, pedagogy, leadership, professional learning and education policy. Prior to taking up this role Pam was a Director of School Education and secondary school principal in Orange in Central Western NSW. We had the opportunity to work together when Pam was in Sydney working on supporting teachers and schools implement the new raised school leaving age in NSW. Pam kindly arranged for me to visit West Island High School, an ESF school that has been a pioneer in applied learning in Hong Kong and also to attend an Emerging Asian Young Leaders Summit organised by ESF on the weekend I arrived in Hong Kong.

Pam and I talked about the:

- role of ESF in the Hong Kong education landscape
- students that attend ESF schools and where they head after finishing school
- comparisons between the Hong Kong education systems, including ESF, and the New South Wales school education system in which we both have worked.

What I found interesting from learning a little about the ESF within the Hong Kong education landscape was:

- the globalisation of education, particularly of the world-wide post-school destinations of ESF graduates
- the capacity of schools and systems operating in this international sphere to choose the qualifications they offer their students and to speculate if we might see this pressure emerge in our Australian education systems
- the strong continuing professional development program ESF offers to its school leaders and teachers
- the curriculum entitlement that ESF holds for its students.

West Island School

West Island School, as its name suggests, is on the western side of Hong Kong Island. It is an ESF secondary school that provides education to students from 11 to 18 years of age in English. It has been a pioneer within the ESF in developing a broader range of post-16 curriculum options, including applied learning options. It is firmly focused on providing quality education to its students and enabling them to pursue further education, training and work opportunities in destinations all over the world – a very global outlook.

I met with Rob Stitch the Vice Principal, Paul Cooper, the school's applied learning coordinator, and Chris Durbin, the Secondary School Development Adviser from the ESF Education Department. I had the opportunity to walk around the school with Rob and talk with some of the teachers and students who were doing applied learning courses including business, art and design and engineering. I also had the opportunity of meeting with members of the school's career counselling team.

The school offers a choice between two Diploma programs for students in Years 12 and 13:

- the International Baccalaureate (IB) Diploma or
- the school's International Diploma (ID) which is a vocationally focused program based around A-level (UK) equivalent qualifications.

I viewed the opportunity that West Island School had to draw on building blocks of qualifications from across the world to design vocationally oriented applied learning programs suitable for their school community as very liberating. Secondary schools in most countries, including secondary schools within the Hong Kong system, have to operate within the settlements and parameters of the curriculum and qualification requirements of their jurisdictions. It has prompted me to think we might see more of this if secondary education becomes more globalised and the history and settlements of curriculum and qualifications come under more competitive pressure.

The school has essentially designed these programs from scratch in a relatively short-time frame. They appear to be operating in a very effective and mature manner.

It is interesting to note the elements the West Island School chose to include in their applied learning programs and compare how this aligns with the elements that are contained in similar programs in other countries, including in Australian states and territories.

I also found interesting:

- the focus on applied learning as preparation for further study at university in related areas rather than for further vocational education and training directly following school
- the concept of building a portfolio of qualifications tailored to university admission systems in a range of countries that require more individualised evidence for their admission decisions. A great deal of personalised planning and support is provided by the school to ensure that students' qualifications portfolios have the right mix and currency to ensure success in transitioning to university. This is in contrast to the Australian Tertiary Admission Rank (ATAR) system that derives a single ranking number from the 'portfolio' of senior secondary subject assessment results. The rank number is the currency for university admission, obscuring students' individual portfolios of knowledge and skills and capacities derived from their senior secondary study. While the Australian system is efficient and cheap for universities, I wonder if it is effective. It certainly doesn't exert the positive pressure that I saw at West Island School to carefully think, plan and support students build their portfolio of qualifications.

- given the global destinations of West Island School students, the school can't rely on well trodden, existing post-school pathways for their applied learning Diploma students. The school, particularly through its careers team, has had to work very hard to create and maintain those pathways. One of the things this has meant is that they have their eyes clearly focused on the destinations of their students and can evaluate the success of their programs by the success of their students' transitions to positive destinations.
- the successful move the school had made to introducing applied learning programs into their pre-16 curriculum, creating strong pathways into the post-16 curriculum
- the confirmation I received from West Island High, aligning with my own views, that the pedagogy, assessment and relevance associated with applied/vocational learning is such a strong driver of its success. Rob and Paul both identified the formative nature of the assessment, with strong feedback loops and the expectation of reaching the required standard as strong drivers of quality and success. Also, the real-life vocational contexts for learning and assessment tasks means that students can "always see why" what they are learning is important and why it needs to be rigorous and of high quality.

Emerging Asian Young Leaders Summit

The ESF organises a range of professional development programs for principals and teachers within its schools. ESF had teamed up with Simon Breakspear, to run two Leaders' summits. One for school principals and senior leaders was held on the Thursday and Friday before I arrived in Hong Kong and another for emerging young leaders on the Saturday and Sunday. The emerging young leaders were teachers who were being prepared to take on leadership roles within their schools.

I was fortunate to be invited by Pam Ryan to sit in on the Saturday sessions for the emerging young leaders. The summit covered leadership and innovation in schools. The Saturday program included sessions led by Professor Yong Zhao and Simon Breakspear. While most of the teachers were from ESF schools in Hong Kong, there were also a number of international participants including teachers from Singapore and Canada.

What I found interesting was Yong's views on the need for us to be educating 'entrepreneurs' and not 'employees'. Yong talked about the need to develop entrepreneurial qualities of risk taking, uniqueness, confidence, passion, and alertness to new opportunities.

Yong Zhao grew up in a small rural village in China and is now a professor in the Department of Educational Measurement, Policy and Leadership at the University of Oregon. He is very confident in the strength of the US education system and rather sceptical of the Chinese education system. He showed a quote from Kai-fu Lee that said: "the next Apple or Google will appear, but not in China... unless it abolishes its education."

Yong has been publically very critical of the interpretations of the international PISA results that say that because some parts of China, Shanghai for example, are getting good results, we should copy their educational approaches. Some of his recent posts to his blog are entitled "How Does PISA put the World at Risk". It is interesting to see an alternative analysis of the PISA results to that generally promoted by the OECD and the governments of participating countries.

Another of the interesting graphs Yong showed was PISA Maths scores plotted against participants reported confidence. Taking confidence as an important entrepreneurial capability attribute, it showed Singapore, Korea and Finland as high maths, low entrepreneurial capability and Greece, Spain, Ireland, the United States and the United Kingdom as low maths, high entrepreneurial capability. I think there would be a range of views on the validity of these results and interpretations.

However, Yong Zhao did a great job of the 'disrupter' role he had been asked to play at the Summit. Lots of room for thought.

Singapore

The Singapore Ministry of Education is responsible for the formulation and implementation of education policies and the administration of government schools and junior colleges. The statutory boards that manage the five polytechnics and the Institute of Technical Education (ITE) also sit under the Ministry of Education.

The Singapore Ministry of Education is also responsible for the formulation and implementation of policies for primary schools, secondary schools, the polytechnics and the Institute of Technical Education (ITE).

In Singapore the link between education and ‘manpower’ appears very strong, arising no doubt from their view that it is Singapore’s people that are its key assets, not having the natural resources that other larger countries have. Of course, it does also have its location as a significant asset.

Ministry of Education

I met with William Lim, Deputy Director, Higher Education in the Ministry of Education.

We discussed the Singapore education system, particularly secondary and post-secondary pathways. In reflecting on the common British heritage of the Australian and Singapore education and training systems, we noted the systems have evolved very differently, reflecting the differing histories and cultures of the two countries.

For the independent state of Singapore this has been a relatively short history, with rapid development and evolution.

William characterised this development in three phases:

- an efficiency phase aimed at maximising potential by ‘sorting’ into different pathways
- an ability driven phase by ‘sorting’ based on ‘academic’ abilities
- the current ‘student centred, values driven’ phase recognising not only ‘academic’ ability but also student interest and aimed at developing more cohesiveness and empathy.

We also discussed:

- the separate histories and systems of ‘Pre-employment Education and Training’ (PET) and ‘Continuing Education and Training’ (CET) that exist in Singapore, with their vision of making sure they are better connected
- the focus on ‘soft skills’ or ‘21st century skills’ and how these might be developed and assessed
- the governance and accountability systems of the various education sectors
- the challenge of ensuring aspirations can be meaningfully met with the level and scope of education and training outcomes matching the profile of workforce opportunities
- the budget pressures likely to emerge on the currently highly subsidized post-secondary education sector, particularly with much smaller cohorts are coming through due to a significant drop in the birth rate.

Some of the key things I noted were:

- The comprehensiveness of the participation in post-compulsory schooling pathways in Singapore – currently it is close to 95% and they are aiming for 100%
- The significant role of the Polytechnics within the post-compulsory education and training catering for about 40% of the cohort

- The close links between vocational education and industry and workforce planning
- The difficulties they have with apprenticeships and traineeships for young people because of the view of Singaporean parents that their children should be ‘students’ rather than ‘employees’
- The approach to defining and implementing ‘21st century competencies’ by providing broad curriculum frameworks, leaving institutions such as the polytechnics to work out for themselves how these should be developed. For example, the Republic Polytechnic, I visited had adopted a ‘problem based pedagogy’, whereas Singapore Polytechnic had adopted a ‘design thinking’ approach based on the ‘Conceive, Design, Implement Operate (CDIO)’ engineering framework developed by the Massachusetts Institute of Technology (MIT)
- The recent announcement of “Applied Degrees” at universities
- The provision of career advice services through the Singapore Workforce Development Agency as a separate service independent from education and training institutions.

Republic Polytechnic

I visited the Republic Polytechnic, which is the newest of the five polytechnics in Singapore. Established in 2002, it currently has over 14,000 students. It offers broad-based 3-year Diploma programs

I had discussions with Dr Terrence Chong, Long Tien Kian and Saideep Issrani of the Office of International Relations and Alvin Tay from the Centre for Educational Development. I also toured the facility and observed it in operation.

We talked about:

- the funding and student fee arrangements for polytechnic students
- the quality assurance and auditing of polytechnics by the Ministry of Education
- the internship program where students include a six-month internship as part of their diploma program
- how academic staff maintain their industry currency which included acting as mentors for students on their internships
- the promotion and support for a problem based learning pedagogy.

What I found interesting was:

- the unique place a polytechnics in Singapore, catering for around 40% of the post-secondary cohort
- the adult and well-resourced learning environment
- the compact geography of Singapore with the strategic placement of the five polytechnics that gives good equity of access for all Singaporeans and allows great economies of scale – they don’t have the challenges of the expansive geography of NSW and Australia
- the people on the ground in Republic Polytechnic appeared to be very familiar with and feel part of the national directions
- the views from industry about effective internships – one month for orientation and then around three months for a project that can contribute an outcome for the business.

Institute of Technical Education (ITE)

I visited the Institute of Technical Education (ITE) College Central, which is co-located with the ITE headquarters. ITE Central is one the three ITE colleges which operates under the “One ITE system, three colleges” governance model.

The Institute of Technical Education (ITE) was established as a post-secondary institution in 1992. ITE is a key provider of career technical education in Singapore at the technician or semi-professional level, and the principal authority for national occupational skills certifications and standards.

The ITE has a national ITE Certification system for accrediting ITE courses pegged to National Skills Standards validated by industry. The National ITE Certificate, or Nitec, is the core ITE qualification in the way that the Diploma is to the polytechnics and a Degree is to the universities. ITE takes in about 25% of each annual secondary school cohort, or approximately 13,000 students a year.

Discussions

I had discussions with Ms Iris Seet, Senior Director, Curriculum and Educational Development where we talked about ITE in the context of the broader education system in Singapore, the curriculum and pedagogical models ITE uses, the range of ITE programs and the quality assurance systems in place.

What I found interesting was:

- The design of the college with the open facing learning areas allowing others to “look in”
- the ITE Epite features seven shops providing services such as eyewear, hairdressing and floristry. It provides an authentic training facility for students to work and interact with customers in a genuine commercial setting - allowing the students to “look out”.

Reflections on Singapore

It was hard not to be impressed, if not a little overwhelmed, by the modern, well-resourced industry standard facilities and the student learning focused campuses of both ITE Central College and Republic Polytechnic. It was almost a case of ‘with these facilities how could students fail to learn’!

I had the opportunity to reflect again on the Singapore education and training system when I met with the Applied Study in Polytechnics and ITE Review (ASPIRE) Committee on a study visit to Sydney in April 2014. The Committee was looking at enhancing career and academic progression prospects for Polytechnic and ITE graduates through the strengthening of industry linkages to provide work-relevant training for students, enhanced educational and career guidance.

The ASPIRE report was released in August 2014 and has been endorsed by the Singapore Government. The report recommended three areas for action to strengthen Singapore’s applied learning pathways:

- helping students make better education and career choices by putting education and career guidance officers in secondary schools, junior colleges, polytechnics and ITE colleges and including education and career guidance programs in polytechnic and ITE programs. The Singapore Workforce Development Agency will also build on the Individual Learning Portfolios (ILP) pilot project and develop an online Education and Career Guidance portal accessible to all Singaporeans, including students and working adults.
- providing more opportunities for polytechnic and ITE students and graduates to deepen their skills through enhanced internships, encouraging individual polytechnics and ITE colleges to take the lead in for different industry sectors to strengthen linkages with industry – for example, Republic Polytechnic taking the lead in logistics, and from 2016 developing Place-and-Train programs for recent graduates as salaried employees
- developing sector specific skills and progression frameworks (pathway frameworks) for critical sectors in the Singaporean economy.

Denmark

Denmark holds a strong international reputation for the quality of its preparation of young people for the world of work through its dual system of combining paid training in a company with learning in a vocational school or college. It is often compared to Germany, Austria and the Netherlands in this regard.

Ministry of Education

The Ministry of Education is responsible for policy and implementation of education across all sectors in Denmark.

Accompanied by Roland Østerlund, former Director General for Vocational Education with the Ministry, I met with Hjordis Dalsgaard, a Senior Advisor in the Ministry, who provided an overview of the Danish vocational education and training system and of some of new reforms that are in the pipeline.

The aims of these new reforms (*Skilled for the Future*) are to ensure that vocational education and training options are an attractive first choice for more young people, that more people complete vocational education and training programs and that the programs are of the highest quality and have the confidence of employers and employees (the social partners) and individual students.

Some of the features I understood to be part proposed *Skilled for the Future* reforms were:

- designing different pathways and vocational programs for young people (under 25) compared to older learners
- reducing the range of programs (or channels) for young people from years 9 and 10
- seeking to create better opportunities for young people who have completed vocational education to move to higher education
- clearer admission requirements for vocational education and training programs
- new targeted programs to ensure all young people complete an education.
- increasing the quality of vocational education and training by increasing contact hours and strengthening teacher's competencies
- increasing the number of workplace training placements.

What I found interesting about the Danish vocational education and training system was:

- the distinction between initial VET programs (I-VET) and continuing VET programs (C-VET)
- the *dual training principle or system* where initial VET programs are a combination of periods of institution-based education and workplace training – sandwich-type programs
- the arrangements for training wages, including the fact that companies receive compensation for the wages paid during institution or school based periods from the Employer's Reimbursement Scheme which is funded from a tax on all employers
- the groupings of programs that sees 12 basic programs (or courses) lead into 109 specific programs
- the educational guarantee that students can complete at least one of the specific programs from the basic course they have commenced
- the duration of the programs from two to five years, with most typically being three and a half to four years
- the differing responsibilities that various partners have had historically and how this has shaped the current arrangements. For example, there are quite different histories for commercial and business programs compared to technical and social and health care programs

- the stakeholder (social partners) involvement at all levels of the system: particularly the local level, but also at the industry sector level and national level.

While at the Ministry, I also had the opportunity to meet with Torben Kornbech Rasmussen, former Director General for Higher Education, Jarl Damgaard, former Director General for Upper Secondary Education, along with Roland Østerlund, former Director General for Vocational Education. While these three colleagues obviously enjoyed the opportunity to catch up with one another, I felt very privileged to meet with these three wise men.

Some of the things I found interesting from these discussions were:

- the different applied learning programs that were introduced into Danish upper secondary education as part of major reforms in 2003-05 such as the HTX, HFX and SFX – while these were applied learning programs with vocational elements, they are still academic programs and rely on this academic perception to maintain their prestige with parents and teachers
- the different teacher training programs for primary, lower secondary, upper secondary and vocational education and confirmation that in Denmark, as is the case in Australia, the background and educational pathways that teachers follow has a significant impact on the educational pathways they value and the advice they give to their students about educational pathways they should follow
- the Danish goal of 60% participation in higher education compared to our 40% goal in Australia – with some views in Denmark that 60% may be too high. This resonates with the challenge and tension found in all the countries I visited of matching the profile of qualifications and skills of their working age populations with the profile of qualifications and skills needed in the workforce, while at the same time supporting increased aspirations of being ‘smart countries’ with the highest and best qualified workforce.

Department of Education (DPU), University of Aarhus

Accompanied by Roland Østerlund, I met with Associate Professor Pia Cort and Associate Professor Ida Juul at the Emdrup campus in Copenhagen. The Department of Education (DPU) is the centre of research in education and pedagogy in Denmark and offers postgraduate programmes in compulsory schooling and lifelong learning.

We talked about the perceptions and valuing of vocational and academic education and some of the recent research projects that Pia and Ida have been involved in including *Learning for career and labour market transitions – individual biographies* and *Working life narratives*.

Some of the things I found interesting were:

- the ‘old narrative’, dating from at least the 18th century, around ‘academic’ versus ‘practical/applied/vocational’ education and learning
- the dual systems of work based vocational education and training in Denmark and countries like Germany, Austria and Switzerland
- the pressures that the expectations for longer participation in education and training by young people are putting on perceptions of vocational education – reinforcing the element of second choice for vocational education and training
- the existence in countries like Germany of higher level vocational and applied qualifications parallel to academic qualifications – right up the level of PhD level for highly qualified workers.
- the changing social trends that accompany changing perceptions of vocational education and choices individuals make about choosing ‘vocational’, ‘practical’ or ‘applied’ occupations

- the over emphasis in research and media commentary on vocational education on the challenges (the minority of weaker students and the barriers to their success) rather than the successes of the majority
- the results of 21 narrative interviews with people in middle range positions in the Danish labour market focusing on the learning and support they had during their career transitions. The narratives seemed to indicate there is still long way to go in providing a life long learning system which provides access to education and training to all from cradle to grave.

EUC Zealand

EUC Zealand was established in 1999 by the merger of two technical schools and a school for skilled labourers. It has divisions in four large towns in Zealand and serves roughly 8,000 students and course attendees. It is one of around fifty vocational schools that operate in Denmark.

EUC Zealand offers several vocational programs for young people including:

- EUX – a combined upper secondary and vocational training program that takes approximately four to five years, depending upon the choice of vocation. The program alternates between theory and practice, and is comprised of several periods of schooling and employment-based learning. The program is organised with interdisciplinary project work, where the foundation subjects of physics, mathematics, Danish and social science are drawn into various projects, for example, involving sustainability.
- HTX – a technology-oriented scientific upper secondary school diploma that takes three years. The HTX consists of a half-year foundation course and two and half years of a specialised course of study. The program is organised with interdisciplinary project work that results in a report and a verbal presentation in relation to the design of a tangible product. The HTX provides a pathway to occupations such as business economist or laboratory assistant through short term advanced courses and to occupations such as a biomedical analyst or a construction manager/designer through medium-long term advanced courses.
- EUD – a vocational education program providing direct access to the labour market as a skilled worker. The program can be undertaken by young people who have completed the nine years of compulsory schooling and by unskilled adults with vocational experience. The EUD is divided into a foundation course and a main course. The foundation course lasts for approximately half year and is concluded with a certificate for the foundation course. The main course lasts for approximately three and half to four years and alternates between schooling and an employment-based training at a business. The program is concluded with an apprenticeship exam, which is graded by a specialist teacher and two external examiners.
- AMU and continuing education courses – programs for developing workplace competencies for skilled and unskilled adults. EUC Zealand offers AMU courses in 14 different occupational areas such as transport and logistics, building and construction or plumbing and heating. Within each of the individual 14 areas there are more the 20-30 specialised courses of 1-10 days in duration. For example, a specialised course may be ‘driving with a trailer’, ‘energy optimisation of buildings’ or ‘Biofuels’.

Accompanied by Roland Østerlund, I met the Astrid Dahl, the Director who took us on a tour of the facilities of the Koege Campus. We then sat down for a broad ranging discussion over a typical Danish ‘morning tea’ – although the term ‘morning tea’ doesn’t do justice to the offering of food and drinks provided – I’m sure the Danes would have a word for it.

We talked about:

- the nature of the vocational programs offered in Denmark, including the level of accountabilities that exist, the nature of expectations of small business compared to larger businesses, and the transferability of skills across different occupational areas
- the relationship of the vocational education programs with schooling and higher education programs
- the challenges of balancing student interest and demand for vocational education and higher education programs with workforce needs
- career planning and guidance approaches
- some of the historical reforms of vocational education in Denmark and how these parallel contemporary discussions and new reforms that are on the horizon.

Some of the things I found interesting were:

- although the programs the school offered were very vocationally focused, the focus of the school was still very much on getting students ‘a good education under their belt’ as a platform for their future rather than necessarily just about getting them a job
- the pithy summation of employer behaviours – ‘hire on hard (technical) skills, fire on soft skills’
- the evidence of the transferability of skills gained from vocational education programs compared to those gained from academic programs. This challenges the common perception that exists in NSW and Australia that vocational programs somehow narrow pathways and options
- the capacity in Denmark of being able to track students through education and training into employment and then to set and monitor employment outcome targets for specific vocational education programs
- the different histories, evolution and natures of commercial (business) compared to technical (trade) vocational programs
- the concerns that career education and guidance programs in compulsory schooling are still based in a paradigm of ‘the one right choice for a lifetime’
- the local educational committees, consisting of equal numbers of representatives from employer and employee organisations as well as representatives from the school’s employees and students. The local educational committees underpin the partnerships between the school and the local labour market and advises the school in relation to programs, instruction and teacher qualification.

Copenhagen Hospitality College

Copenhagen Hospitality College has existed for more than 80 years and is the largest vocational college in the hotel and restaurant field in northern Europe. The college moved to new premises Valby in Copenhagen in 2010. It is known for its strong international ties with many of its students doing all or part of their internships abroad.

Accompanied by Roland Østerlund and Lars Mahler, the Chair of the National Board for Vocational Education and Training I met the Søren Kristiansen, President of the College who took us on a tour of the facilities. We then sat down for a broad ranging discussion covering:

- the dual system of learning in school and learning in work (off the job and on the job in Australian terminology), particularly the most effective balance between the two
- the systems in place run by the local committees of social partners for the approval of employers to be involved in the learning in work component
- the Employers Reimbursement Fund
- the existence of exit points from full vocational qualifications – the issues are similar to the discussion in Australia about skills sets and full qualifications
- the ‘Taximeter’ system for funding vocational education and training schools

- the program focused on innovation in cooking and food presentation. The program appeared to be like a series of Masterchef challenges with clear focus on the innovation and creativity in the dishes they prepared.

The United Kingdom

I had the opportunity to talk to a range of people about the overall education and training systems across the UK and, in particular, the systems that operate in England and Scotland.

SKOPE – Oxford University

The Centre on Skills, Knowledge and Organisational Performance (SKOPE) aims to examine the links between the acquisition and use of skills and knowledge, product market strategies and performance. It has a multi-disciplinary approach from across the social sciences and is based at Oxford University.

While public policy is often focused on ensuring the supply of skills, SKOPE has been looking at the other side – the demand for skills within an economy and how the skills that do exist can be well utilised.

I met with Professor Ken Mayhew, Director, Dr Susan James, Assistant Director, Professor Ewart Keep, Research Fellow and Dr Cathy Stasz, Associate Research Fellow at SKOPE.

We talked about the education and training systems and labour markets across the UK. We also talked about some of the research that the team had been involved in.

What I found interesting was:

- the research on the profile of workforce skills needs and how the needs that continue to exist for lower skill levels sits somewhat uncomfortably with the accepted public policy narrative of the high level skills needs of the ‘knowledge economy’. Is the narrative of “high skills, high value” as the way forward for all economies and all people in those economies robust and useful?
- the adverse impacts and negative perceptions of vocational education that emerged from English school and college performance league tables based on the number of qualifications (subjects) achieved, where vocational qualifications were used to game the system – and the Wolf review response to those issues
- research on the disconnect between the valuing of qualifications in employer recruitment and selection strategies with that espoused by government policy and educational institutions – do employers really value qualifications, including vocational qualifications, when they do their recruitment?
- views on the interest and capacity of employers across the board to either lead, or to invest more in, the vocational training system
- lack of regulation and licensing of occupations such as building compared to our regulated apprenticeship and licenced occupational arrangements in Australia
- research on the utility of Worldskills competitions in career education.

Qfqual

Qfqual (The Office of Qualifications and Examinations Reregulation) regulates qualifications taken at school and by adults (though not higher education), vocational qualifications in Northern Ireland and National Curriculum and early years foundation stage assessments in England.

I met with Simon Perks, Policy Manager and we had a wide-ranging discussion about the English school and vocational education systems. We talked about:

- the directions in which some of the reforms of the English education system were heading
- the roles of qualifications frameworks and credit matrices for young people and for adults
- the impact of school performance and accountability measures

- the expectations and measures of foundation skills as students move through secondary schooling
- the Wolf review of vocational education, the Whitehead review of adult vocational qualifications and the Richard review of apprenticeships

What I found interesting was:

- the uniqueness of the English education system in general, and particularly the existence of a ‘market’ for school and vocational qualifications
- the general move back to more academic expectations and standards for young people, leaving the place of vocational education quite uncertain and problematic
- the common theme of the Wolf, Whitehead and Richard reviews of the need for more industry engagement, particularly in qualifications design
- the emerging view from reviews and government that standard passes in GSCE English and Maths is what is needed to ensure secondary school students have the foundational literacy and numeracy skills they needed for their working lives

National VET Conference – *It’s about work...*

While visiting Ofqual in Coventry, I had the opportunity to attend the *First National Vocational Education and Training Conference at The Skills Show* at the National Exhibition Centre in Birmingham. *The Skills Show* is the brand used by WorldSkills in the UK for the event that hosts the finals of the national UK WorldSkills competitions and the associated experiential skills and careers expo.

The conference was jointly hosted by the UK Commission for Employment and Skills (UKCES), the Commission on Adult Vocational Teaching and Learning (CAVTL) and the Education & Training Foundation. It featured presentations on the conclusions from the work of CAVTL, the recently released review of post-secondary VET in England by the OECD, the recently released review of adult vocational qualifications in England led by Nigel Whitehead, a keynote address by the UK Skills Minister Matthew Hancock and a tour of the *The Skills Show*.

What I found interesting at the Conference and the Skills Show was:

- the congruence of the conclusions from the suite of recent reviews of VET in England
- the seeming self-evident nature of those conclusions, at least from the perspective of a visitor from Australia – more industry involvement in determining occupational standards and competencies; academic versus vocational divide; who pays, state, student or employer; and incentivisation for apprenticeship pathways
- the useful and self-evident way the term “skill ecosystems” was used by a number of speakers at the conference. This was interesting because the concept and term first originated, as far as I am aware, from research by the NSW Board of Vocational Education and Training on the changing nature of work in 2001. However, the term and concept struggled to gain currency in Australia and was replaced by the more amorphous term “workforce development”
- the enormous range of occupations represented at the Skills Show
- the range of activities at the show including *Have a Go at skills* experiences, careers advice, Spotlight speakers, exhibitors, showcase demonstrations and the competitions themselves
- the *Swipe to like* wristbands that allowed the students to swipe their personalised wristbands at any of the displays they were interested in and then access personalised information about those careers and industries on an associated Skills Bank web portal

University of Edinburgh

I met with Professor David Raffe and Dr Cathy Howieson from the Centre for Educational Sociology at the University of Edinburgh. David's research interests are in secondary, further, higher education and training, transitions between education and the labour market and policy initiatives including curriculum and qualifications reforms. Cathy has particular research interests in curriculum and qualifications reform, the role of career education and guidance in the transition process and education and training policy.

We discussed:

- the recent review of vocational education and training in Scotland –the Wood Commission for Developing Scotland's Young Workforce
- the Scottish apprenticeship system based on Scottish Vocational Qualifications (SVQs) and the Modern Apprenticeship Frameworks
- the Scottish Credit and Qualifications Framework (SCQF)
- institutional arrangements and curriculum and qualifications available for young people in Scotland
- the nature of workplace learning and the different roles it can play in socialising young people into the workforce
- recognition of wider learning and the use of e-portfolios.

What I found interesting was:

- the complexities of the Scottish system of curriculum and qualifications 'sitting within and operating alongside' the UK system
- the recurring theme that 'the skills problem' sits as much with the demand and utilisation of skills as it does with their supply, though much discourse about the problem focuses on the supply side
- David Raffe's changed views of qualification and credit frameworks. He identified the significant risk that if they become too 'detailed and micro', while they have great potential flexibility, they become too difficult to navigate. This makes discerning clear and robust pathways very difficult, particularly for disadvantaged learners that most need to see these pathways. We need to focus on developing better structured and more transparent pathways
- Cathy Howieson's co-research showing different roles in the workforce for 'student learners' and 'trainee workers' and how this links to their socialisation into the workforce
- the need to support 'ongoing career management' for young people rather than support for 'just one decision'
- the responsibility Skills Development Scotland has for career guidance that is independent from schools
- the 'My World of Work' careers information websites produced by Skills Development Scotland with versions for under 19s and for adults.

Scottish Qualifications Authority

The Scottish Qualifications Authority (SQA) is the national accreditation and awarding body in Scotland, accrediting qualifications other than degrees and developing qualifications.

Discussions

I was generously hosted by the SQA at their Glasgow headquarters for 4 days in a program of meetings with key staff, visits to a secondary school and further education college and a collegial sharing session/seminar comparing the vocational education programs available for school students in NSW and Scotland.

These discussions covered the:

- curriculum and qualifications available to young people in Scotland, particularly the current reforms called Curriculum for Excellence (CfE)
- initiatives and programs for improving the literacy and numeracy achievements of school leavers within the Scottish curriculum and qualifications structures
- significant role of Skills Development Scotland in Skills Development Scotland (SDS) as the national skills body supporting the people and businesses of Scotland to develop and apply their skills.
- role of Sector Skills Councils in developing national occupation standards for trade occupations
- role of the inspectorate in Education Scotland (formerly Her Majesty's Inspectors (HMIE) in quality assurance and performance monitoring of vocational colleges as well as schools
- Skills for Work courses – which are vocational learning courses focusing on generic employability skills but studied in the context of a range of occupational areas such as health and social care and creative and digital.

St Paul's High School

I visited St Paul's Roman Catholic High School, in Glasgow and had some wonderful discussions with Rosaleen Kennedy, Deputy Head Teacher, and key staff members involved in designing and implementing pathways and transition programs for students. I was accompanied by Laura Dougan from the SQA.

St Paul's High School is a Roman Catholic co-educational school. It has around 800 students in first to sixth form and has been a leading school in the implementation of the Curriculum for Excellence (CfE) in Glasgow.

We talked about:

- the school's curriculum planning under the Curriculum for Excellence reforms
- the range of programs operating in the school to support different groups make good transitions to positive destinations
- the use of personal learning profiles through the Scottish government funded glow education portal
- Skills for Work programs, including the involvement of the Council in providing work placements
- the explicit pathways planning made clear to students as part of the subject selections in Stage 3 and how these map through Stages 4 and 5
- the careers advice and destination tracking services provided to the school by Skills Development Scotland

What I found interesting was the way the school 'owned' and was committed to ensuring "positive destinations" for their students. It was also great to have the opportunity at St Paul's to talk with groups of students who were following various pathway programs and hear first hand their thoughts on what the programs offered them. All the student groups articulated a clear sense of the support they were receiving in understanding the next steps in their education and training journeys and how that understanding was helping their engagement in their learning.

Glasgow Clyde College

Glasgow Clyde College is a new further education college formed in August 2013 from three existing colleges - Anniesland, Cardonald and Langside. Scotland's further education colleges offer vocational qualifications to young people and older adults, including Scottish Vocational Qualifications (SVQs) Higher National Certificates and Higher National Diplomas.

Discussions

I visited the Anniesland campus of the Glasgow Clyde College and met with Eric Brownlie and colleagues. I was accompanied by James Morgan from the SQA.

From our discussions I found interesting:

- the organisation and funding of Apprenticeships, particularly the role of providers as 'managing agents' for apprenticeships
- the pathways identified from vocational education and training to university
- the concept of positive destinations and how this is managed through the college
- funding of VET programs for school students, with similar concerns about the 'double funding' dilemmas (school sector and VET sector) that are so familiar in all the states and territories in Australia
- the strong role played by the Glasgow City Council as the local education authority
- the use of the *My world of work* website service provided by Skills Development Scotland
- the development of literacy and numeracy skills integrated with technical and applied study.

OECD

The OECD is currently undertaking policy reviews of post-secondary vocational education and training under the banner *Skills beyond School*. This program builds on the *Learning for Jobs* policy review, which looked at initial VET, often at upper secondary level and was conducted from 2007 with the final comparative report released in 2010. *Learning for Jobs* included country reviews for Australia, Germany Switzerland and the United Kingdom (England and Wales).

Of the countries I visited during my Fellowship, full country reviews have been done as part of *Skills beyond Schools* review for Denmark and the United Kingdom (England). A short country commentary was also undertaken for Scotland.

These policy reviews are part of the OECD's Skills Strategy, which also includes the Programme for the International Assessment of Adult Competencies (PIAAC), which aims to evaluate the skills of adults in 24 countries including Australia, the United Kingdom (England and Northern Ireland), Canada, the United States, Denmark, Finland, Germany, Japan and Korea. PIAAC directly measures proficiency in several information processing skills - literacy, numeracy and problem solving in technology-rich environments. The first results from the Round 1 of the PIAAC survey were released on 8 October 2013.

The OECD also conducts the far better known Programme for International Student Assessment (PISA) survey, which is a triennial survey, which aims to evaluate school education systems by testing the skills and knowledge of 15-year old students. PISA has been operating since 2000. 15-year old students from randomly selected schools take tests in the key subjects of reading mathematics and science, with a focus on one subject in year round of the assessment.

I met with Simon Field and William Thorn from the Directorate for Education and Skills based at the OECD headquarters in Paris.

Simon is a Project Leader in the OECD reviews of vocational education and training. Simon was part of the OECD team that undertook the *Skills beyond School* review of England. We discussed the directions in the 'marketisation' of vocational education across the world, including the growth of private sector involvement and the challenges of quality assurance in these contexts. We also talked about the funding mechanisms for vocational education and Simon pointed to the 'taximeter' system in Denmark as funding mechanism that encourages qualification completion.

William is a Senior Analyst at the OECD and manages the PIAAC survey. Prior to joining the OECD, William held a wide range of senior positions in the Australian Departments of Education and Employment. We discussed recently released PIAAC results, particularly the Australian results.

Some key results for Australia from the first PIAAC survey were:

- Adults (aged 16-65) showing above-average proficiency in literacy, and problem solving in technology-rich environments compared with adults in the other countries participating in the survey, but only showing average proficiency in numeracy.
- Australia showing a good match between the literacy proficiency of workers and the demands of their jobs.

What I found interesting was that while PISA results have generated much discourse and dialogue in NSW and Australia, and in most participating countries around the world, the PIAAC results seemed to

go largely unreported or discussed. No doubt this is in part due to PISA being well established and having data over a period of time that can show changes in international rankings. It is also interesting to contemplate if this might be due to PIIAC being a pretty good news story for Australia, where bad news stories can be more easily be made out of Australia dropping in the PISA rankings in some areas.

Conclusions and recommendations

A number of common issues and threads emerged as I was undertaking my Fellowship and as I have taken time to reflect on what I heard and saw. These are outlined below with some discussion of the implications for NSW and Australia and with some recommendations for how NSW and Australia might benefit from the experience of the countries I visited in providing programs for developing the work readiness of their young people.

Situated and contextual nature of education and training, but with common themes and challenges

Both from reading in preparation for my study, and in talking with people operating in different countries and systems, I have been repeatedly struck by the way education and training systems are deeply situated in their contexts and cultures. This of course makes the task of drawing out conclusions and lessons for NSW and Australia quite difficult.

The concept of aiming for ‘policy learning’ rather than ‘policy borrowing’ has been important for me in trying to think about what we should do in NSW and Australia. Identifying a particular institutional structure or program that works well in Singapore, Denmark or Hong Kong is unlikely to work ‘as is’ in the Australian context, even if we tried to replicate all the features. The relatively recent Tasmanian experience in attempting to establish a polytechnic institutional structure, but in the end not succeeding, warns us of the challenges of making significant changes in educational and training structures and systems. Yet polytechnics in the Singaporean context and educational ecosystem appear to work well.

There is, however, much commonality in the goals of vocational education and applied learning programs and also great commonality in the issues and challenges faced. So it is probably more a case of what we can learn from how different systems work towards those goals and how they address those issues and challenges, and then seeking to apply that knowledge and understanding as a consideration in the NSW and Australian context.

Some of common themes and challenges in enhancing the work readiness of young people that I come across include:

- matching the outputs of the education and training system to workforce needs
- giving appropriate status to vocational or applied learning pathways and ‘vocational work’
- the deeply held and embedded value positions at the heart of the debates around general, academic and vocational education
- designing systems that can meet the needs of people seeking to move into work as opposed to the systems needed for up-skilling those already in work in a particular industry area.

One of the common themes and challenges for Australia and for all the countries I visited is how they can best match the outputs of their education and training systems with the needs of their workforces, both in the immediate and longer terms.

This was evident in the discussions at SKOPE at Oxford University on the continuing need for lower-level skills in our economies and how this need can be at odds the accepted public policy narratives in all our countries of ‘high aspirations and higher levels of educational participation for all’ and ‘high-skills, high value for the knowledge economy’. It was also identified in Singapore as the challenge of ensuring

aspirations can be meaningfully met with the level and scope of training outcomes matching the profile of workforce opportunities.

Countries such as Denmark, with a strong dual system of learning in the workplace as well as in classrooms and workshops, appeared to have the highest status for their vocational or applied learning pathways and for the occupations they lead to.

Those countries that are more confident in the status of the vocational programs also see more comfortable to allow students to choose a vocationally oriented program earlier. They also tend to ensure that vocational programs have broader “general” education components.

Australia’s industry-led system of training package qualifications developed around occupational roles (and often influenced by industrial and pay level considerations), may not lead robust educational and training pathways for young people.

An interesting question that arises for us when we look at the comprehensiveness of the pathways and the high participation and completion rates in countries such as Denmark and Singapore is whether the structural separation of post secondary pathways for 17-22 year olds might deliver better outcomes than the ‘one-size fits all’ models of senior secondary schooling generally found in Australia?

The critical importance of work-based learning for young people

All the countries I visited regarded work-based learning as a critical part of vocational or applied learning for young people. Everyone wanted to have more work-based learning in their programs and improve the quality and accessibility of those experiences.

The critical factor in delivering on this aspiration is the responsibility that employers and their industry representative organisations take in providing these opportunities. In a country such as Denmark it appears to be an ‘industry-owned’ system, as compared to the ‘industry-led’ system which is the rhetoric of the Australian vocational education and training system.

Recommendations

That work-based learning be a mandatory requirement for all young people undertaking entry-level VET qualifications in Australia

That Australian and state/territory governments commit recurrent funding to coordinate and broker work-based learning experiences for young people undertaking entry-level VET qualifications.

The value in integrating the development of the literacy and numeracy needed for the workplace with vocational education

In many of the countries and institutions I visited there was strong belief in the value of integrating the development of the literacy and numeracy competencies required for the workplace with the development of the specific occupational competencies.

The specification of core skills requirements in the Scottish educational system alongside specific occupational standards is an indication of how this integration might be manifested in systemic structures. At Clyde College in Glasgow that value of literacy lecturers working alongside specialist lecturers was noted as an important in the development of the necessary literacy skills for learners, particularly those that might otherwise struggle in this area.

Recommendation

That plans and programs to address the gaps in the literacy and numeracy competencies needed in the workplace develop these competencies through integration with vocational education programs

The importance of articulating ‘robust’ pathways to occupations across the workforce

Prompted by my discussions with David Raffe at the University of Edinburgh around the risks of qualification and credit frameworks becoming too difficult to navigate when they become too ‘detailed and micro’, I have increasingly come to the view that we need to invest in work to make pathways clear and transparent, particularly those through the vocational education and training sector.

Education and training pathways in Australia have multiplied exponentially over the last few decades.

While most people in the community, including parents, teachers and students, are clear about the pathways young people should follow to become a doctor or a teacher or a licenced electrician, the pathways to other occupational areas or level are not so clear – but they need to be.

This is made even more important in demand driven entitlement systems for post secondary education, such as those in place for higher education and those being introduced for vocational education and training in Australian states and territories where learners are placed in the driving seat and expected to make well-informed choices.

Recommendations

That Australian and state/territory governments commit recurrent funding to mapping and publically communicating ‘robust’ pathways through education, training and work to the full range of occupational areas and levels in the Australian workforce.

The value in educational institutions ‘looking over the parapet’ to ensure positive destinations for their students

To ensure all young people make successful transitions from education and training to productive work, it is important for individual educational institutions take some responsibility for the destinations of their graduates.

One of concepts that most struck me on my Fellowship was the concept of ‘positive destinations’ that was widespread in policy and practice in Scotland. It was part of the accountability requirements for secondary schools and ensured significant attention was focussed on ensuring the programs schools had in place resulted in the destinations of students being the best they could be.

In a different context, programs in West Island School in Hong Kong were also focused on ensuring positive destinations for their students - in their case a wide range of destinations across the world.

I was also struck by the use of the term ‘skill ecosystem’ at the National VET conference in Birmingham – a term that was coined as part of research by the NSW Board of Vocational Education in the late nineties on the future of work. This seems to me to be a useful concept for secondary and post-secondary educational institutions to use to think about how the workplace related skills there are teaching and developing might be needed and used in the workplaces and communities into which their students will move.

Recommendations

That funding and accountability frameworks for secondary and post-secondary educational institutions include accountability requirements for ensuring positive destinations for their graduates.

That Australian and state/territory governments commit recurrent funding to destination tracking programs to support individual institutions and regional, state and national analysis and reporting of the graduate destinations.

The need for ongoing engagement and dialogue between education, industry and government

Ensuring young people are prepared for the world of work requires the crossing of institutional and sector boundaries, for example between schools and training organisations and between education and industry sectors.

In this context, there needs to be ongoing engagement and dialogue around enduring purposeful activities, such as workplace learning, to ensuring ongoing collaboration and as a means of addressing the differences in perspectives that inevitably exist across these boundaries.

A relatively small ongoing investment by government will secure significant ongoing investment and responsibility by educational institutions, employers and industry organisations to preparing young people to find their place as productive members of the Australian workforce.

Recommendations

That Australian and state/territory governments commit recurrent resources to support engagement and dialogue at the national, state and regional/local levels between education, industry and government around:

- providing sufficient, quality work-based learning experiences for young people undertaking entry-level VET qualifications
- developing workplace literacy and numeracy capabilities through integration with vocational education programs
- articulating and communicating ‘robust’ pathways to the full range of occupational areas and levels in the Australian workforce
- analysing and reporting on graduate destinations to help judge the success and make improvements to vocational education programs that enhance the work readiness of young people.