institute for adult learning singapore

*Research Report*

# CET Systems Update Developments in Policy, Systems and Delivery: United Kingdom, Australia and New Zealand

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# Executive Summary

## The Continuing Education and Training Update Reports

This is the second of two Continuing Education and Training (CET) Systems Update reports on developments in policy, systems and delivery of vocational and continuing education in the United Kingdom, Australia and New Zealand. The first report (March 2011) focused on the labour market and skills agendas of the three systems and changing policy, including the relationship of vocational training and higher education. This report focuses on CET learners; teaching and learning; developments in vocational teacher qualifications; new arrangements for quality assurance and CET research.

In the background to this second report the countries are briefly revisited and their systems of vocational and continuing education summarised. The concept of a "converging agenda" is introduced and updates are provided on the first report

- Since the first report, the conservative government's policy agenda has begun to have an effect on the further education and vocational training sector. The leitch targets have been scrapped and the role of the UKCES as a skills formation planning and research agency reduced. Student loans and changed funding arrangements have been announced placing greater onus for training funding on users rather than the government.
- In Australia, the Skills Australia report *Skills for prosperity: a roadmap for vocational education and training* was released in April, firming up proposals for a generous student entitlement system of public funding of training. It also called for a number of measures to improve quality and outcomes of the system. The Australian Skills Quality Agency (ASQA) commenced on 1 July 2011.
- No major changes and developments to the New Zealand vocational training system were identified during the interim period

In this report the developments overseas are more explicitly compared with issues and developments in the Singapore CET system and the second report concludes with an overview of "the state of the field" of vocational and continuing education.

# Observations of Interest

## The observations of interest in the report cover five areas:

### CET Learners

The picture of participation in CET and VET shows a growing emphasis on professional courses in all systems with traditional rank and file trainees in Singapore declining. But disadvantaged learners and marginalised workers comprise a very diverse mix in the other systems with “disengaged youth” an important group. In Australia and New Zealand VET, there are fewer older workers in the system. Singapore’s proportion of CET learners entering with diplomas or above in 2009–2010 matched that in the other systems. The report argues that New Zealand stands out with higher participation of indigenous and disadvantaged workers in skills training.

### Pedagogy – Improving the CET Experience for Learners

Pedagogy is a vexed question in CET with pressures in all systems to move away from “old certainties” and embrace teaching and learning beyond Competency Based Training (CBT) and Competency Based Assessment (CBA). Overseas, workplace learning is stronger than in Singapore which by contrast has a classroom–bound model. Broadening the skills of trainers, reflective practice and e-learning is a theme of teacher development.

### Professionalism and Professional Development of the VET Workforce

This is the largest section of the report given the developments in IAL to chart new pathways for professional development and the introduction of mandatory qualifications for Workforce Skills Qualifications (WSQ) trainers. Both Australia and the United Kingdom (UK) have long had mandatory requirements for vocational teachers and trainers and the report looks in detail at developments in both countries. The teacher “standing” concept in the UK and Australia’s new “skill sets” based Certificate IV are profiled. The concept in Australia of the “new VET practitioner” is noted and similarities drawn with Singapore.

### Quality Assurance and National Regulation

The major discussion of enhanced regulation and quality assurance is focused on Australia where the latest Skills Australia Report (2011) proposes higher standards for Cert IV providers, national moderation of VET assessments, development of a national professional development roadmap for trainers and publication of provider performance amongst a range of measures. The new ASQA will for the first time create national quality assurance standards and regulations for vocational training in Australia.

## CET Research

The report profiles the scope of research agencies in vocational and continuing education and labour market studies in Australia, the UK and New Zealand and briefly reviews the types of research being undertaken and the way in which research policy and agendas are formulated. Ako Aotearoa in New Zealand is profiled together with their efforts to make research on tertiary education more effective are discussed.

# The State of the Field of Vocational and Continuing Education

The second report attempts to draw together the observations and findings in both reports and across the three overseas CET systems and Singapore looking at;

*The Common Heritage and History of Vocational Education* There are many ways in which Singapore and the three overseas systems have taken similar paths in their models of training, in developing employability and generic skills and in coupling the CET skills formation agenda with goals also of improving social mobility;

*The Converging National Agendas for Skills Formation* The report observes a "converging agenda" in the major economic strategy and workforce development reports of the last few years – for productivity improvement, skills targets, high order skills, better employer engagement and also closing the income gap. The report asks whether, we in CET, are able with our present knowledge to respond effectively to these challenges

*The Challenges of Quality Assurance*. As the demands on CET by national governments grow, there are also increasing pressures to ensure that funding is well spent and that quality outcomes are achieved. This is so in Singapore and Australia though the UK appears to be taking a different path. The challenge is to move to outcomes-based quality assurance, which allows more flexibility in curriculum, contextualisation and learning, but still holds trainers and providers accountable

*Evolving Systems, New Methodologies and Bridges to Higher Education* All the overseas CET systems are in the process of change, they are evolving from an "old" model of CET characterised by strict adherence to competency-based training and VET silos separated from the other sectors to more variable systems more closely linked with higher education. This is the path that it is argued Singapore's WSQ system should take as well.

*Differences and Divergence* The report concludes by noting that not all the observations form a common pattern, and there are key differences. The overseas

systems have a more diverse clientele than Singapore's WSQ system and ultimately the nature of the CET system and how it is funded, and how it works is a political decision. Witness the divergence occurring between Further Education in the UK and VET in Australia with the election of a conservative government in the former and a centre-left coalition government in Australia.

As WSQ goes forward these three overseas vocational education and training systems, similar in many ways to the CET system in Singapore, different in others provide rich barometers of the way systems, practices and policies in CET here and overseas are facing common challenges with sometimes similar and other times different solutions.

# Background

This is the second report of a comparative CET Systems Update on the United Kingdom, Australia and New Zealand. It is written with the perspective in mind of the current and emerging issues shaping Singapore's Workforce Skills Qualifications system. In the first report of the project (Willmott, Loke, F. and Ramos, C. 2011a) the history and development of the CET (or as it is more commonly referred to – VET) systems in each country was described, and the common (and differing) features they have with Singapore's development of the WSQ system was discussed. The report went on to provide a series of observations on particular aspects of CET in each of the three countries and drew out points of interest, and some lessons to be learnt for Singapore.

By way of introduction to the second report a few brief comments are reiterated below about the countries selected for study, the focuses and observations made in the first Report and the issues covered in this second Report.

## The Countries

The United Kingdom, Australia and New Zealand were selected for this comparative study for two related reasons. First, these three countries, along with Singapore and several other countries, for example, South Africa and Ireland, have adopted a national systemic approach to CET and VET provision (unlike the US, for example). These systems of vocational and continuing education share many common principles and features with what has been implemented in the WSQ system in Singapore. These include the Anglo-European model of competency-based training; national sector-based skills frameworks and credentialing within a vocational qualifications framework; industry engagement through national sector-skills councils and broadly similar systems of regulation and quality assurance.

Secondly, Singapore's development of the WSQ system was influenced strongly by the Australian and the UK systems, in particular the Australian system. Indeed, the common origins and principles of the Australian Quality Training Framework (AQTF), the National Vocational Qualifications (NVQ), and the WSQ, and their operational similarities, give strong grounds upon which to review how these systems are developing and changing, and how they are addressing similar challenges to those being faced in Singapore in such areas as national skills formation, labour market demographics, funding, systemic reform, professional development of the CET workforce, and in improving learning experiences and pedagogy.

It is worth also keeping a line of sight on the current developments and changes in New Zealand, a country of similar population to Singapore which also has a national adult and continuing education system embedded within a post-secondary

education system not unlike Singapore's with its system of polytechnics and private training providers.

It should be stressed that while these systems are broadly similar, there are also differences that the first report drew out – for example the UK's multiple agencies for certification, regulation and funding in comparison to Singapore's centralisation of these roles "under the one roof" in WDA, and Singapore's greater emphasis on course accreditation. An important difference which the first report stressed was the distinctiveness of the separation of pre-employment training (PET) and CET in Singapore. These pre-employment and continuing education (or workforce development) sectors are merged together in the UK's further education system, New Zealand's polytechnics and Australia's TAFE institutes.

In this regard the review has not touched upon the PET components of these systems but drawn out the issues and developments germane to their "CET" components and traced the implications of these in relation to Singapore's CET sector, and more particularly the WSQ system.

## The First Report

The first report largely took a labour-market, policy development, and systems management perspective. It noted that in all three countries, as with Singapore, recent national reports (Bradley, Noonan, Nugent, & Scales, 2008; New Zealand Government, 2008; Skills Australia, 2010; UK Commission on Employment and Skills (UKCES), 2010) placed new demands on the CET and VET systems in terms of long-term skills formation planning, improving workforce productivity, increasing industry and employer engagement, and posed the challenge for higher levels of integration of the schools, VET and Higher Education sectors. Notably the key strategic directions for change in the reports were broadly similar and many of these same issues are extant in Singapore and have been highlighted in the recent Economic Strategies Report (2010).

Additional imperatives articulated consistently across the reports were to increase the national employment rate through keeping older workers employed; improve the skills of marginalised workers; improve the transparency and accountability for public funds in vocational training and achieve improved responsiveness of employers to skills use. The first report concluded that in all three countries the arrangements, policies and funding, indeed the systems as a whole, of adult vocational training were in various degrees of transformation which was not yet settled and were adjusting to both political change and the uncertainties of the emerging post global financial crisis environment.

# The Focuses and Themes Addressed in the Second Report

This second report, which should be read in conjunction with the first report, focuses on a different set of issues which in summary are less about systems and more about the learner and learning, professional development and research. This report, unlike the first, does not take a country-by-country descriptive approach but rather looks at specific issues. These are set out under the broad rubric Observations of Interest and comprise the main body of the report. The first of these concerns **learners** and the report asks who the adult and vocational learners are and whether they are changing. It looks at the extent to which other systems are addressing the needs of marginalised workers, and whether, like Singapore, other groups such as professionals and executives are a new priority.

The next focus is around **pedagogy**, subtitled "improving the CET experience for learners". It looks at how CET engagement is changing, for example the extent to which learning outside the classroom – in the workplace and at home – is becoming the norm, and the role of technology in the CET learning experience. The third theme is around the professionalism and professional development of **the CET workforce.** To what extent is the current emphasis in Singapore on professional development and credentialing of trainers and adult educators also evident in the UK, Australia and New Zealand? Or are there different perspectives on this issue? How is the issue of minimum professional standards being addressed?

The fourth subsection is more systemic in character and focuses on **quality assurance and national regulation** in which there are significant developments currently occurring in Australia. A related question concerns the extent to which emerging regulatory arrangements are common to or are creating stronger linkages between vocational and higher education.

Finally, the paper turns to **CET research.** This of course has particular resonance with IAL as the Institute has established MOUs with the major and well established vocational education and training research centres in all three countries. The focus of CET research in the UK, Australia and New Zealand, and the commonalities with our CET research priorities here in Singapore are of interest. This section examines some of the dilemmas in setting research priorities and how, in New Zealand Ako Aotearoa is exploring how vocational and continuing education research can be made more effective in its impact on policy and practice.

The last section of the report draws together the first and second reports by attempting a summary update of the **State of the Field of Vocational and Continuing Education** in the UK, Australia, New Zealand, and Singapore and by makes an assessment of the challenges facing CET – or VET in the years ahead

# Some Updates on the First Report

While only a few months separates the completion of the first and second reports, it is noteworthy that a number of changes and developments have occurred in the interim in the countries under comparison. In the UK, the impact on the further education system of the new conservative government is becoming clearer. For example in its Skills for Sustainable Growth: Strategy Document the UK Department for Business Innovation and Skills (2010) sets out the new agenda for skills, reflecting the workforce development and industry policy of the new Conservative government. This includes the abolition of the Leitch skills formation targets, the abolition of Regional Development Agencies, the introduction of a student loans scheme in further education (similar to that in higher education) and major changes in the role of the UKCES.

The report notes:

> We will abolish the Leitch targets and the machinery of centralised control set up to meet them… We will change the focus of the UK Commission for Employment and Skills to become a true vehicle for economic growth and social partnership, with employers, trade unions and others coming together to give effective leadership to business on skills…(p.13)

Elsewhere in the report it focuses attention, for example on high performance workplaces and tasks the UKCES "to work with leading employers, Sector Skills Councils, trade unions and other representatives of workers to develop a pledge setting out there commitments to work together to create high performance workplaces" (p. 46). The BIS report still advocates the broad agenda of the workforce development articulated early in *Ambition 2020* which includes outcomes relating to productivity growth, increasing numbers of skilled people, increased investment in training, reduced skill deficiencies and improved social mobility (ibid, pp. 59–60) but with progressive reduction in public funding of further education and less "centralised" skills planning.

The new policy also focuses specific attention on improving the literacy and numeracy of workers, including migrant workers, noting that 16 percent of the working age population, equivalent to 5.2 million people, did not have functional levels of literacy (p. 9).

Perhaps the most important changes noted in the report relate to the introduction of a student loans system in higher education and that, with the exception of basic skills training and the first NVQ level two qualification for under 24-year-olds, and some targeted programmes for the unemployed, further education will be co-funded by student fees, with, from 2013/2014 student loans being introduced for individuals over 24 years old.

In Australia, Skills Australia has now published its review and recommendations to the Australian Government on the future of the VET sector (2011) *Skills for Prosperity: A roadmap for vocational education and training*. The report has firmed up a specific recommendation for the vocational and continuing education sector to move to a fully demand-driven model through vocational learning entitlements which would allow VET students freedom to choose courses of study under a "voucher" styled funding model rather than respond to set numbers of funded course places. The proposed scheme will provide full (100 percent) subsidy for courses to Certificate III level and partial subsidy for Certificate IV and above. It also recommends that the previous policy of permitting subsidisation of only the first qualification at a particular level be discontinued.

In the earlier report the concept of convergence of the UK, Australia, New Zealand, and Singapore around labour-market planning, the establishment of skills targets and the push into productivity-focused training was apparent. However, in the case of the UK, since the election of the Conservative government the earlier centralised research-based skills planning and the key role of the UKCES in this has diminished, and it seems that in terms of funding and support for vocational and CET students, as with the picture in higher education, the UK is moving in the direction of reducing the public share of investment in the sector, while the Australian government is increasing it.

The Skills Australia report also recommends substantial reform of the current Australian quality assurance arrangements for VET including more stringent controls around the quality of the Certificate IV in Training and Assessment. These developments are reviewed in more detail later in this update.

Another new development proposed relates to foundational and generic skills. In Recommendation 19(b) (Skills Australia, 2011, p.19) the report proposes ongoing support for the National Foundation Skills Strategy and in Recommendation 19(c) that

> The Australian Government develop as a priority a dedicated national bank of foundation skills units and qualifications at a range of Australian Qualifications Framework levels, owned and maintained by Innovation and Business Skills Australia on behalf of all industry skills councils.

It is suggested that IAL and WDA, especially the Generic Skills Division of WDA keep a watch on this development.

No new developments in relation to the New Zealand Skills Strategy were identified since the last report and the major focuses taken up in this report in relation to New Zealand concern the work and policy in relation to participation in continuing education and training of indigenous and marginalised groups – reflecting far higher participation rates than Australia, and the work of Ako Aotearoa – The National

Centre for Tertiary Teaching Excellence in vocational and higher educational teaching and learning research. It is noted however, that Dr Peter Coobear, the founding Director of the Centre and a driver of its research profile is leaving for another position this year.

# Interest

## A Note on the Comparative Approach

In drawing out comparative observations from the UK, Australia and New Zealand the report searches out changes, developments and perspectives of interest to Singapore rather than working through a particular focus in depth in each country. This means that the report may not treat each country equally in terms of the attention given to different focuses or issues. Thus, for example, the report takes some time to unpack what seems a complex set of arrangements in the UK and Australia around mandatory vocational educator qualifications because of the currency of this issue in Singapore at present and the changing nature of these requirements. The concept of qualified "standing" in the UK and the new approaches to the Certificate IV in Training and Assessment are of particular interest.

On the other hand most of the discussion of the wider quality assurance and regulation issues focuses on Australia where major changes in quality assurance are occurring and new regulatory bodies are being established. The report looks closely at Ako Aotearoa, the Centre for Teaching Excellence in Higher Education in New Zealand which has many functions in common with IAL. It provides a good case study of a research centre that is attempting to improve the focus and impact of its research on both methodological excellence and potential for application in practice and policy.

In some areas of the report it is difficult to provide a current picture of the situation in the UK as many aspects of further education and vocational training are in flux due to the change of government. This was touched upon earlier in the update on the first report.

Notwithstanding these points it is hoped the reader of this, and the earlier report, will have a better understanding of the three adult vocational training or CET systems most similar to Singapore's. This ought to put the reader in a better position to judge the extent to which issues emerging in the CET system in Singapore are paralleled overseas, whether we can learn from how the UK, Australian or New Zealand systems are developing and responding to global issues, and how well Singapore's CET system stands up against international comparison.

# CET Learners

While in general terms, CET serves the needs of working adults seeking skills upgrading, either through their own initiative or through their company, increasingly CET learners are becoming more diverse. Singapore, the UK, Australia and New Zealand all have mandates to support and assist low wage skilled workers and the unemployed. In Australia, New Zealand and the UK, the marginalised and disadvantaged group which are supported by adult and continuing education is much more diverse including underskilled and "disengaged" school leavers, migrants, indigenous populations and those seeking "second chance" secondary education. This attention extends the traditional CET, or VET, sector, which has generally served rank and file workers. Recently, however, there has also been increased attention on professionals and executives. The focus given to these different types of learners will be discussed below.

## CET Learners in the WSQ System

Since records were kept until December 2010, a cumulative total of 606,365 Singaporean workers have participated in WSQ training, in the process obtaining 1,784,832 Statements of Attainment in nearly 14,000 different courses. During the period from 2005–2010 32,556 WSQ qualifications were awarded across 24 different industry or generic skills sectors (WDA Singapore Workforce Development Agency, 2010).

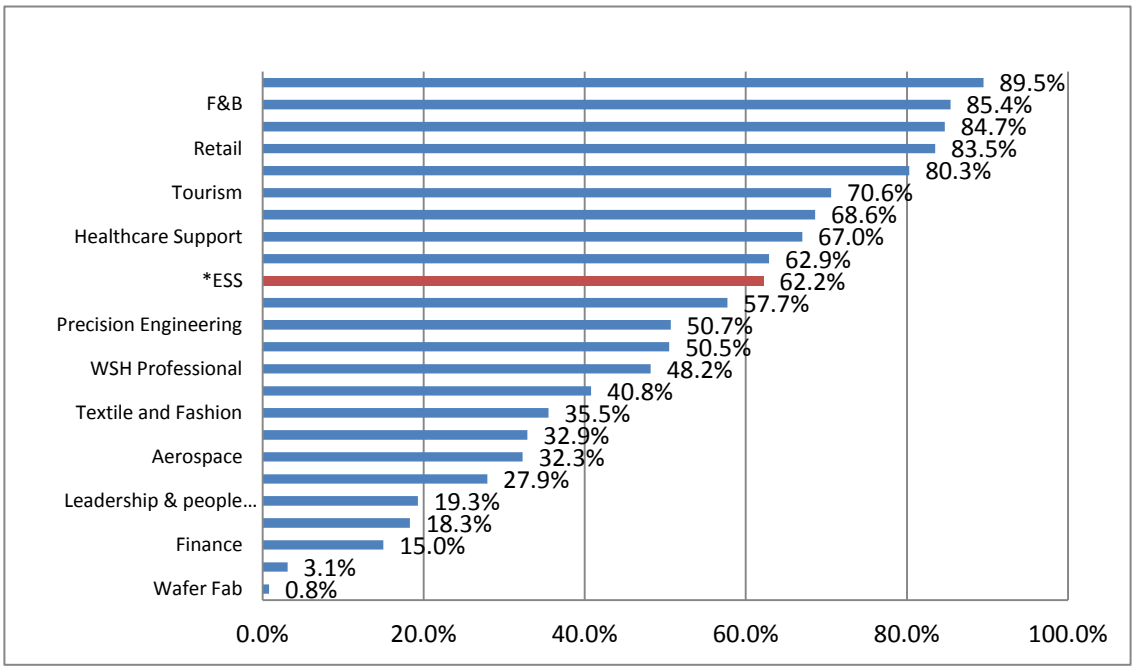
As a background to this part of the review it is useful to look more closely at who in Singapore are WSQ learners. In particular to what extent has CET been the vehicle for skills upgrading of particular cohorts, for example marginalised or lower skilled workers? What is the age profile of WSQ learners and to what extent is the WSQ system attracting professionals and executives? Is this pattern of participation changing as the WSQ system matures? A question of particular interest is whether different CET learners' cohorts are being treated differently. This part of the review will compare the profile of CET – adult vocational learners – in Australia, the UK, and New Zealand with the picture that emerges of CET learners in Singapore. One issue which will be explored in all countries is the extent to which the sector is addressing the needs of different marginalised and "at risk" workers. More generally the comparison will explore the diversity of CET learner participation across countries, from marginalised workers and the unemployed, to high income professionals.

In the study of Employability Skills (Willmott, 2011b) data on the participation of low skilled workers in WSQ was examined. The data illustrated in Figure 1 shows that overwhelmingly WSQ courses are attended by low skilled workers. The percentage varies from 89.5 percent in security training and 85 percent in F & B to 15 percent in Finance, 3.1 percent in Info Comm and less than 1 percent in Wafer Fab. Employability skills modules enrolled 62 percent LSW. Harris (2010) showed that 69

percent of all WSQ graduates had O level or below qualifications – by definition low skilled. The most recent WDA data shows that in the three highest enrolled frameworks – Employability Skills, Food and Beverage Services and Service Excellence 70.5 percent of participants were low skilled workers. Figure 1 shows the proportion of Low Skilled Workers across WSQ training 2006–2010.

**Figure 1.** Proportion of Low Skilled Workers Undertaking ES (WPS) Courses 2006–2010




*Source: Willmott, 2011b, p.77*

Harris also found that WSQ graduates were overall 56 percent male and 44 percent female, however there was wide gender variation in courses from those with over 90 percent males NICF, Process Industry and Precision Engineering to over 90 percent females in HR and Floristry. The age spread was 32 percent (40 and over), 18 percent (30–39) and 32 percent 29 and below.

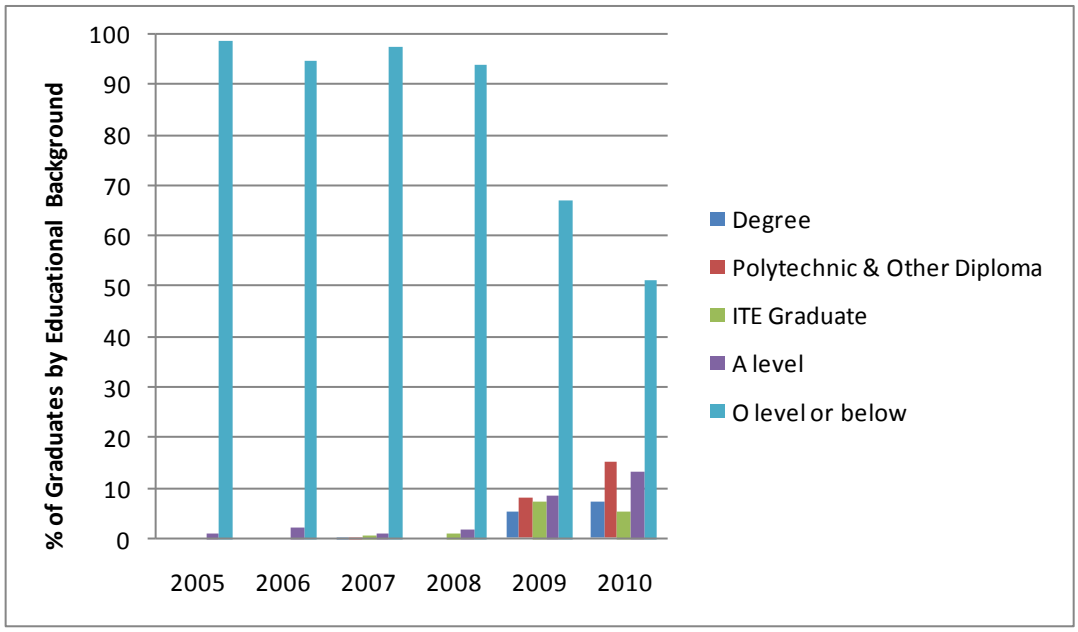
In the Harris study (2010) 13 percent of graduates were Professional, Managers or Executives (defined as having a Diploma or higher). The PMEs were skewed heavily towards some frameworks Finance, Creative Industries, Textile and fashion, and HR and were virtually non-existent in Retail, ESS, Security Cleaning, Service Excellence and Healthcare Support.

Notably the Singaporean CET age profile data is skewed towards older workers. The most recent WDA data (WSQ Quarterly Report, March 2011) shows that in the three largest enrolment frameworks (see above) 46.2 percent were 40 or above. The pattern varies by framework from 82 percent (Cleaning), 66 percent (Floristry), 56 percent (Landscaping) and 54 percent (Security) to 19 percent (Aerospace and Wafer Fab) and 23 percent (Finance). It can be seen from these data that older worker

participation tends to be highest in training associated with low wage/low status jobs and lowest in new industries and professionalised sectors.

A more interesting analysis of participation in WSQ can be made by looking at changes in patterns of participation over the period 2005–2010. This shows that the clientele for WSQ is changing. As illustrated in Figure 2 using WDA Skills Connect data, total participation of people in WSQ with a degree has grown from zero in 2005 and 2006 to 688 in 2009 and 600 in 2010. Participation of those with a diploma shows similar growth from zero in 2005 and 6 to 1087 in 2009 and 1274 in 2010. Participation of people with A-level qualifications has shown similar growth. This accords with the surge in PME engagement with WSQ during the downturn under the Singapore Programme for Upgrading and Resilience (SPUR) subsidies (the argument being the downturn hit PMEs harder than rank and file). It is also interesting to note that the recent Economic Strategies Committee (ESC) Report recognised the importance of CET engaging with the PME group. This data clearly shows that this is already occurring.

**Figure 2.** Changing Patterns of Participation in WSQ Courses by Education Level 2005–2010




*Source: WDA Singapore Workforce Development Agency, 2010*

Collectively this data presents a picture of CET learners in Singapore. The important observations are that they are dominantly lower skilled workers undertaking courses in big numbers in the generic areas employability skills and customer service and in relation to operator jobs in Security, Cleaning, F & B, Retail, Tourism and Generic Manufacturing. But this is changing and in 2009 and 2010 there has been a decline in low skilled worker participation – to now a little over 50 percent and rapid growth in participation of PMEs – people with Diploma and Degrees, and also those with A

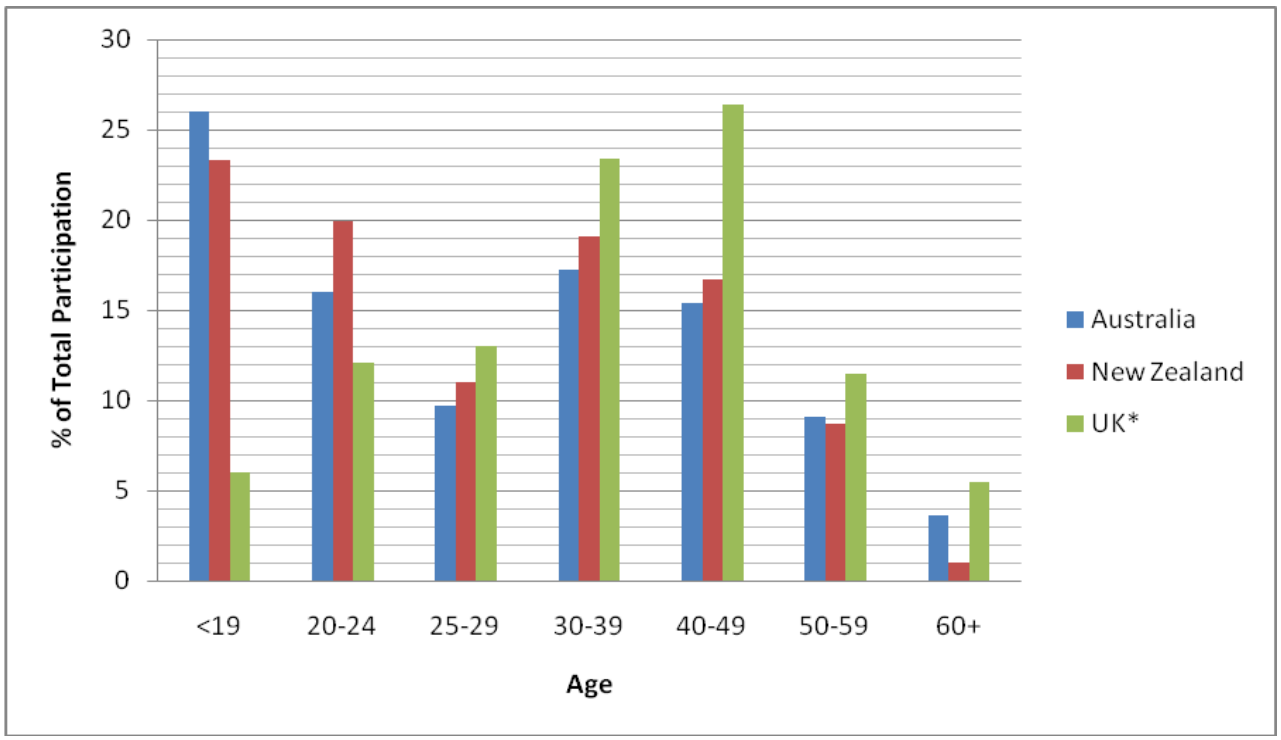
levels. This is likely to be due to several factors – the coming on stream of many new frameworks in the professional fields, the downturn and its impact on PME employment and the introduction of new courses targeted at PMEs as a result of the ESC Report and its proposals in relation to productivity improvement.

## CET Learners in Australia, the UK and New Zealand

In looking at the profile of CET or vocational and continuing education learners in the UK, Australia and New Zealand it is important to remind ourselves that in these systems CET and PET are not structurally separated as they are in Singapore and that VET learner data in these countries will include school leavers entering vocational courses in further education, TAFE and the New Zealand polytechnics. Thus, for example the age profile of CET trainees in the WSQ system, as shown earlier is skewed to older workers. School-leavers under 18 are not able to enrol in WSQ courses – they move into ITE, the polytechnics or universities.

Figure 3 gives age profile data of participants in the vocational and continuing education sectors in the UK, Australia and New Zealand. These data and comparisons need to be viewed with caution as the Australian and New Zealand data shows all VET participation – hence the high rates of participation of young school leavers in the system (as CET and PET are combined in VET in these countries). The UK data shows only those who undertook "job related training" and does not as far as the data can be interpreted include school leavers in further education – thus participation of people under 24 is lower. However, it is also noteworthy that in all three systems shown, the VET sector has a long "tail" of older worker participation (28 percent of VET participants in Australia were 40 and above in 2008 (Australian Year Book, 2009–2010) and 26.3 percent in NZ were over 40 (NZ Ministry of Education, 2008).

**Figure 3.** Age Profile of CET and VET Participants Australia New Zealand and the United Kingdom 2007




**Does not include Further Education.*

*Sources: Australian Bureau of Statistics, 2010; Department for Education, 2011; Mahoney, 2009*

The comparative analysis of participation which follows will not further explore the details of mainstream school-leaver participation in VET. The one exception is that of disengaged and alienated youth (sometimes referred to as "youth at risk"), not a big issue in Singapore but a major issue for the VET sectors in the three systems which are examined in this study. There are two main focuses in the discussion below; these are (a) participation of disadvantaged or marginalised people and (b) the general pattern of participation.

*Participation of Disadvantaged and Marginalised Populations*

While the major disadvantaged or marginalised group whose participation is tracked in the WSQ system is the low-skilled/low-wage worker cohort, in the UK, Australia and New Zealand the profile of disadvantaged participants in the VET sector is far more diverse. These groups, for which generally specific targeted access programmes exist, usually with special funding and support arrangements include:

- In Australia and New Zealand **indigenous people** (Aboriginals and Torres Strait Islanders in Australia and Maori and Pasifika in New Zealand);

- In all three systems **migrants, new arrivals and refugees** for which targeted and funded English language and literacy and employability skills support programmes are available;
- In all three systems **disengaged, alienated and "at risk" youth and young offenders**. This group may partly be absorbed into mainstream courses but increasingly special programmes are designed to address this group;
- In Australia, particularly, and New Zealand **regional and isolated learners** are serviced by organisations such as OTEN (The Open Training and Education Network) in TAFE NSW and The Open Polytechnic in New Zealand;
- Programmes for **incarcerated persons** in prisons and youth training facilities;
- **Unemployed job seekers** and **long-term unemployed** undertaking basic skills courses including, literacy, numeracy and employability skills programmes, usually under special funding and possibly income support arrangements; and
- In addition, though not technically vocational, education, but clearly part of the mix of adult and continuing education are the **second-change adult matriculation and foundation programmes** for adults who did not complete secondary schooling.

What is clear from this overview, and the available participation data is that the VET sectors in Australia, the UK and New Zealand have a complex mix of people and while serving to provide skills training for employment and industry and development, they also perform an important social function, often working closely with welfare and community service agencies, correctional services, departments of immigration and ethnic or indigenous affairs.

In the United Kingdom, for example the new Department for Business Innovation and Skills Strategy document (2010) comments "we will continue to support those who left compulsory education without basic literacy and numeracy skills through providing free training through the further education and skills system" (p. 9). The document indicates free training in basic skills will be extended to all individuals and special funding provisions for individuals who are unemployed or on active benefits.

The strongest arrangements and most successful engagement of indigenous populations in education and training are evident in New Zealand. Coolbear (2010) reports higher levels of participation in New Zealand vocational education of Maoris and Pasifika than Europeans; in fact Maoris comprise the highest number of people taking up "training opportunities". Even though they represent only around 14 percent of New Zealand's population they comprised 40.5 percent of training

opportunities (Mahoney, 2009). There are a number of factors associated with this including the presence of Wananga (indigenous education and training centre) special funding and ongoing priorities in New Zealand to advance Maori and Pacifica success in VET and support for disadvantaged learners who have not been served well by New Zealand's school system. Figure 4 shows participation rates of European, Maori, Pasifika and Asians as a percentage of the ethnic group population in New Zealand, 2009.

**Figure 4.** Student Participation in Tertiary Education in New Zealand as a Percentage of Ethnic Population Group 2009

| Level of Study | NZ European | NZ Maori | NZ Pacific | NZ Asian |
|---|---|---|---|---|
| Certificate L 1-3 | 3.7 | 8.7 | 4.9 | 3.3 |
| Certificate L 4 | 1.6 | 3.9 | 2.6 | 1.3 |
| Diploma L 5-7 | 1.9 | 2.7 | 2.0 | 1.7 |
| Bachelors + Graduate quals L7 | 4.1 | 3.3 | 3.2 | 5.6 |
| Postgraduate L 8-9 | 0.7 | 0.7 | 0.6 | 1.8 |
| Total | 11.4 | 17.1 | 12.1 | 12.5 |

*Source: Coolbear, 2010*

## *General Patterns of Participation*

In Australia in 2009 12.3 percent of VET trainees had diploma or higher prior qualifications and 34.2 percent entered with Year 11 or below as their highest education level – equivalent to the Singaporean definition of "secondary or below" – which, in Singapore is the definition for low-wage workers. This represents about half the Singaporean proportion of low wage workers. 20.3 percent of Australian VET students were studying at Diploma or higher in the VET system. Other data include 3.7 percent indigenous and 16.1 percent were classified as being in the most the disadvantaged quintile of the Index of Relative Socio-Economic Disadvantage (NCVER, 2011).

Data from the UK on participation in further education and training is not comparable to that of Australia and New Zealand (for reasons noted above) as students in Further Education and Job Related Training are treated separately. The latter includes all training not just certified training under the NVQ. We might conclude from this that vocational education in the UK divides neatly into PET and CET, but this not so. Of the 2.49 million students in Further Education , 51 percent of the total FE cohort are in the over 30 group so we may assume there is considerable overlap with the "job related training cohort" (but these data sets are not broken down further). Under job-related training data the proportion of older

workers, 40+ is higher in the UK than in Australia and New Zealand at 43 percent of participation in job-related training (Department for Education, 2011).

Due to data inconsistencies and a lack of data in many areas of a comparable kind it is difficult to draw precise comparisons in many areas, however:

(i) In terms of total participation; in Australia in 2007 1.665 million people undertook publically funded VET training either in TAFE or private providers, about 7.5 percent of total population. In New Zealand, 297,000 trainees attended polytechnics, private providers or Wanangas, a slightly higher proportion (8.4 percent) of the total population. The 3.447 million workers undertaking "job-related training" in the UK represents 5.7 percent of the UK population but as noted above this figure is not disaggregated from the 4.8 million in the UK who attended further education colleges so the figure is not directly comparable with those from Australia and New Zealand.

(ii) While CET learners in these countries span the whole age profile, compared to Singapore (at around 50 percent) there are fewer older workers (40+) undertaking CET in Australia (28 percent) and New Zealand (26 percent). However the proportion of older workers in "job related training" in the UK is comparable to Singapore at around 43 percent.

(iii) VET students by highest previous qualification are, historically, more educated and study higher qualifications, diplomas and advanced diplomas, in Australia (often to articulate as mature students into university) than in Singapore's WSQ system. The proportion of "low wage workers" in Australian VET is about half that of Singapore. It is noticeable however that the proportion of PMEs in WSQ has risen rapidly in the last two years and is comparable in 2009–2010 with the proportion shown in the Australian data.

(iv) There is a high incidence of "disadvantage" in VET participation in Australia (this specific socio-economic indicator relates mainly to residential location, not necessarily income or social situation) meaning people living in poor or isolated areas have a high incidence of enrolment in VET. By comparison Aboriginal and Torres Strait Islander engagement with vocational training is low in Australia, compared with New Zealand which is one of the most successful countries in the world in terms of indigenous participation in post secondary education.

# Pedagogy – Improving the CET Experience for Learners

## CET Learning in Singapore

In Singapore's WSQ system, learning is shaped strongly by the nature of the competency standard on which the course module is based and by the accredited curriculum for the module or course. Related components in the curriculum development and delivery process shaping the learning experience are the Curriculum Training and Assessment Guide (CTAG), the Assessment Plan (which forms part of the course accreditation) and formal lesson plans which are also normally included in the curriculum materials subject to accreditation. Course developers are normally also required to prepare a Facilitators' Guide and a Learner Guide, the latter covering advice on the instructional programme, learning activities and assessment points provided to trainees.

Strict limitations were set in terms of contextualisation of the training to a maximum variation from the accredited curriculum of 20 percent. There is consideration of broadening these limitations in some frameworks with calls from employers for higher levels of contextualisation at the industry and company level. Training providers are audited under the Continuous Improvement Review process every 1–3 years depending on the standing and performance of the provider. All Approved Training Organisations (ATOs) and CET Centres are subject to the course accreditation system though for some high performing CET centres course accreditation may occur more broadly or en bloc. National CET Institutes, polytechnics and ITE are self-accrediting providers.

Delivery under the WSQ system's quality assurance system is thus tightly controlled and though this is being mitigated to some extent in the CET centres, overall the accreditation and audit system has sought quality at the expense of flexibility and contextualisation of training. Recent research on the Employability Skills programmes (see Willmott, 2011b) revealed very limited contextualised training or workplace based training. Bound and Lin (2010) have shown that WSQ training is overwhelmingly classroom-based while employed learners related that most of their learning happened in the workplace. "Structured vocational courses" were rated as one of the least useful means of learning new skills. Other forms of "non-traditional" learning such as the use of technology to support online, mobile and other self-directed forms of learning, and learning based on mentoring and coaching are rarely observed in the current WSQ system.

While there are over 200 company-based approved training providers delivering WSQ training "in-house" to employees, extensive research by IAL has revealed similar constraints and inflexibility displayed. Most in-company training is also carried out in in-company classroom environments. The case studies conducted in the hotels and F & B sectors (Bound & Lin, 2010; 2011) showed that the most

effective learning occurred through learning on the job. Bound and Lin (2011) analysed the relationship between company based classroom training and the company workplace and showed that the connections between formal learning (in the classroom) and the actual performance of work (in the workplace) were rarely drawn. When this did occur learning was more effective.

And so a picture emerges in Singapore, even in company-based WSQ training, of learning and pedagogy which is heavily classroom based and in which practice is constrained by a reliance on traditional face-to-face instructional modes and a quality assurance and course accreditation system which limits variation from the accredited curriculum and lesson plans, and responsiveness to individual client needs. This contrasts with the approach to competency-based training and assessment in the UK where in the NVQ there has a strong association of competency-based assessment with assessment in the workplace based on authentic work performance and where training may be customised to specific workplaces.

The preponderance of classroom-based training in Singapore is shaped to a considerable degree by the interpretation of competency-based training made in the WSQ system and the way trainers have been trained in the ACTA course. Thus the doctrine of "competency" has adhered strongly to the classic Anglo-European concept of expertise in a Taylorist, predictive task sense. It could be argued that this has not surprisingly led us to a model of delivery based on uniformity of teaching to the agreed assessment and lesson plans with little scope for reflective practice and a reluctance to contextualise "too much" (in case the contextualisation limits are breached). In the UK and in Australia's apprenticeship system the doctrine of authentic work performance is stronger. It is also the case that more generally, in Singapore's post-secondary (PET) education system classroom and institutional teaching is the dominant mode. Singapore does not have a strong tradition like Germany, the UK and Australia of an on-the-job and workplace training.

In Singapore we have begun to question the universal application of competency-based training and assessment which is at the heart of the WSQ system. However, this departure from the norm is cautious and still limited. The review now turns to developments in pedagogy and the vocational learning experience in the UK, Australia and New Zealand.

## Pedagogical Trends in the UK, Australia and New Zealand

This section is concerned with innovative pedagogical trends in the UK, Australia, and New Zealand. While the pedagogical trends mentioned are in practice, they do not necessarily reflect what is going on in the wider VET sector. They are standout initiatives that practitioners and VET systems, both in Singapore and elsewhere, can aspire towards as they seek to improve and evolve the experiences of their learners. Although practitioners cannot change the system, they can change the way they

work in it (Hillier, 2009). Innovative practitioners in the UK, Australia, and New Zealand are pushing the boundaries and changing many of the ways they teach and train[1]. This is largely in response to meeting client and learner needs in a changing global environment and keeping all parties, including themselves, engaged in their effort to learn.

The main innovative pedagogical trends seen in these countries involve: work-based learning; using e-learning technologies; assigning authentic learning tasks; peer learning; and personalising the learning experience. All of these developing trends are a result of adult and vocational educators who actively think about changing their teaching/training approaches and who are reflective, responsive and respectful of learners, closely engaged with local enterprises, and involved in collaborative work with fellow practitioners. Such traits, and the willingness to put their existing understanding of things at risk, are the cause of changes in pedagogical approaches that we can see today (Figgis, 2009). The main trends of interest for this paper, which will be discussed in greater detail below, are those of workplace learning and e-learning.

## Workplace Learning and E-Learning

Workplace learning is not new, but there has been increasing effort to identify learning strategies that work and that do not work. In the UK many employers are reluctant to implement work based learning strategies as the direct benefits are not apparent enough and they can be disruptive to work flow (www.parliament.uk, 2011). This was also acknowledged as an issue in Australia. This stance by employers, though, has now led to one of the more integral changes in work based learning – that of engaging and involving the employer so that they can direct and understand effective workplace learning better. In the UK many work based courses have also evolved from partnerships where the curriculum is controlled by the tertiary institution and the content designed by the employer. In such courses the learner is also a full time employee (Hillier, 2009, p.15; Lemanski, Mewis, & Overton, 2011). The way this works is through employers being put in touch with training providers through brokers who carry out skills needs analysis for organisations, which are then translated into learning tools and implemented in the workplace. The more intense involvement of employers is one of the most important changes for successful work based learning in the UK and Australia. With the support and input of the employer, learning tasks can be tailored and integrated to suit more specific

[1] A word of warning from Hillier (2009, p.9): "I have a healthy skepticism about the way that many reports, websites and networks promote their activities. In other words, we hear and see the good news but rarely those aspects of projects that didn't work, and we're not told about the long hard slog to get things right. It is important, therefore, for readers to follow up some of the suggestions themselves…to pursue both the "what works" and the "what didn't".

or broad based needs and learners are supported to dedicate time to gaining new skills.

As mentioned above, much workplace learning in Singapore is done in the classroom and is not necessarily work based. Innovative adult educators (AEs) in Australia are taking learning in workplaces outside the classroom environment and are even going beyond informal learning. AEs are using people's active and natural engagement in their work as the primary vehicle for credentialing learning. This is an extreme form of an authentic learning task where learners are motivated by tasks that mimic real world challenges; in this case, however, they are not "mimicked" tasks, but actual ones. This type of workplace and work based learning does not disrupt regular work patterns. In order to accomplish such training an external registered training organisation must take the learner onto "new and difficult terrain" where they will experience a "huge mental leap". Here the educator must understand and work within the constraints of the workplace culture and the internal politics (Figgis, 2009). Figgis (2009) also points out however, that learning while working is not always the best option. Workplaces provide distractions and pressures that inhibit experimentation and making mistakes, which greatly interfere with the learning process. The stakes can be higher when "real task" work-based learning is conducted.

The use of technology to learn has also become a major concern over the past decade or so. Most vocational education providers in the UK, Australia and New Zealand have now incorporated some elements of e-learning into the services they offer (Davis & Fletcher, 2010). This is because technology as a learning tool is attractive – it can be flexible, interactive, engaging, and mobile – and our more technologically savvy world is demanding it. It has also been said that e-learning is particularly suitable for mature students who are self-managing (New Zealand Council for Educational Research, 2004). The open embrace of technology into "21st century pedagogy" is both a reaction to client demands, and "21st century characteristics" that seem to ask for the flexibility and engagement of e-learning. More information is presented in Table 1.

**Table 1.** Characteristics of Learners

| 20th Century Characteristics | 21st Century Characteristics |
|---|---|
| Conforming | Ingenious |
| Stable | Agile |
| Quality controlled | Quality assured |
| Subject based | Project based |
| Delivered wisdom | User generated content |
| One size fits all | Personalisation |
| Individualised | Community/collaborative |
| National | Global |
| One to many | Peer-to-peer |
| Interactive | Participative |
| Curriculum centred | Learner centred |
| Retaining | Critiquing |
| Teaching | Learning |

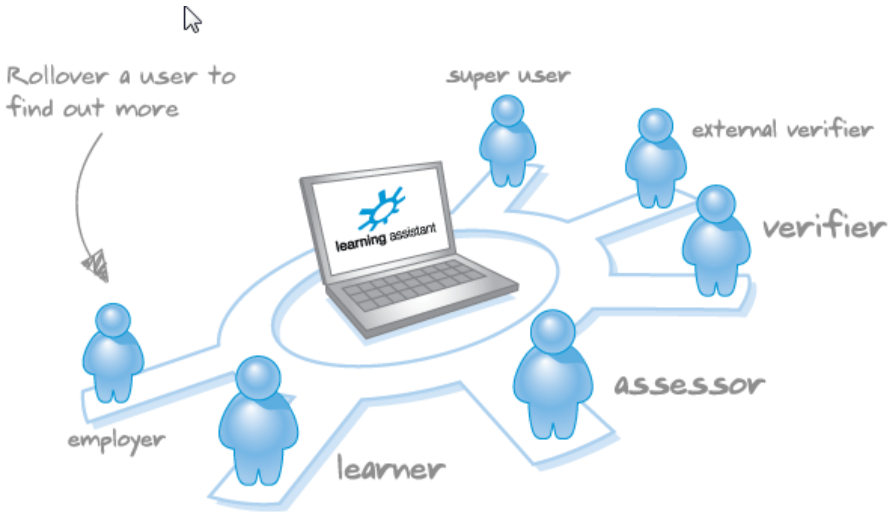
*Source: Stephen Heppell, no date, in Walsh, Lemon, Black, Mangan, & Collin, 2011, p. 9*

As mentioned briefly earlier in the report, e-learning tools have been gaining particular emphasis in Australia and New Zealand for reaching disengaged youths (whose lives are apparently closely entwined with technology[2]) and learners in regional areas (Hillier, 2009; Walsh et al., 2011). Beyond this, many industries and workplaces also use e-learning. This is done to optimise the flexibility and access of training courses, which can easily be slotted into (or around) work requirements. Some of these require individual learning plans that take account of business objectives and keep the employer engaged, while others are broader reaching and are supported by larger industry bodies (for example, in Australia the Australian Flexible Learning Framework provides funding for industry sectors to develop innovative training using e-learning). Some examples of technology and e-learning being used include mobile or online assessments, Point of View Glasses, Virtual Classrooms, Toolboxes/Toolkits (The Hub, see Figure 5), and Moodle. Many of these technologies are being used effectively and often reduce the time needed to gain recognition of a competence, or provide flexibility for accessing and completing a course. The Toolboxes and use of Point of View Glasses, for example, allow trainers to upload videos on how to complete tasks, which learners can access whenever they need to, and then, while at work, learners can use the glasses to record themselves completing a task, which can then be assessed by the trainer (CIT Canberra, 2011). Other examples also include e-portfolios. E-portfolio platforms can store many different types of data and allow trainers and learners to upload podcasts, photographs, video recording, word files and more. An e-portfolio

[2] It is noted, however, that many providers and practitioners assume all youths are highly technologically literate, even though this is not always the case (Walsh et al., 2011).

can provide information about the course requirements and examples of how to complete tasks, but more importantly they can be used as a platform for the learner to upload their work completed on the job, and the assessor to assess their progress. Upon completing a course, a learner can take the contents of their e-portfolio to use on the job or to provide evidence of their competences when they are looking for a job (Education Today, 2010).

**Figure 5.** Learning Assistant e-Portfolio Overview




*Source: Learning Assistant, 2011*

E-learning can come in a variety of forms, from blended learning to purely online Moodle[3] courses. There is no fail safe way of using e-learning, but research in Australia has found that blended forms are ideal for achieving learning outcomes (Skills Australia, 2011). This is to ensure that the learner feels like a part of an inclusive learning environment and a wider social environment. It also allows them to learn in a way that best suits their preferences (Walsh et al., 2011, p.17).

While e-learning has opened up many opportunities for the delivery of adult education and building networks, there is a concern than the seductive nature of such technology can blur the learning focus and some practitioners may forget to think about the "learning" aspects before the "e" part. This is especially the case when practitioners are not comfortable with the technology or are unwilling and unable to investigate its potential as a learning tool instead using it in ways, like simply uploading text, that fulfill the "e" quota of a course but do not enhance learning (Walsh et al., 2011, p.22). In 2003 Australian research found that pedagogy was being driven by technology rather than learning outcomes in Australian VET. But as Ian Martin (2009) puts it, "the question is not whether the glass is half full or half empty, but what it is half full of". Educators should not simply take on

[3] Moodle provides open-source community-based learning tools (see: http://moodle.org/)

technology because it is new and exciting, or expected. Like all learning tools, new technology is "only as good as the use to which it is put" (Hillier, 2009, p.20). The Flexible Learning Advisory Group (FLAG) acknowledges this issue and has called for VET practitioners to develop higher levels of technology literacy:

> There is an expectation that practitioners will not only know how to use the technologies but how to integrate them into teaching practice in an innovative way. However in many cases VET teachers and training are on the back foot when it comes to the application of technology, responding to changes in learner behaviour rather than driving it. There is a strong argument for investment in mentoring and ongoing professional development for VET practitioners that will equip them with the skills they need to keep pace with emerging technologies and business practice. (Skills Australia, 2011, p. 112)

The Skills Australia Report (2011) makes a number of suggestions for developing ICT savvy VET practitioners including professional development to gain skills for using technology. Such skills have already been included in teacher training courses in the UK. The professional development of VET practitioners will be looked at in some detail below.

# Professionalism and Professional Development of the VET Workforce

From the commencement of development work on Singapore's WSQ system in 2003 the issue of trainer professionalism and trainer standards was of concern and still remains a policy priority. This was a central factor in the establishment of IAL in 2008 and the recent introduction by the IAL of a Diploma in Adult and Continuing Education (DACE) in 2010. It is a current issue in terms also of the recent introduction of mandatory requirements for trainers to be phased in over the next three years. In comparison, the UK (England) and Australia have a longer history of mandated minimum qualifications, while New Zealand has not implemented this requirement for VET teachers/trainers.

Because of the currency of this issue in Singapore's development of the WSQ system and the efforts of IAL to develop continuing professional development pathways for adult educators this section of the report provides a detailed description of initial vocational teacher training (ITT) and the evolving shape and direction of trainer professional education in these three countries.

## Professional Preparation and Development of the CET Workforce in Singapore

In 2003 WDA inherited a disparate CET sector with a diverse community of trainers, the substantial majority of whom did not have a training qualification. The sector was (and remains) one largely populated by freelance trainers rather than full-time training staff attached to one institution. The numbers vary depending on who is counted and have been variously estimated at between 3000 and 5000 people who have to date, delivered WSQ training. In 2003 there were no minimum trainer standards for the sector. There was a mix of different Train-the-Trainer Programmes available including two delivered by ITE – a workplace trainer course and the Pedagogical Certificate in Technical Education (PCTE). A professional Diploma in Training and Development (since discontinued) was also delivered by the Singapore Training and Development Association (STADA). There was no data available on the number of "qualified" trainers operating in CET.

In establishing a framework for trainer requirements and standards in the new CET system WDA looked initially to Australia where the Certificate IV (TAA) in Workplace Assessment and Training was a mandatory requirement under the Australian Recognition Framework, and to the UK where mandatory teaching qualifications for people delivering NVQ training also existed. Additional requirements of vocational teachers in both countries included an appropriate "domain" qualification in an industry field, and industry experience. In both countries and in New Zealand there were also degree programmes available in vocational education, though these were not mandatory.

In establishing the trainer requirements under the WSQ, WDA took a similar position on the three components of trainer capability – industry experience, an appropriate qualification in the domain field, and formal trainer training and believed strongly that a similar "train-the-trainer" qualification to that in Australia was needed to underpin quality assurance in the new CET system. The Advanced Certificate in Training and Assessment (ACTA) was thus developed based largely on the Australian Cert IV (TAA). This has become the benchmark trainer qualification in Singapore and there is an expectation that all WSQ trainers obtain ACTA. It is noteworthy however that ACTA was not made mandatory for trainers until late 2010 with a transition period until 2015 for people to gain the qualification. At the same time the WSQ Workplace Trainer Programme was made a requirement for company workplace trainers delivering and assessing WSQ modules and the DACE a mandatory requirement for curriculum developers.

Since its inception 4,500 ACTA qualifications have been issued and it is estimated that around 75 percent of the active WSQ trainer population is qualified with ACTA or its equivalent.

Trainer professional development and the "professionalising" of the training community have thus been key themes in the WSQ story. Since 2008 IAL has strongly pursued this agenda with the development of the Professional Development Roadmap for Trainers and Adult Educators, the introduction of "hosted" masters degrees for adult educators from the Institute of Education (IOE) at the University of London and Griffith University, and as noted, through the introduction of additional professional qualifications such as DACE. The Institute also set up the Adult Education Network (AEN) to promote informal learning and professional support for trainers (and the larger CET "community").

While much of the focus on professional credentialing and development of trainers in the WSQ system has been on expertise in competency-based training, the more recent emphasis in post ACTA professional development, and particularly in DACE and the masters programmes, has been to develop a broader range of capabilities. These include reflective practice, action research and familiarity with models of teaching, learning and assessment beyond competency based training and assessment. Practitioners are encouraged to join AEN and some scholarships are available to practitioners for higher degree courses. Practitioners are also supported in fostering innovation in their practices through IAL's CET Innovation Fund.

## Vocational Education Practitioner Requirements in the United Kingdom

Since 2003–2004 when WDA commenced development of ACTA, much has changed in terms of vocational teacher preparation in the UK. As the countries that make up the UK each have their own further education (FE) systems and qualifications, for simplicity and clarity, this section will only focus on England. Many of the recent changes in England have affected the FE sector and the mandated FE qualifications greatly. These will be discussed here, and it is hoped a clear picture of the current pathways towards becoming a certified professional adult educator will be reached.

Although today's FE teachers are mandated to gain FE "professional status", the qualifications that lead to this status evolved from those set up five years ago. The previous mandated qualifications stemmed from the Further Education White Paper of March 2006, which suggested a number of proposals to improve the Initial Teacher Training (ITT) and Continuous Professional Development (CPD) of Further Education (FE) teachers in England. This resulted in the development of two programmes in 2007 for teacher training: the Initial Teaching Award (now the Preparing to Teach in the Lifelong Learning Sector (PTLLS) Award) and a full teaching qualification (now the Diploma in Teaching in the Lifelong Learning Sector (DTLLS) or the Certificate in Teaching in the Lifelong Learning Sector CTLLS) (Lifelong Learning UK, 2011a). The remainder of this section will focus on the current mandatory FE qualifications.

The Preparing to Teach in the Lifelong Learning Sector (PTLLS) Award for all new teachers, lectures, trainers and tutors in the learning and skills sector, is the mandatory teaching qualification in further and vocational education for those working under publicly funded provisions[4]. This programme is 30 hours long and at a level three with no time limit on its completion. It was designed to give a threshold status to teach, and includes both generic and subject specific mentor support in the workplace. This award is the starting point for FE teachers and can be done before becoming a teacher or during the first year.

The PTLLS, however, is not so much a full teaching qualification as the preparation for gaining one. Those who intend to teach as a major part of their job require a professional teaching qualification and can take the PTLLS at level four or five to count it towards gaining the Certificate in Teaching in the Lifelong Learning Sector (CTLLS) or the Diploma in Teaching in the Lifelong Learning Sector (DTLLS). After gaining one of these qualifications an FE teacher can apply for the Associate Teacher, Learning and Skills status (ATLS) or the full Qualified Teacher, Learning and Skills status (QTLS) in order to practice as a recognised professional FE teacher. These statuses can only be conferred by the Institute for Learning (IfL), which is an independent professional body that was set up in 2002.

The difference between the ATLS and the QTLS is that the former is for FE teachers who do not have full teaching roles and responsibilities, while the latter is for those with a full range of teaching responsibilities (these require an extensive range of knowledge, understanding and application of curriculum development, curriculum innovation or curriculum delivery strategies). To apply for ATLS an FE teacher must complete the Certificate in Teaching in the Lifelong Learning Sector at level 3 or 4. This certificate is completed through 30 hours of practicum teaching, which means that an FE undertaking this qualification must already have access to teaching hours. To apply for the QTLS an FE teacher must complete the Diploma in Teaching Lifelong Learning Skills, which is a more rigorous qualification and consists of units that contextualise the learning and teaching for particular types of learners. This qualification is usually awarded at a level five, and teachers have up to five years to complete it.

As well as the CTLLS or the DTLLS[5] an FE teacher must hold a specialist subject qualification; demonstrate to the IfL the necessary literacy, numeracy and

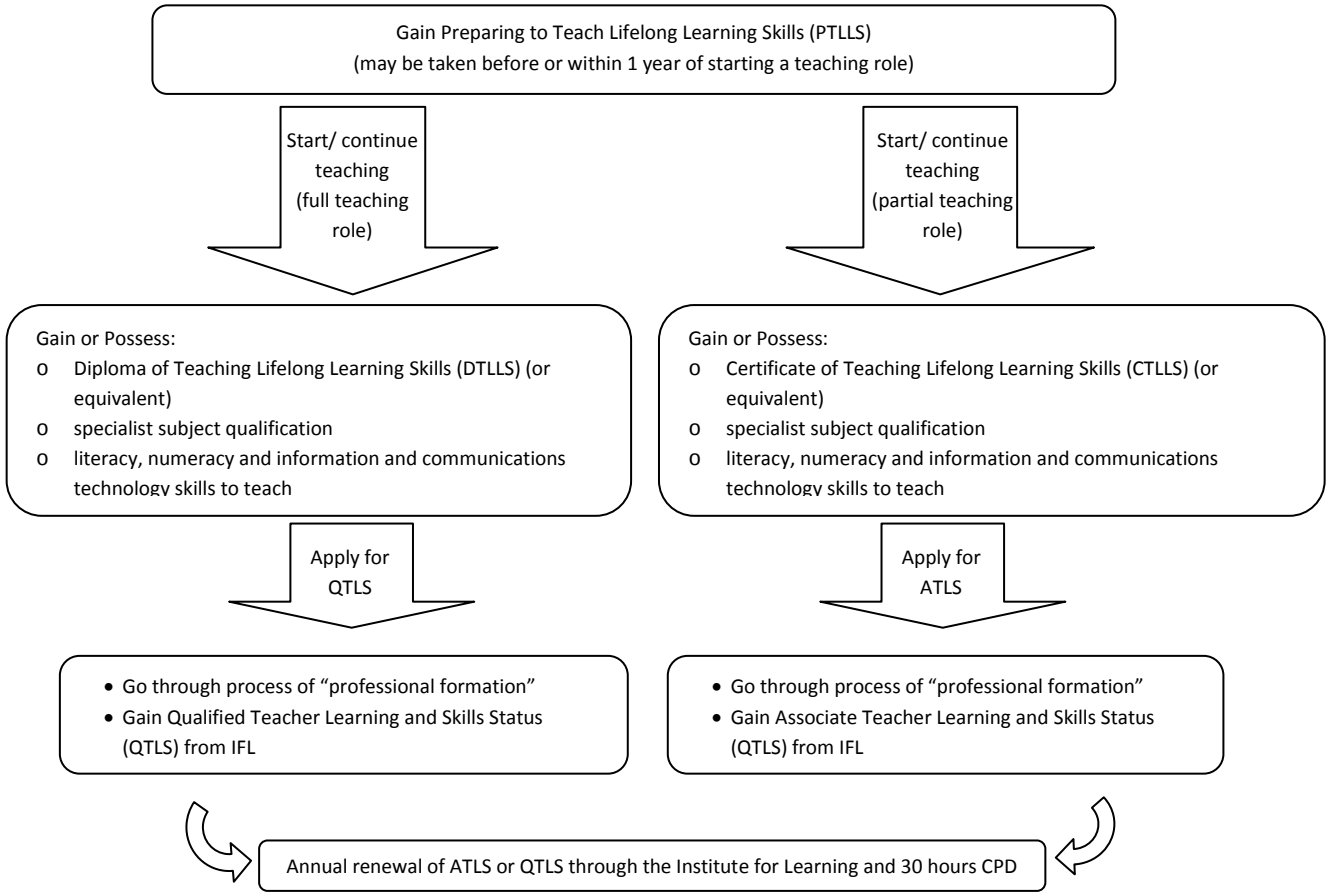
[4] A person may teach without this award for up to one year of starting their post on the condition that that person is provided throughout that period with professional support by a qualified person. Professional support includes mentoring and direction in the processes and practice of teaching, including lesson planning and course development, and a qualified person is someone who satisfies the qualifications requirements of the 2001 Regulations or the 2007 Regulations or is exempt under either set of Regulations. This award is not compulsory for those who teach on an occasional basis (28 hours or less in one year)(Institute for Learning, 2011b).

[5] It should be noted that the Certificate of Education and the PGCE also cover the requirements for the qualification needed when applying for QTLS or ATLS status. These two qualifications remain the most

information and communications technology skills to teach; and complete to the satisfaction of the IfL a process of "professional formation" in order to qualify for the ATLS or QTLS status. Professional formation consists of workplace assessment and employer referrals, which the IfL uses to confer ATLS or QTLS status. Figure 6 maps the process to gain professional FE status in England:

**Figure 6.** Gaining Professional FE Teacher Status (England)




*Source: adapted from Lifelong Learning UK, 2011b*

Continuing professional development has also gained much focus in the UK to encourage FE teachers to go beyond the mandatory qualifications and stay up to date. As a condition of the QTLS or ATLS awards, teachers, trainers, tutors, and trainee teachers must register with the IfL. This registration needs to be maintained by the FE teacher through completing thirty hours of CPD per year (for full time teachers, or the equivalent on a pro rata basis at a minimum of six hours per year) and declaring it through the IfL website. CPD may include reading relevant journals, reviewing books, training courses or formal development, peer review, mentoring or shadowing, online learning, viewing and reviewing television programmes,

commonly held in the FE sector, even though the PTLLS, CTLLS, and DTLLS are the newer mandatory qualifications (Lifelong Learning UK, 2011d).

documentaries, and the internet, and so on. IfL's 2011–2014 priorities include focusing on support for self driven teacher CPD, raising the status of teachers, and giving members an influential voice on policy (Institute for Learning, 2011a). As of 1 April 2011 the IfL became a self-funded independent professional body and members are now required to pay their own annual fees[6].

As of March 2011 approximately 89.9 percent of eligible teaching staff in the Further Education Sector hold, or are pursuing, a relevant teaching qualification. This is very close to the Success for All target that aimed for all teaching staff in FE (who started teaching on or after the 1st of September 2001) to hold relevant qualifications by 2010 (Parsons & Berry-Lound, 2004). This target was set in 2002 when it was estimated that only 60 percent of full time and 43 percent of part time FE teachers held full or partial teaching qualifications (Department for Education and Skills, 2002). The most commonly held qualifications are the Certificate of Education and the Post Graduate Certificate for Education, which preceded the CTLLS and DTLLS as the mandatory qualifications, and are still recognised as their equivalents. The attainment of these latter qualifications, however, has been increasing since 2007[7].

The high attainment of relevant teaching qualifications in England is largely a result of high interest and funding in the professional (and initial) development of FE teachers, and a general effort to improve the quality of the Further Education Sector. This interest was kicked off by the Success for All report in 2002, which set targets to be met by 2010 that were supported by the Learning and Skills Council (LSC)[8]. The Further Education Workforce Reforms, introduced in 2007 and implemented by the Further Education and Teachers' Qualifications (England) Regulations, continued the push towards all FE teachers gaining qualifications. Since 2010 it has become the newly established Skills Funding Agency's responsibility under the Department for Business, Innovation and Skills to fund and

[6] Although the IfL states that it is mandatory for all FE teachers to register with the Institute, there is some confusion over whether this has any legal standing. It is legally mandated that all FE teachers gain QTLS or ATLS status, which are conferred by the IfL, and that all teachers at publically funded colleges or training providers join the IFL (www.parliament.uk, 2010), yet there are those who oppose the compulsory membership and fees associated with the Institute for Learning. This is a result of more than 15,000 lecturers who see little benefit from joining the institute and are outraged at the fee hike (from £30 to £68 per year) which has resulted from the government withdrawing funding. Some even believe that the compulsory membership is a contravention of Article 11 of the European Convention on Human Rights (Lee, 2011). This is currently a very hot issue with some of the 200,000 members of the University and College Union proposing a boycott of the IfL, which they believe is not fit for purpose (Hunt, 2011).

[7] The reason why the Certificate of Education remains the most popular qualifications may be due to the course providers being relatively new to offering qualifications equivalent to a Certificate of Education. In 2007, however, all Certificate of Education and Postgraduate Certificate in Education qualifications were revalidated to ensure they met the new requirements. So while their names remained the same, the course specifications were newly developed.

[8] The LSC closed in 2010 and was replaced by the Skills Funding Agency and the Young People's Learning Agency.

regulate adult further education and skills training in England. The SFA now invests £4 billion per year in its endeavour to help people do their jobs better, get new jobs, or progress in their careers (Department for Business Innovation & Skills, 2011).

There have been many changes in England's Further Education Sector over the past decade, which have impacted the qualifications that FE teachers need in order to practice. As it stands, the new coalition government is seeing public funding reductions across the board and new approaches of "localism" as a consequence. This may affect staff development and up skilling negatively in the FE sector, however, it remains mandatory for all FE teachers to attain PTLLS and CTLLS or DTLLS, and the appropriate professional status in order to teach in publicly funded institutions.

## Vocational Education Practitioner Requirements in Australia

Like England, Australia also requires a minimum qualification for Vocational Education and Training practitioners. In the 1980s VET teacher qualifications (for people working in TAFE) were generally at the Diploma level or graduate diploma level for those with undergraduate degrees. The private training sector was however unregulated. At this time, and until the 1990s, most initial teacher training was delivered by universities, and many saw these courses as too "prolonged, padded out and overweight" with little use of recognised prior learning[9]. This was an issue as many VET practitioners felt they already had the skills and experience, and therefore saw gaining formal qualifications as a burden (Guthrie, 2010, p.8). The 1990s also saw a growth in private VET providers and workplace learning, which extended the domain of VET beyond Technical and Further Education (TAFE) institutions, and extended the types of environments and learners that VET practitioners would be working with. In 1998 the Training Package for Assessment and Workplace Training was implemented, and its Certificate IV level became the minimum requirement for people delivering AQF qualifications in the public and private sectors. TAFE institutes, however, still required teachers to gain degrees usually through in-service programmes. This was essentially a training programme in competency based training and assessment designed primarily for workplace trainers.

The original Certificate IV was in force until 2004. It allowed for a much shorter completion time, however its delivery was widely variable (with some providers offering it over a single weekend), It also allowed much more liberal usage of Recognised Prior Learning (RPL). This was a more flexible and attractive option for those with existing skills and experience, but there was some doubt over how rigorously RPL was assessed, and whether the quality of delivery and assessment

[9] Today no universities provide initial teacher training, and more are also withdrawing from the "post-initial" training market too. This is possibly a result of small enrollments and VET practitioners not seeing to relevance of gaining a university qualification (Guthrie 2010, p.15).

was satisfactory (Guthrie, 2010, p.10). Guthrie (2010) also points out that is was often forgotten that this qualification was specifically designed for workplace training, rather than other types of training that many VET practitioners worked in.

In 2004 the new minimum qualification became the Cert IV (TAA) of the Training and Assessment Training Package. Questions were raised over whether this qualification had a good enough underpinning of teaching and learning theory and practice. This is a continuous debate that plagues the minimum qualifications for VET practitioners in Australia. Guthrie (2010) makes it clear that it is difficult to determine the right level and nature of teaching skills and abilities required by VET practitioners initially and throughout their careers. Since the late 1990s TAFE Institutes across Australia have progressively removed support for staff to obtain in-service degrees in vocational teacher education and aligned to the new Cert IV as the minimum requirement, coupled with domain credentials and industry experience.

Over the past two years Australia has seen an unprecedented interest in vocational teacher preparation and development, particularly in terms of a growing call for broadening the range of skills and capability of trainers and providing specialist expertise in critical emerging areas such as e-learning. This is largely due to increased interest in the professionalism of VET practitioners, the range and quality of awards, and issues over support for VET staff professional development as knowledge based economies expand. Skills Australia (2011) talked about the need for a "new VET practitioner" (see next section on Quality Assurance).

In 2010, the Cert IV (TAE) of the Diploma in Training and Assessment replaced the Cert IV (TAA) as the minimum required qualification in Australia to try to address some of the concerns over quality, breadth, depth, and versatility[10]. This Diploma takes a "skills set" approach, which is hoped to enable progressive gathering of formal training related to specific work roles. As this qualification can be gained progressively it demands smaller periods of investment at one time and can be built up from the foundational Cert IV into more specialized areas of expertise.

The new Cert IV (TAE) consists of seven core and three elective units (from 14) down from the old Cert IV TAA's requirements of 12 core units and two elective units (from a list of 11) into. Learners can proceed through this course at their own pace throughout one year, and normally take between 150 and 250 hours to complete the qualification. The Cert IV of this Diploma is designed to provide what is needed for entry level trainers and assessors in VET to deliver training packages

[10] There has been heated debate over the actual goal of the Cert IV TAE and why practitioners are given two years to attain it. Some argue the qualification (or an appropriate qualification) should be mandatory before beginning to teach and also that practitioners with Bachelors of Education and Masters who move into VET should not be classified as unqualified if they do not get the Cert IV TAE. Some people are also confused about the point of the Cert IV TAE if it is classified as equivalent to its predecessor, the Cert IV TAA (Meakin, 2011).

determined by the AQTF (DEEWR, 2010, p.3). It also aims to provide a foundation to build further knowledge as continued professional development becomes a key issue. This qualification, however, does assume that the learner is engaged in a training and education environment or has a vocational skill at a level that supports training and education in their subject area (although, some course providers have an option for students to be assessed in a simulated workplace if they are not working, or have never worked, in a training environment).

The latest Skills Australia report (as noted later under the Quality Assurance and Regulation section has, however, proposed a series of reforms to the Cert IV delivery and higher standards for Cert IV providers (Accredited Online Training, 2011; Department of Education Employment and Workplace Relations, 2010a). It is hoped that the "skills set" approach will drive CPD and provide better pathways into higher level qualifications. The various skills sets include: Assessor; Enterprise Trainer; Enterprise Trainer and Assessor; Sustainable Practice; and Workplace Supervisor. (For an overview of the Reviewed Cert IV TAE core and Elective Units and a breakdown of the Skill Sets see Appendix 1 and 2).

Despite the much longer history in Australia of a mandated requirement for the Cert IV qualification for trainers in Registered Training Organisations compared to Singapore, it is noteworthy that the Skills Australia *Skills for Prosperity* report in 2011 stated that many VET trainers and assessors currently do not possess the CERT IV (TAE) or its equivalent, although precise data is difficult to obtain. While it is acknowledged that the National Quality Council determination provided a two-year period from June 2010 to June 2012 for trainers and assessors to gain the Cert IV (TAE), the Skills Australia report found it unsatisfactory that this policy did not apply to practitioners who work without qualifications but under direct supervision of someone with the required competencies. This report recommends that even those who are currently practicing under supervision attain the minimum qualification by 2013. Despite the varying criticisms and discussions around the Cert IV (TAE) as the mandatory minimum qualification for VET practitioners, many reports have, for now, stood by the appropriateness of this qualification and argued that it is the suitable entry level qualification as long as it is delivered properly by quality providers (TAFE Directors Australia, 2011, p.6).

## Vocational Education Practitioner Requirements in New Zealand

Between 1972 and 1991 all New Zealand Polytechnic teachers were required to complete a fully centrally funded 12 week training course that covered basic teaching skills. In 1991 the provision of this course changed dramatically and the requirement ceased. Today, tertiary education practitioners in New Zealand, including both vocational and higher education staff, are not mandated to hold any teaching qualifications (Viskovic, 2009, p.10). This said, quality assurance processes do require providers to offer quality learning environments, which means that

providers are required to employ appropriately qualified staff (The Ministry of Education (NZ), 2008). Although teaching qualifications are not compulsory, adult educators are highly qualified, but normally hold relevant "area of expertise" qualifications. Census 2006 data found that 38 percent of Adult and Community Education staff held a bachelor or higher qualification, and another 30 percent hold other tertiary qualifications (The Ministry of Education (NZ), 2008).

Although there are no minimum qualifications required, 38 Tertiary Education Organisations (TEOs) (4 universities; 13 institutes of technology and polytechnics, 1 Wananga and 23 Private Training Establishments or Industry Training Organisations) do offer a range of "local" and national certificates and diplomas for ITT and post-ITT with a range of credit sizes and levels. In 2009 most of these were level 4 and 5 certificates on the national qualification framework (Viskovic, 2009). Some of these courses (for example the Diploma in Tertiary Learning and Teaching) suggest different pathways for in-experienced "tutors" and experienced "tutors" and their programme structure allows for specialisation in specific areas.

In 2007 3,800 students were enrolled in TEOs for adult educator qualification. About 90 percent of these were enrolled in certificate level qualifications, with nearly 50 percent undertaken at Te Wananga o Aotearoa, which uses Maori philosophies as a foundation. Although the numbers of people enrolled in these qualifications is not very high, it is important to note that enrollments are increasing, and some training providers are now requiring staff to complete adult teaching qualifications as a condition of employment. This suggests that despite qualifications being voluntary it is becoming more important for AEs to gain them in order to fulfill the demands of their workplace and to gain a competitive edge.

## Issues of Interest: The Changing Nature and Focus of Qualifications

The mandatory and non-mandatory qualifications for adult educators in the UK, Australia and New Zealand have gone through many changes over the years, and will likely continue to do so in the years to come. The main points of interest regarding the current state of AE qualifications and professional development are highlighted below.

### Specialisation pathways

One of the standout factors of the current (newer) qualifications is that the diversity of AEs, and the various environments they work in, are starting to be reflected in the initial vocational teacher training and CPD courses. This is especially apparent in Australia's new "skills set" approach and the flexibility of choosing more specialised pathways in many of the qualifications in NZ (for example a student can specialise in Literacy and Numeracy; Learning and Teaching; Flexible/e-learning; Leadership, Research in Learning and Teaching; or Course and Programme Design). The UK (England) has also clearly differentiated between practitioners with lower and higher

teaching responsibilities. Such specialisation suggests a move away from the one size fits all qualifications.

## Language, Literacy and Numeracy

All three countries also place an emphasis on the importance of Language, Literacy, and Numeracy (LLN) skills for adult educators. In order to qualify for ATLS or QTLS an FE teacher must demonstrate their LLN skills to the satisfaction of the IfL; in Australia the Skills Report (2011) has also pushed the IBSA to mandate LLN as a core subject of the Cert IV rather than an elective (the IBSA is currently considering this recommendation); and New Zealand also has a very strong emphasis on LLN, integrating it into all of its AE qualifications. Technology literacy is also gaining importance.

## The Concept of Status Versus Set Qualifications

The most apparent differentiation in current AE requirements is that of the UK, where a minimum qualification is no longer satisfactory, and a professional status is required of adult educators in publicly funded institutions. This status is conferred by an independent body (the IfL) that does not conduct courses, but supports the professionalisation of further education teachers. Therefore the individual, external providers and places of work are responsible for gaining/providing the relevant qualifications, experience and referrals, while the IfL focuses on whether these attainments are satisfactory for gaining professional Associate or Qualified Teacher status. In order to keep their professional status FE teachers must participate in CPD and renew their membership with IfL annually. Such a movement away from mandating very minimal qualifications may encourage greater professional development and higher quality practice. As mentioned above, however, many FE teachers in England are fiercely dissatisfied with the IfL and its compulsory membership.

## Comparative Standards and Expectations

As it stands, the UK seems to have the most demanding pathway for professionalising AEs (for those with full teacher roles), while the minimum and basic qualifications across all countries start at a comparable (and low) level. Only in the UK is CPD mandatory, while other countries encourage it but see it as the AEs' individual professional duty. Nevertheless, in all countries, industry experience and related qualifications seem to remain the most important in terms of gaining an AE position, with practitioners given one or two years (in the UK and Australia) to gain teaching qualifications. For many, this is seen as a burden, either because their professional identity is not aligned with the teaching side of their job, or because they see themselves as already possessing the necessary skills and knowledge to teach. In Australia there is widely held skepticism about the standards and quality of delivery of the current Cert IV (TAE) and the suitability of the training and

assessment which is given. The skills Australia repost suggested major reforms to the delivery and assessment of this qualification.

Beyond Competency Based Training – "The New Practitioner"

In the UK the scope of the qualifications and professional development system has provided greater breadth of educational preparations than in Australia (and New Zealand) where the Cert IV training is very focused on competency-based training and now "skills sets". Australia is struggling now to produce a more broadly prepared "new practitioner" and Skills Australia has recommended ongoing programme development and the fuller design of a training and development roadmap for vocational education. These developments are taken up in more detail in the section on Quality assurance and Regulation which follows and which places many of the issues discussed in a broader context.

# Quality Assurance and National Regulation

The quality assurance system put in place in Singapore was based largely on the key components of quality assurance and regulation under the Australian Recognition Framework and so it is timely to look at how, in Australia quality assurance arrangements and regulation of vocational education and training are at present being reformed. Changes are also occurring in quality assurance and regulation in the UK and New Zealand.

## Quality Assurance and Regulation under the WSQ System

In Singapore the main underpinnings of quality assurance are (a) the provider approval process, (b) course accreditation, (c) a train-the-trainer qualification (but currently without formal regulation of trainers) (d) the Continuous Improvement Review (CIR) provider auditing system, and (e) central management and documentation of the credentialing and certification process including the issuance of qualifications and Statements of Attainment. As the funding agency, WDA has also exercised a powerful lever to ensure that training organisations comply with quality assurance requirements.

While the approval of providers by a central agency is a feature of quality assurance which Singapore has in common with the UK, Australia and New Zealand, most of the other components vary significantly across the four systems. Only Singapore has institutionalised course accreditation as a core platform of quality assurance across the whole of the WSQ system. It is worth noting that the former Australian National Training Authority (ANTA) argued strongly *against* what it referred to as "the curriculum approach". Its position was that curriculum was an "intermediation" which lessened the focus of training on industry determined standards.

It is important to note however that this position was not however universally accepted in Australia. In NSW the state regulator has required accreditation for courses and qualifications proposed by providers which were outside approved qualifications specified in national industry training packages and the NSW TAFE system – the largest provider of vocational and continuing education in Australia continued a process of internal course accreditation.

Unlike the other systems, Singapore has centralised the management of certification. In the UK there are multiple certifying authorities and in Australia individual institutions issue certification. The UK has post approval auditing of providers but in Australia auditing and site visits only take place at the point of provider registration and re registration. So while all systems have a framework for quality assurance of the multiple private training providers, in general the large public providers like further education colleges in the UK and TAFE Institutes in Australia have their own internal quality assurance processes. WDA clearly has, at the moment, the most comprehensive *quality assurance* arrangements but in comparison with other systems a lighter mandated regulatory *framework*, particularly in terms of requirements for trainer qualifications.

However, it must be said that WDA has struggled with its quality assurance system both in terms of the administrative and management resources needed to put in place a centralised system and also in judging the right level of control exercised over providers. To observers from other systems Singapore's approach would appear excessive, especially the rigidity of course accreditation and CIR auditing and there is much anecdotal feedback from providers that the system stifles innovation, flexibility, responsiveness and contextualisation. WDA has been looking at avenues to provide improved room-to-move for providers, for example by making course accreditation more fluid for CET centres, however these changes are occurring slowly. The press for more flexible courses and different delivery modes for PME programmes may hasten change in the professional course areas.

In Australia particularly there are similar moves to develop more broadly prepared vocational educators – the "new practitioner" and also major concerns about the quality of the VET sector generally, and about the quality of delivery and assessment of the Certificate IV in Training and Assessment. Currently there are major changes occurring in the structures and framework for quality assurance and regulation of the Australian VET system and these developments are the main focus of interest in the discussion which follows.

## Quality Assurance and Regulation in Australia, the UK and New Zealand

In Australia the Skills Australia Report *Skills for Prosperity: A Roadmap for Vocational Education and Training (2011)* sets out a series of proposals and recommendations to the Australian government on strengthening quality, and quality assurance of the Australian vocational education and training system.

Referring to its consultation process held during 2010, it notes: “Concern about the quality of training delivery and assessment is the single biggest issue identified across the 140 submissions received…” (p. 78) and quotes the response from the Safety Institute of Australia,

> …there are deep seated issues of consistency in quality of training that can only be addressed by changes to the system. Both employers and OHS professionals and practitioners regularly report their concerns on consistency and quality to us. From major variations in duration to quality of trainers and people being taught things that are just plain wrong. (ibid)

The earlier discussion paper identified a series of factors seen to be contributing to poor quality and these were reinforced by submissions. They included inconsistent regulation with current regulation seen to be ineffective; variable assessment packages; insufficient transparency and lack of data to assess performance, and the depth and breadth of essential professional qualifications of practitioners. The report also noted that the existing arrangements, established over a decade ago have been at best incrementally improved rather than subject to major reform. It argues “slippage” has occurred and over the last ten years the number of training providers in Australia has grown from 2000 to now, over 5000.

The report noted the establishment this year of a National VET Regulator now gazette in legislation as the Australian Skills Quality Authority (ASQA) which will have oversight on a national basis, for the first time of quality assurance and regulation – which until now was administered on a state basis. (Thus the comment in the report about inconsistent regulation). A separate national body is to be established to set training provider standards to be met across Australia.

Skills Australia has recommended the following improvements to enhance the quality of the Australian vocational training system:

- Building a robust national VET regulatory system in which the ASQA is well resourced and where most regulatory efforts are focused on high risk providers and the regulatory and “red tape” is reduced for good providers.
- Eligibility Criteria for public providers is strengthened. Measures would include performance history with government funded contracts, professional capability and staff qualifications, length of time in provision and minimum years as a designated low-risk provider, and partnerships to enhance support services for learners.
- Implementation of mandatory external moderation of all providers’ assessments both on and off the job to ensure consistency of assessments, standards and trainees exiting performance capability.

- High quality delivery of the Training and Education Training Package – the TAE Certificate IV in Training and Assessment. The Certificate IV has been a mandatory requirement for trainers delivering training package qualifications under the Australian regulatory system for over a decade (see earlier discussion of trainer qualifications and professional development) however the report questions both the quality of delivery of the TAE Cert IV and the veracity of this requirement. For example it recommends a tightening of the "training under supervision" provisions which have been used by providers to circumvent the regulation. More pointedly, the report recommends that the skills council – Industry and Business Skills Australia

> …should amend the Evidence Guide for (the TAE Cert. IV) to require those seeking to demonstrate competence at Cert IV level to prepare and deliver at least four consecutive supervised training sessions. An assessor from outside the RTO delivering the unit should evaluate a student's competence through observation of two of these sessions (p. 90).

The report also recommends a higher level of registration for providers delivering the TAE Cert. IV including that they have a track record in delivering in an industry area outside TAE for two years, governance includes expertise in teaching and learning, and show a programme of on-going professional development of their staff. Trainers of TAE Cert. IV must also have a professional qualification higher than the Cert IV and demonstrated experience as a trainer.

- The report also recommends a broad-based national VET workforce development strategy to ensure VET educators can meet the challenges which the sector faces in the future. Future VET practitioners should have skills to support digital learning and a "new practitioner" concept was framed

> this progressive practitioner can customise programmes to suit enterprises and personalise learning activities to suit the individual. The new VET practitioner lets go of the old certainties, like pre-set curriculum and didactic instruction and develops attributes, attitudes and ideas and techniques that meet the needs of clients. The new practitioner looks outward at market needs and seeks to meet those needs. Notably these features and attributes represents a new hybrid mix of educational and business thinking infused with values such as commitment to service and quality (as quoted from Mitchell, 2006).

The report also puts the view that provider organisations develop broader capabilities beyond training in workforce development such as job design and organisational development.

- As discussed in the previous section the report also recommends a qualification structure that supports different levels of expertise and specialisation for VET practitioners and avoids a "one size fits all" approach.
- The report recommends various additional strategies to improve the work of agencies supporting quality assurance including better training of auditors; systems to disseminate and share "excellence in practice" identified through audits and publication of performance data on training organisations to improve transparency of the system.

The framework for enhanced quality and quality assurance in the Australian VET system proposed in the report is set out in Table 2.

**Table 2.** Aspiring to Excellence: A Package of Reforms for the Sector

| QUALITY PILLARS | | |
|---|---|---|
| Robust regulatory systems | A highly skilled VET workforce | Excellence in teaching, learning and assessment |
| **KEY REFORM RECOMMENDATIONS** | | |
| A well-resourced and effective regulatory framework | • A strengthened TAE<br>• High-quality delivery of the TAE<br>• A VET workforce funding package and strategy | • Mandatory external validation of assessment<br>• New criteria for RTOs to be eligible as entitlement place providers |

*Source: Skills Australia, 2011, p.81*

A key component of Australia's reform and redevelopment of the quality assurance and regulatory system is, as noted above, the establishment of new national quality assurance and regulatory agencies – the Australian Skills Quality Authority (ASQA) and the new parallel agency covering quality assurance and regulation of higher education the Tertiary Education Quality and Standards Agency (TEQSA). ASQA formally commenced operation on July 1 under its legislation and from July 1 VET regulation in NSW, the Australian Capital Territory and the Northern Territory transfer to national jurisdiction. That of Queensland, South Australia and Tasmania will follow later in 2011. Currently Victoria and Western Australia have not agreed to join the national system.

Importantly, ASQA reports that it is working with TEQSA "to align our corporate systems and processes where feasible and to work towards more coordinated regulatory approaches for providers offering both VET and Higher Education" (Australian Skills Quality Authority, 2011, p. 1). It was also reported that meetings were held with the CEO New Zealand Qualifications Authority (NZQA). "One of the

matters of mutual interest discussed was the concept of NZQA and ASQA benchmarking some of their regulatory activities…" (ibid)

In New Zealand quality assurance of further education, including the registration, monitoring and auditing of non university educational institutions, private training providers and learning establishments that offer approved courses and award credit for NZQA qualifications falls under the jurisdiction of the NZQA. The NZQA also accredits Industry Training Organizations (ITOs) to register workplace assessors. The NZQA has delegated authority for approval and accreditation of Institutes of Technology and Polytechnic courses up to degree level to their own Institutes of Technology and Polytechnic Quality agency. The Universities provide quality assurance for university qualifications in New Zealand but the criteria applied in the universities and by the NZQA are the same.

It is thus noteworthy that the ASQA and NZQA are looking at commonalities and consistency in quality assurance between Australia and New Zealand with the potential to produce a regional alignment of quality standards and broadly similar regulatory processes in vocational education and training.

The position in the UK in relation to quality assurance and regulation as far as trainer qualifications and regulation is concerned has been treated in some detail in the section on the Professionalism and Professional Development of the CET Workforce. Vocational teacher qualifications and requirements aside, the UK regulatory arrangements are at present in some degree of flux and as new approaches and institutional roles are being developed and put in place by the new government. The main pillars of quality assurance in the UK (though these vary between England and Scotland) are (a) the establishment of professional standards for teachers, tutors and trainers in the Further Education Sector by Lifelong Learning UK and related requirements to meet these standards (see: Lifelong Learning UK, 2011c), (b) provider approval and auditing processes and (c) the separation of assessment and credentialing from provision through the operation of multiple certifying bodies.

Lucas and Nasta (2010) argue that in the UK schools, further education (FE) and higher education exist on a continuum of regulation, from high regulation in schools to limited regulation in higher education, with FE "somewhere in the middle". While standards are set for the sector the existence a part-time in-service routes, the confusion between "domain" and teaching qualifications – and the reluctance of further education teachers to be identified with school teachers – and the continuing emphasis on competency-based standards has inhibited the development of professionalism in further education. The same issue is identified in the Skills Australia papers proposal for a "new practitioner". In fact, in comparison with the other two sectors the existence of strong assessing and certifying bodies is a strong component of the quality assurance and regulatory system in the UK.

How quality assurance and regulatory arrangements will evolve in the UK remains to be seen. There is considerable rhetoric from the new government about "freedom" "reduced bureaucratic control" and quality through performance reporting driven by "provider-customer relationships" rather than "provider-government regulation". Also the government has abolished or stopped public funding of many statutory and quasi-government agencies including Standards and Verification UK; Lifelong Learning UK, and the Qualifications and Curriculum Agency. We watch with interest the emerging shape of vocational and continuing education in the UK.

# CET Research and Evidence-based Policy

## CET Research in Singapore

While references were made in the WDA Act to a research role for the agency "to support, direct, encourage and undertake research in adult continuing education and training" (WDA Singapore Workforce Development Agency, 2003, Part III, 11, (i)) WDA did not establish a dedicated research function until the establishment of IAL in 2008. WDA undertook some data collection on training through its policy directorate and from time to time commissioned research – the clearest example being the SCAPE study (Toh, Thangavelu, & Chin, 2008). Some CET research was also undertaken on an ad hoc basis by the Ministry of Manpower. (See for example, Ang, Cheolsung, Haoming, Thangavelu, & Wong, 2006) . Research undertaken by the National Institute of Education (NIE) is focused almost entirely on the schooling sector. In comparison to the UK, Australia and New Zealand which have strong research centres in vocational and continuing education, Singapore's entry into CET research is very recent and embryonic – a major issue for Singapore is to build capacity in CET research.

The IAL Research Division has three main priorities:

- to increase local research capacity,
- to create the disposition and capability of the CET community to interpret and use research, and
- to influence CET practice and policy through research.

It has established three Centres in discrete fields of CET related research to further these priorities; the Centre for Research in Learning; the Centre for Skills, Productivity and Performance Research, and the Centre for Evaluation and Innovation Research. The scope of the Division's work thus spans several broad areas in contrast to some overseas centres (for example the UK Commission for Employment and Skills and Skills Australia) which focus on mainly labour market research. Examples of current research in each of the three centres are set out in Table 3.

**Table 3.** IAL Research Centres and Related Research Projects

| **Centre for Research in Learning** | **Centre for Skills, Productivity and Performance Research** | **Centre for Evaluation and Innovation Research** |
|---|---|---|
| Reflexive Practitioner Research for Professional Learning in CET<br><br>**WSQ Workplace Learning and Assessment**<br><br>Tools for Learning and Training Design<br><br>Examining and Improving Assessment<br><br>Assessing Workplaces as Learning Environments: Personal, Workplace Industry and National Measures<br><br>WDA/IAL Commissioned projects | Skills Utilisation in Singapore<br><br>**Organisational Skills Strategies and Productivity**<br><br>Employer-Employee Matched Sample Skill Survey<br><br>High Skills Eco-systems Evolution | Evaluating and understanding PME workforce development<br><br>Evaluation of innovative practice in CET<br><br>Understanding the Singaporean Adult Educator<br><br>**Development of a CET monitoring and evaluation framework**<br><br>Evaluation of IAL and other CET programmes |

*Source: Institute for Adult Learning, 2011*

While IAL's research agenda is in its early stages of implementation it reflects a growing emphasis on evidenced based policy and practice in the CET sector. Examples of the impact of research on policy include the recent work completed on the review of the ES system (Willmott, 2011b) which has helped shape the future development of the employability skills programme and changed the approach to the measurement of training outcomes. The range of studies noted above, several of which are nearing completion including those on skills utilisation and workplace learning anticipated have the potential to significantly shape both WDA policy and priorities for future funding of skills training and training delivery.

One of the issues which IAL has to manage is the strategic focus of its work in terms of projects directly relating to WDA and government workforce development policy, which may take the form of specific requests from WDA for projects on particular policy or programme related issues and research within broad fields of interest, especially in relation to teaching and learning. There are related issues concerning whether research is publishable or findings held confidential. The comparative study which follows shows that this not an isolated problem – most

publicly funded research agencies face the issue and have found various ways of addressing the issue.

To support its work IAL has set up collaborative relationships with a number of overseas research agencies including several in the UK, Australia and New Zealand and it is to these that we now turn to explore emerging research shaping CET in the wider world.

## CET Research in Australia, the UK and New Zealand

The first general observation about vocational and continuing education research in the UK, Australia and New Zealand is that, in these countries the field has a longer history, the research agencies are more numerous and larger, there are higher education institutions with specialist labour market and adult and vocational education research centres, and the volume and diversity of research is much more extensive than exists in Singapore. In Australia, for example , the National Centre for Vocational Education Research (NCVER) *Research Messages* (2010) publication lists 38 research reports published by the agency during the year across five broad areas – Industry and Employers, Students and Individuals, Teaching and Learning, the VET System, and VET in Context – focusing on labour market research. It is noteworthy that research reports covered specific learners such as people with disabilities, older workers, older workers and school to work transition. Research on teaching and learning included graded assessment in competency-based training, literacy and numeracy, VET practitioners, and initial VET teacher training.

For the most part NCVER research, even that commissioned by the Australian Government is published in Research Reports however NCVER is also concerned to ensure as far as possible that research is disseminated in very brief summary form to stakeholders. The aforementioned *Research Messages* publication achieves this. Figure 7 gives an example of the key messages and related research report summary for a project. This page also shows how to access the full report and related publications.

Figure 7: An Example of an NCVER Key Messages Research Report

**Crediting vocational education and training for learner mobility**

*Sandra Walls, John Pardy*

Despite the rhetoric that encourages "seamless pathways" from vocational education and training (VET) to higher education, many barriers exist for VET students who wish to undertake further study at university.

Movement from VET to higher education takes place on a spectrum ranging from well organised to haphazard. Students are not always granted full credit for their previous learning, and there is a lack of clarity between institutions about what counts as credit transfer or exemption.

This project investigates the concept of learning pathways, using as an example the localised credit arrangements that exist in degree structures at Deakin University and the partnerships between Deakin and three TAFE institutes—Box Hill, South West and the Gordon Institute.

By way of comparison, the authors also explore pathway arrangements available to individuals who have undertaken training through enterprise-based registered training organisations.

**Key messages**

- Different VET qualifications result in different pathways with varying credit transfer arrangements and outcomes.
- Students who are perceptive and well informed show that they are adept at forging pathways for themselves, in spite of systemic and cultural impediments.
- TAFE and university personnel identify improved pathway negotiations, a database of credits, and mutual respect as important for efficient credit transfer processes.
- The majority of employment and context-related training delivered by enterprise registered training organisations goes unrecognised in broader credit transfer and articulation policy discussions.

A short publication, A guide to credit transfer, has also been developed to assist students with VET qualifications who seek articulation into higher education programmes <http://www.ncver.edu.au/ publications/2248.html>.

*Source: National Centre for Vocational Education Research, 2010*

In addition to NCVER, Skills Australia, formed in 2008, is now a major commissioner of skills and labour market research in its role of advising the Australian Government (see Skills Australia, 2010; 2011). Other VET research is conducted by universities including the Centre for the Economics of Education and Training (CEET) at Monash University, by the University of Technology Sydney, the University of South Australia, Griffith University, Queensland University of Technology, specialised centres in Sydney and Melbourne Universities, RMIT and the University of Ballarat, to name some with dedicated VET research capability. Most research on teaching

and learning is undertaken in higher education research centres and departments though NCVER has also focused on pedagogy, VET practitioner skills and learners.

In the UK, adult, vocational and further education research is similarly extensive with numerous universities with established teaching and learning, and labour market research departments including the Centre for Labour Market Studies at Leicester University, Cardiff University, the IOE Centre for Learning and Life Chances (LLAKES), and the University of Warwick's Institute for Employment Research (check title) . Other research centres in this field include the Centre for Research in Lifelong Learning at Stirling and Glasgow Caledonian, the Centre for Skills Knowledge and Organizational Performance (SKOPE) in Oxford and the Centre for Economic Performance at the London School of Economics. Other agencies such as NIACE – The National Institute for Adult and Community Education and (until recently) UK Lifelong Learning, the sector skills council with coverage of the further education sector are also active in adult and vocational education research (see for example Lifelong Learning UK *Research Directory 2010* which lists 52 research reports produced by LLUK between 2005 and 2010).

The major independent centre in the UK advising government on skills and labour market issues through commissioning and undertaking research is the UK Commission on Employment and Skills. The UKCES produced *Ambition 2020* in 2009 and 2010 following publication of the Leitch Report (2006) targets. The UKCES also oversees the UK Sector Skills Councils. The UKCES lists 28 Evidence Reports on its website and over 100 publications on a wide range of issues including skills shortage reports, high performance working, barriers to higher education, the Skills Almanac and Annual Employer Skills Surveys, scenario building, employability skills, business planning and specific sectoral skills reports.

In New Zealand there are two main agencies responsible for research in vocational and continuing education, Ako Aotearoa the National Centre for the Study of Tertiary Teaching Excellence and The New Zealand Centre for Educational Research (NZCER). While NZCER has carried out or commissioned research in adult learning and vocational training this has mainly been related to adult literacy.

## Ako Aotearoa

Ako Aotearoa is funded by the government but is an independent research agency linked to Massey University with its own board established in 2007. Its key focus is the improvement of teaching and learning in vocational and higher education – what is referred to in New Zealand as tertiary education.

> Through a focus on enhancing the effectiveness of tertiary teaching and learning practices, the Centre will assist educators and organizations to enable the best possible educational outcomes for all learners. (Ako Aotearoa, 2011)

Its activities include funding projects, including research, resource developer, supporting communities of practice, identifying and showcasing excellent practice, raising the dialogue about tertiary teaching and learning and provision of independent policy advice. Its ambit includes the components of the "Tertiary" sector in New Zealand which includes the polytechnics, private training providers, universities, institutes of technology, adult and community education, workplace learning and the Wananga – Maori cultural and skills centres.

It sees learning and teaching excellence advanced through research which embraces, practitioners, education and training organisations, learners and employers and the community. Peter Coolbear (2010), its current Director, argues that there is much good practice in the system but it is generally not identified and shared. Another position which informs Ako Aotearoa's research is that the benefits and outcomes of learning are often assumed not tested. Some of its recent research and implementation projects include developing a dedicated education unit for nursing practice, assessment structures for workplace learning, the review of building sector training packages and issues around the engagement of workplace learners. Coolbear et al. (2009) notes that between 2006 and 2008 there were 118 pieces of work recorded on Ako Aotearoa's National Register of Research and Implementation Projects as being undertaken on vocational education and training in New Zealand.

So in many ways Ako Aotearoa shares many of the roles of IAL in research, particularly on learning, on developing improved practice and building teacher capability. It does not deliver training to the vocational educator community or generally undertake labour market research.

The major research agency for labour market and skills research in New Zealand is the Department of Labour. It produced the New Zealand Skills Strategy in 2008 and cites its main current research priorities as focusing on "… the labour market outcomes of people who undertake tertiary education or industry training; the employment conditions and work arrangements of people in the workforce and adult literacy , language and numeracy skills" (See New Zealand Department of Labour website, 2010). Other research focuses include the Linked Employer-Employee (LEED) data and research programme and Workforce 2020, a new futures programme which "will build an evidence base to generate awareness and stimulate debate on future labour market issues" (ibid).

# Some Points of Interest

It is not the intention in this overview to attempt to review the research and research findings in vocational and continuing education and training across the three countries, as noting the research is far too extensive and diverse to do this. The comparative review has attempted to convey a sense of this diversity. Rather, the comments below explore three issues which hold some messages and learning points for Singapore's developing CET research programme. These are (a) the balance of research interests and focuses, (b) improving the quality and application of research in CET and, (c) approaches to research planning, coordination and priority setting.

## The Balance of Research Interests

It is noteworthy that research in CET seems to fall into two broad categories. The first is what we might call *skills and labour market research* which itself spans a wide field from skills and labour market planning and predictive analyses of skill shortages per *se* to productivity research, research on high performance work and workplaces, impact and ROI type studies, studies of income disparity, labour market mobility and economic returns to education and training. The second area of research falls broadly under what we might *pedagogy, teaching and learning.* This area includes studies of VET practitioners, an increasing focus of research on workplace learning, on-line and non-traditional learning, learning transfer, VET curriculum and institutional arrangements, including pathways and relationships between the educational sectors.

These two categories are not wholly separate of course and some areas of research cross the "boundaries" however it is noteworthy that in the UK, Australia and New Zealand the institutional arrangements to carry out research have sharpened the distinctions. For example in New Zealand, the Ministry of Labour clearly focuses on Labour Market Research and Ako Aotearoa focuses on teaching and learning. More generally governments tend to fund and set up labour market focused research centres (like UKCES and Skills Australia) or manage it from within government agencies – for example in New Zealand's case. This kind of research has a much clearer line of sight to government resourcing and policy.

Hattie (2009) writing in relation to the UK makes the point that government funded research tends to be focused on *"surrounding structures and resources, rather than on teaching and learning*" (Coolbear et al., 2009, p.8). Interestingly the funding afforded labour market research also sustains specialist university centres like CEET, and the Institute for Employment Research at Warwick which receive commissioned research projects from the government funded national agencies.

Research on teaching and learning, practitioner development, assessment tends to be more likely to occur in higher education institutions, often in centres set up with indirect government support. An example is the Centre for Research in Lifelong Learning at Stirling and Caledonian. The Ako Aotearoa and IAL are two unusual examples of agencies directly set up and funded by government to pursue research in adult learning. As is explored in the next section this research (particularly research on teaching and learning) tends to be more difficult for governments to apply in policy terms, or to understand. It is likely to be more qualified, to be framed within particular theoretical or conceptual paradigms, incremental and specialised. It is also more likely to link to the professional behavior of practitioners rather than policy (see Coolbear et al., 2009).

The case of NCVER is an interesting one of a government funded organisation with a broad scope. An analysis of its *Research Messages 2010* shows about one thirds are in labour market related areas, about two thirds in learning and teaching. However, its labour market research tends to be exploratory rather investigation and reporting of skills shortages futures planning. This is the province of Skills Australia.

What can be made of all this for IAL? *First,* it is rare for a research centre for CET and adult learning to have such a broad ambit, this flexibility and room to move is important as IAL builds its capacity, it should be preserved. *Second*, there is a dilemma facing IAL in relation to its Centre for Skills, Productivity and Performance Research. There is no dedicated agency in Singapore, unlike in the UK and Australia for independent labour market advice to government. While IAL is not an independent agency, the issue does raise the question of how far does IAL wish to develop its labour market research capability? On the other hand, research requests from WDA and MOM are likely to fall into the labour market category, it is important that this doesn't capture IAL's research agenda and purpose as this is likely to be where the link between research and policy impact will be strongest and thus where the utility of IAL's Research Division will be perceived to be strongest. *Third*, there are particular lessons to be learnt by IAL from Ako Aotearoa which has sustained support for its research in teaching and learning from both government and education and training providers by both commissioning and funding good research and by building up its in-house research capability and targeting research which has both methodological integrity and potential impact. This is further developed in the next section.

## The Quality and Application of Research

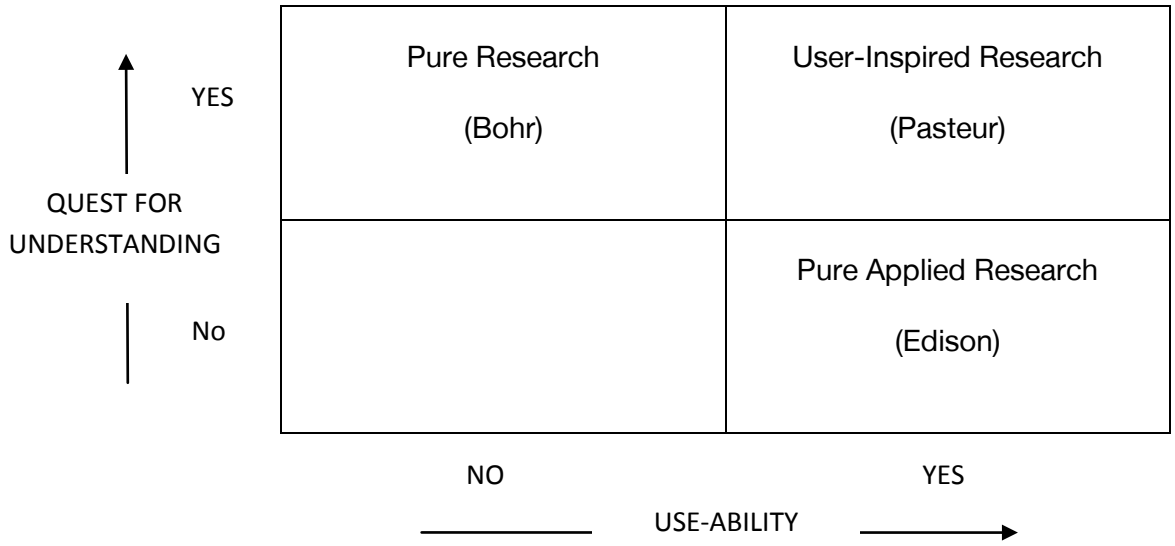
Coolbear et al. (2009) notes that there has been considerable debate in the UK (Hargreaves, 1996; Tooley & Darby, 1998), Australia (Department of Education Training and Youth Affairs, 2000) and in the United States (Shavelson & Towne, 2002) on the value to practice and policy of much educational research. He notes the arguments presented in the literature about research in education as being

partisan, fragmented, methodologically weak and often conducted without access or effective dissemination to policy makers or practitioners. In a paper presented to the New Zealand Vocational Education Research Forum (ibid) he argues that although substantial research in vocational education and training has been completed in New Zealand "as with other research in tertiary education, the impact on practice appears to be negligible" (ibid, p. 1) He reports on a study undertaken by Ako Aotearoa to investigate "why this might be so and how Ako Aotearoa as the National Centre for Teaching Excellence might contribute to ensuring better synergies between research and practice in the future" (ibid).

Coolbear et al. (2009) analysed a sample of 40 studies on workplace learning using Stokes (1997) quadrant model of scientific research in terms of whether the research satisfied two criteria, a quest for fundamental understanding and application and usability. He notes that the inference in this model (see Figure 8), is that much educational research is either too theoretical to be useable in practice or of insufficient rigour or scope to push the boundaries of understanding. Coolbear points out that it is not the case that Pure Basic Research or Pure Applied Research has no value but that "as a funding agency with limited resources, it is reasonable to assume that Ako Aotearoa should favour proposals for work that seek to address both application and increase fundamental understanding" (p. 3).

Figure 8: Stokes Quadrant Model of Scientific Research




*Source: Coolbear et al., 2009*

Core drivers were identified for *Methodological Integrity* including "methodological Integrity" itself, "contribution to cumulative knowledge" and "non-partisan approach" and for *Potential Impact* "including/considering practitioners", creating "synergies and relationships" and "dissemination/accessibility". He notes that the researchers predicted that research would show high methodological integrity and

low on the use-inspired axis. Instead "the majority of the research (70 percent) was ranked as low on both methodological integrity and potential Impact" (p. 5) and that "research published in New Zealand peer reviewed journals tended to score low on both methodological integrity and potential impact whereas other types of publications tended to be spread more evenly across the quadrants" (p. 6).

The research report goes on to suggest ways research in learning (in this case workplace learning) can be improved by better questions, triangulation (multiple data sources), adoption of a researcher-practitioner model and more balanced researcher expertise in qualitative and quantitative approaches. As an agency it was proposed Ako Aotearoa be better attuned to use-inspired projects and more effective in dissemination.

For IAL as a research agency there are strong messages here for it in developing its capacity in learning and pedagogical research. Labour-market research is likely to be more objective, more focused on clear questions and with a ready policy "market". Research on learning is more problematic, research not just in New Zealand but internationally shows its impact on practice limited and that on both methodological and potential impact it is weak (for example Tooley & Darby, 1998). One avenue would be for IAL to collaborate with Ako Aotearoa – one of its MOU partners on developing its research in learning in the adult and continuing education sector.

## Research Planning, Coordination and Priority-setting

Finally, a few comments on planning research. In 2009 IAL undertook a broad consultative process to develop its Research Strategy 2009–2012. The strategy has guided its work since including the setting up of its three research centre.

Wilkinson (2010) comments in a paper for NCVER on the different approaches to research planning, and differing research priorities in the UK, (Scotland in particular) and in Australia. Commenting on the UK she notes "There is growing interest in the "return on investment" in social science research, exemplified by the focus of the United Kingdom's Research Council on "impact" and while there is an emerging field on the use of research in policy less attention has been paid to the processes of research planning and prioritisation" (p. 6). Wilkinson profiles the case study of NCVER's collaborative process and national coordination of research with the situation in the UK, particularly that in Scotland.

In Australia in 2007 Ministers responsible for vocational education and training signed off national research priorities for the sector. These shaped NCVER's work over the past five years. The process of determining new priorities was a collaborative one which began with a public forum in 2009 and continued throughout 2010. The process began with a discussion paper prepared by NCVER which took key drivers such as future skills needs, demographic changes,

technology, sustainability and from these ten themes were generated. Participants included academics and practitioners, industry parties, state and federal government representatives, skills councils, trade unions, employer bodies and community organisations. The emerging research priorities from which in 2010 NCVER progressively shaped its priorities included:

- the current policy context and skills formation strategy
- system design and responsiveness, the overall design of the sector
- boundary issues between sectors (e.g. higher education and vocational training)
- strategies for a more holistic approach to skills formation
- the demand side or market issue in VET
- VET in relation to other social issues, such as crime, mental health, social inclusion
- The need to focus on outcomes

In comparison Wilkinson (2010) argues there is no overarching set of priorities shaping research in vocational and further education in the UK. Central government departments commission applied research to inform policy, charities which also fund research set their own priorities. The UK Research Councils do have strategic priorities but these tend to be very broad for example the Economic and Social Research Council specifies, "succeeding in the global economy", "global poverty", "energy and the environment". In Scotland, within the Scottish government there is an *internal* process to stock take evidence needs for skills and lifelong learning policy. Wilkinson (ibid, p. 10) lists the different priorities of Scotland's stakeholders in skills and training for example "Scottish government – outcomes focused, what works…Scotland's 43 colleges – efficiency and accountability; employers – a skilled workforce; Scottish Funding Council – economic growth; Scottish Qualifications Authority – Scottish qualifications, systems and processes" and indicates there is no coordinating research infrastructure to link and prioritise these claims and asserts "There has never been a better time for the multiplicity of stakeholders in vocational education and training to work together in identifying research needs and priorities to address their shared challenges"(p. 12).

For IAL there are lessons to be learnt in this case study of two different systems, one a coordinated, consultation process, the other, uncoordinated claims by multiple agencies overshadowed by research driven by internal priority setting within government. IAL has established its research strategy through consultation but this could "drift" towards evidence gathering solely to support the policy agenda. It would be valuable for IAL to continue its broad-based consultation with

the multiple stakeholders within the sector, perhaps every two years to fine tune and progressively reshape the research priorities for the future.

# The State of the Field of Vocational and Continuing Education

It is ambitious to attempt a commentary on something as broad and embracing as the international "state of the field" in vocational and continuing education and this discussion will be a modest one. There are two limitations. First the review is only focused on the three overseas countries – the United Kingdom, Australia and New Zealand, and of course Singapore and does not take into account developments in other places. For example recent establishment of the European Qualifications Framework and wider OECD and UNESCO policy papers on vocational training are not part of the study. Secondly, the major issues around which the comments which follow are made are those addressed in the First and Second Update reports. In this concluding section the report draws out some of the convergences and commonalities in the national CET systems however it also notes that there are some emerging differences and these also are highlighted.

## The Common Heritage and History of Vocation and Continuing Education

Australia, New Zealand, the UK and Singapore show many similarities in the stories of their vocational education and training systems. In the first report the history of vocational education and training was traced from the late 19th Century. All three countries saw the progressive development of more formalised, state funded training through the Mechanics Institutes in the UK and Australia, similar early colleges in New Zealand to the establishment in the 20th Century of the Further Education system in the UK, Technical Colleges in Australia and the technical schools, later to become Polytechnics in New Zealand. Though later, in Singapore the history of vocational training can also be followed, from the establishment of the Adult Education Board in 1960, to the Vocational and Industrial Training Board in 1979, and the establishment of the ITE and the polytechnics.

From the earliest developments there were two major differences between what happened in Australia, the UK and New Zealand, and Singapore. The first of these was that in all three countries, an early (and continuing) pillar of the vocational training system was the concept of apprenticeship. Trades apprenticeships were at the heart of all industry training. This was never so in Singapore. The second difference was the aforementioned separation of CET and PET learning in Singapore which has coloured the system to the present day and resulted in a

*separate* WSQ system, outside ITE and the polytechnics. In the UK, Australia and New Zealand "entry-level" and continuing vocational training have always been integrated.

Nevertheless the broad similarities in the core-principles of the national vocational and continuing education training systems of all four countries became explicit from the mid 1980s to 2005 as first the UK, then Australia and New Zealand and later Singapore implemented frameworks of national vocational qualifications, competency-based training, national sector skills frameworks and industry-driven training systems. These were of course the NVQ in the UK (1986), the AQF and related AQTF system of training packages in Australia (1995–2000), the NQF in New Zealand and the WSQ system in Singapore (2005). Around these frameworks developed similar approaches to quality assurance including registration and approval of providers, competency-based assessment, and minimum (though not necessarily mandated) trainer qualifications or requirements for trainers.

The training frameworks and qualifications set up were designed primarily to serve the needs of industry, to provide a skilled workforce, to provide for the upgrading of the workforce as new technologies emerged or structural changes occurred in employment. But in all cases the vocational training system also had to address the needs of marginalised workers, the low-skilled, those without functional literacy and the unemployed.

Each of these systems developed generic foundational or key skills programmes, increasingly known under the rubric of employability skills which were designed to address, mainly, the needs of very low-skilled, marginalised workers. In some instances, as with Australia these were intended to be integrated into skills training while in the UK and Singapore they stood apart as discrete foundational skills programmes.

## Converging National Agendas for Skills Formation

One focus of the first report was to look at recent developments in each country in terms of labour market skills planning and forecasting and the potential implications of this on the vocational and CET systems. The "converging agenda" is expressed in the Leitch Report (2006) and the UKCES Ambition 2020 Report (2009); the Skills Australia (2010) Australian Workforce Futures Report, the New Zealand Skills Strategy (2008) and the Singapore Economic Strategies Report (2010). These reports have much in common including:

- Medium to long-terms skills projections for post global financial crisis growth and structural reform
- Proposals to increase the employment rate (generally from around 65–70 percent)

- A focus on skills training for productivity improvement and related targets
- An increased focus on high-order generic skills and "high performance work"
- Improved skills application, efficacy (the right skills in the right place)
- Greater Enterprise engagement with the training sector
- Improved "connectivity" and "articulation" of vocational and higher education, and,
- Contrasting with this "high skills" agenda, all note the challenges of low levels of literacy and increasing inequity in income distribution.

In all the countries studied, including Singapore these issues have been implicitly (or in some cases, for example, Australia) directly passed to the vocational and continuing education and training sector to respond to, for example to develop training strategies for high productivity growth, and to also be more effective in attracting marginalised workers and generating social and economic mobility through skills training.

As a result vocational training has what Skills Australia calls "a new mandate", no longer is it just about training people for jobs, but it is expected to also address or at least contribute to the resolution of bigger national agenda. But there are important questions yet to be resolved which require policy improvement and research if this response is to be effective. They include;

(i) What kinds of training and workforce development will most effectively impact productivity improvement, and in which sectors?

(ii) What are the "high order" generic skills and how are they most effectively developed?

(iii) How are improved employer engagement and better skills transfer and application achieved?

(iv) How can skills upgrading most effectively produce social and economic mobility, and can skills improvement, alone lower income disparity?

These are issues on which, in all countries, there needs to be a better understood of the issues, better data and research before the vocational and continuing education sectors can intelligently and effectively address these challenges.

It should also be noted that in the UK the alignment of skills formation thinking with the other systems has broken down somewhat following the election of the Conservative government. The commitment to skills formation and productivity growth and social mobility are still there but Leitch targets have been scrapped and

the UKCES's central skills planning and research function reduced and its role changed.

## The Challenges of Quality Assurance, Accountability and Improving Outcomes

Another issue which is emerging as a common concern in the vocational and continuing education sectors is the issue of quality assurance, achieving better outcomes from training and improved evaluation. Quality assurance in all vocational and continuing education sectors has focused to a large extent on input measures – regulation of trainer standards, approval of training providers, in some cases course accreditation. Currently in both Australia and the UK changes are occurring in relation to quality assurance and regulation with an increasing emphasis turning to outcomes and accountability measures rather than regulating inputs The new government policy in the UK proposes a "transparency agenda" which will be delivered through open public data on performance and spending. Four measures include placement in employment and further study, international comparisons on outcomes with other OECD countries, funding per student and administrative as a proportion of total cost of further education. Other high level indicators are increased productivity, skills formation, increased use of qualifications by employers, reduced skills deficiencies and measures of social mobility.

In Australia a concern with the quality of training and performance of providers, particularly the quality and skills of trainers has resulted in a series of recommendations in the Skills Australia "Roadmap" report (2011) which include independent sampling and moderation of training outcomes, higher standards for Cert IV providers and publication of performance data on providers on the My Skills Website. Also in Australia the Australian Skills Quality Authority will establish national standards across the country.

While in New Zealand trainer credentials are not regulated, the oversight of the Industry Training Organisations (ITOs) is strong and they have the power to remove providers who are unsatisfactory. Part of the reform of Australian quality assurance arrangements will be to strengthen the powers of the regulator to remove poor providers from the system.

As the expectations of vocational and continuing education systems in responding to the larger national economic and social agendas and workforce productivity strategies increase, we observe increased interest from governments and regulators about quality generally and, more importantly, about establishment of outcome measures which can be used to judge performance of the whole system and of individual providers. These are issues and trends paralleled in Singapore as we

rethink the outcome measures used and strengthen the quality assurance system, particularly regarding trainer regulation in Singapore.

## Evolving Systems, New Methodologies and Building Bridges to Higher Education

It was noted earlier that the UK, Australia, New Zealand, and more recently Singapore's WSQ system all share the same foundational "source code", national competency-based training systems linked to national qualifications endorsed by industry and supported by a "vocational model" of quality assurance. But there is a real sense that the larger overseas systems are changing and evolving to embrace a more broadly based platform of vocational learning methodologies requiring a more versatile trainer – or adult educator – who is able to employ a range of learning models, not just competency based training and assessment.

With the broadening of the client base of CET, especially the increasing numbers of PME learners (in all systems) there are calls from governments and regulatory bodies for closer links with and articulation between vocation and continuing education and higher education, what in Australia is called "greater connectivity".

The way in which the various systems have evolved shows some interesting similarities. All began as staunchly competency-based approaches to training, tightly controlled by various forms of quality assurance, inspection and auditing. This in itself was controversial at the time and led to major critiques of competency-based vocational training. The critique by Alison Wolf (*Does Education Matter* (2002)) of the NVQ system in the UK, the 2002–2003 High Level Review of Training Packages in Australia, and the withdrawal of the New Zealand universities from the NQF were expressing a similar concern – that CBT was an overly rigid and constraining educational model which imposed a bureaucratic rather than learning model of assessment.

Whether these critiques were warranted is a matter for debate but the result was the systems changed, for example in Australia training packages became more flexible, more graded assessment was used and in New Zealand a new model of credits was introduced to replace the former competency-based criteria for levels of study. In the UK the relationship of the NVQ to the NQF was changed. During the last five years the VET systems have continued to evolve with the expansion of professional level courses under the VET umbrella and with more TAFE – university and Further Education – university partnerships.

The methodologies are evolved in concert with these changes away from competency based training models to graded assessment and inclusion of vocational skills components in higher education courses. In TAFE in Australia and the Further Education sector in the UK the boundaries are blurring between VET

and Higher Education. As noted earlier in this report in Australia a "new VET practitioner" (Skills Australia, 2011, p.92) is sought *"who can customize to suit enterprises and personalise learning... who can let go of old certainties…these attributes represent a new hybrid mix of educational and business thinking*" (Mitchell, 2006).

In the UK UKCES (2010) has called for more opening up of pathways between further education and universities and the Bradley et al. (2008) Review in Australia has proposed greater connectivity and eventually a single national regulatory body for both sectors. And in all systems, including Singapore's, the increasing numbers of PMEs entering CET are causing the systems to go beyond CBT and CBA to embrace other models of skills development and improved work performance.

# Improving the Vocational Experience for Learners and the Transfer of Learning

This second report focused attention on learning and the learner including improving the quality of training through better professional preparation of trainers, pedagogy, research and addressing the needs of marginalized and disengaged learners. There are here a collection of issues and challenges for all systems. In particular creating flexible, contextualised learning, and taking VET and CET learning into the workplace are challenges, especially in Singapore. In the other systems workplace learning is more evident (due in part to the tradition of apprenticeships) but also because in the UK the concept of authentic work-based assessment was fused with CBA to create a stronger nexus with workplace learning. Contextualisation of learning has not come readily to competency based training and it would be useful for Singapore to look at how Australian Training packages are addressing this issue.

An area which is far stronger in the overseas VET systems than it is in Singapore is online, and other blended technology based systems. The experience of on-line and distance methodologies in VET from New Zealand, Australia and the UK may assist WDA in diversifying beyond the dominant mode of classroom instruction in the WSQ system.

Finally, while research agencies such as NCVER, NZCER, UKCES, Ako Aotearoa and the university with strong labour market and vocational education departments overseas have built up a body of research on CET, much of this is labour market related. There is scope for IAL to build its reputation in VET pedagogy and workplace learning and for developing better understanding of alternative models of vocational learning and assessment to those practiced in the competency movement. A useful point of reference is to look at some of the work Ako Aotearoa has done and perhaps develop some joint projects in areas of mutual interest.

## Differences and Divergence

Having suggested a picture of converging systems which display many common issues and have had a broadly similar trajectory in their development, it is important to recognise there are important differences as well. One sharp difference of all these vocational training systems with Singapore is the greater diversity of the people they serve, particularly marginalised and disengaged learners. Participation in New Zealand's vocational and continuing education system including the higher education sector shows a high proportion of Maori, Pasifika and Asian students compared with Australia and coupled with the Wananga indigenous participation in training is one of the highest in the world. In all the overseas systems disengaged learners form a major client group, especially disengaged youth and the presence of these groups has shaped the mission of CET. This is not so in Singapore where the main focus on disadvantage relates to low skilled workers.

And the Australian and UK vocational education and training systems are beginning to diverge in terms of the level of government funding and the planning model. While Australia's current government is prioritising additional public funding for VET and is likely to accept the current recommendation for a much more generous student entitlement system, in the UK the government in introducing a co-funding and student loans system. While Skills Australia, the independent body advising the government on skills and VET has had its mandate expanded the UKCES has had its role both as a strategic advisory body and research agency has recently been reduced.

From Singapore's perspective and in terms of the future development of the WSQ system, these three systems still provide useful exemplars of good practice, of lessons learnt on what to avoid, and signposts for the future.

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Appendix 1 – Structure of Reviewed Qualification: Core and Elective Units 2010

| Structure of existing TAA40104 Certificate IV in Training and Assessment | Structure of reviewed TAE40110 Certificate IV in Training and Assessment. |
|---|---|
| **14 units (12 core plus 2 elective units from a defined list of 11 units)** | **10 units (7 core and 3 electives)** |
| **Learning Environment:** | |
| TAAENV401B Work effectively in VET | |
| TAAENV402B Foster and promote an inclusive learning culture | |
| TAAAENV403B Ensure a safe and healthy learning environment | |
| **Learning Design:** | **Learning Design:** |
| TAADES401B Use Training Packages to meet client needs | TAEDES401A Design and develop learning programs |
| TAADES402B Design and develop learning programs | TAEDES402A Use Training Packages and accredited courses to meet client needs |
| **Delivery and Facilitation:** | **Delivery and Facilitation:** |
| TAADEL401B Plan and organise group-based delivery | TAEDEL401A Plan, organise and deliver group based learning |
| TAADEL404B Facilitate work-based learning | |
| TAADEL403B Facilitate individual learning | TAEDEL402A Plan, organise and facilitate learning in the workplace |
| **Assessment:** | **Assessment:** |
| TAAASS401C Plan and organise assessment | TAEASS401A Plan assessment activities and processes |
| TAAASS402C Assess competence | TAEASS402A Assess competence |
| TAAASS403B Develop assessment tools | TAEASS403A Participate in assessment validation |
| TAAASS404B Participate in assessment validation | |
| | **Electives:** |
| | TAEASS301A Contribute to Assessment |
| | TAEASS502A Design and develop assessment tools |
| | TAEDEL301A Provide work skill instruction |
| | TAEDEL403A Coordinate and facilitate distance-based learning |
| | TAEDEL404A Mentoring in the workplace |
| | TAEDEL501A Facilitate e-learning |
| | TAELLN401A Address language, literacy and numeracy skills |
| | TAETAS401A Maintain training and assessment information |
| | BSBAUD402B Participate in a quality audit |
| | BSBCMM401A Make a presentation |
| | BSBLED401A Develop teams and individuals |
| | BSBMKG413A Promote products and services |
| | BSBREL402A Build client relationships and business networks |
| | BSBRES401A Analyse and present research information |
| | **1 elective unit** may be selected from anywhere including other currently endorsed national Training Package or accredited course. Where the choice of a unit from another currently endorsed national Training Package or accredited course is made, this unit must come from a qualification or course at Certificate III or above and must contribute towards the vocational outcome of the program. |

*Source: DEEWR, 2010, p.6*

# Appendix 2 – Certificate IV (TAE) Skill Sets

| | | |
|---|---|---|
| **Assessor Skill Set** | | |
| **Target Group** | Individuals wishing to obtain the assessment competencies to assess according to AQTF requirements. | |
| **Units** | TAEASS401A<br>TAEASS402A<br>TAEASS403A | Plan assessment activities and processes<br>Assess competence<br>Participate in assessment validation |
| **Pathway** | The TAEASS units provide credit towards TAE40110 Certificate IV in Training and Assessment | |
| **Enterprise Trainer Skill Set** | | |
| **Target Group** | Individuals who train others within a workplace. The training may be accredited or non-accredited. The role may involve some coaching at individual or small group level. | |
| **Units** | TAEDEL301A<br>BSBCMM401A | Provide work skill instruction<br>Make a presentation |
| **Pathway** | These units are elective units and provide credit towards TAE40110 Certificate IV in Training and Assessment. | |
| **Enterprise Trainer and Assessor Skill Set** | | |
| **Target Group** | Enterprise trainers and assessors working in an enterprise registered training organisation (RTO) or in an enterprise that works together with an RTO in an auspicing arrangement. These people deliver and assess nationally endorsed units or qualifications. | |
| **Units** | TAEASS401A<br>TAEASS402A<br>TAEASS403A<br>TAEDEL301A | Plan assessment activities and processes<br>Assess competence<br>Participate in assessment validation<br>Provide work skill instruction |
| **Pathway** | The TAEASS units provide credit towards TAE40110 Certificate IV in Training and Assessment. | |
| **Sustainable Practice Skill Set** | | |
| **Target Group** | All trainers and assessors. In the first instance those who have a specific role in delivering green skills or who train and assess in sectors where green skills development is identified as a priority. | |
| **Units** | TAESUS501A | Analyse and apply sustainability skills to learning programs |
| **Pathway** | This unit is an elective unit and provides credit towards the TAA50110 Diploma of Training and Assessment. | |
| **Workplace Supervisor Skill Set** | | |
| **Target Group** | Supervisors and managers involved in developing the skills of their team. In particular these competencies are identified as essential skills for those engaged in supervising apprentices. | |
| **Units** | TAEASS301A<br>TAEDEL301A<br>TAEDEL404A | Contribute to assessment<br>Provide work skill instruction<br>Mentor in the workplace |
| **Pathway** | These units provide credit towards TAE40110 Certificate IV in Training and Assessment. | |

*Source: DEEWR, 2010b, p.81*

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