# The Allen Consulting Group

# Queensland Post-secondary Education and Training Review

**Final Report** 

November 2010

## The Allen Consulting Group

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### Executive summary

#### 1. Purpose of the Review

The independent review of Queensland's wider post-secondary education and training system was commissioned by the Minister for Education and Training the Hon Geoff Wilson to provide advice and make recommendations on the current state and future direction of the post-secondary education and training system in Queensland.

Mr Peter Noonan, Director, Allen Consulting Group, was appointed to lead the Queensland Post-secondary Education and Training Review. Mr Noonan was a member of the Expert Panel for the Review of Australian Higher Education (the Bradley Review).

Under the Terms of Reference, matters considered to be in the Scope of the QPET Review include:

- 1. Comparative assessment of Queensland's post-secondary education and training sector with national and other jurisdictions with particular reference to investment, participation, qualifications and other outcomes.
- 2. Analysis of the impacts on current and future workforce participation rates, industry development and productivity levels, including upon Queensland's regions.
- 3. Assessment of the impacts of current and proposed national changes to Vocational Education and Training (VET) and higher education and opportunities for Queensland, including improved student movement between the sectors.
- 4. Analysis of the operational effectiveness of Queensland TAFE institutes including factors impacting on responsiveness and flexibility, and strategies for improvement.
- 5. Identification of opportunities to enhance the role of Queensland Universities, Queensland TAFE and private Registered Training Organisations (RTOs) in any potential new direction for post-secondary education in Queensland.

The findings and recommendations outlined in this Report are those of the Allen Consulting Group as an independent review. The Government or government officials have not endorsed them and the process of government consideration of the recommendations is separate to this report. Matters relating to the operational effectiveness of Queensland TAFE Institutes are the subject of separate advice to the Government.

#### 2. Key issues

#### 2.1 Workforce participation, productivity and skills shortages

It is now widely recognised that higher levels of educational attainment result in higher labour force participation rates, and longer participation in the workforce. A better-educated workforce is also important in achieving productivity improvements. Higher levels of educational attainment across the population mean the stock of skills in the workforce, and across industry sectors, are wider and deeper.

Holding a post-school qualification at or above Certificate III bestows advantages on individuals and to the economy. Participation in higher education can have intergenerational benefits, underlining the long-term significance of school completion rates and pathways from school to post-secondary education.

The relationship between skills and educational achievement and labour force participation and productivity underpin policies and strategies of the Council of Australian Governments and the Queensland Government which aim to boost participation and attainment in education and training.

Workforce development has also emerged as an organising framework for effectively planning, delivering and evaluating training and education for those already in the workforce and as a means of linking skills development to industry and enterprise strategies to boost productivity.

For existing workers and those seeking to join or rejoin the workforce after a period of disengagement, sources of education and training are more diverse and include informal learning. Workplaces are increasingly important and preferred site of learning.

An effective post-secondary education system must therefore respond to the variety in enterprise and learner expectations, preferences, needs and learning contexts, through diversity of providers and with strong engagement with industry and enterprises.

Governments and industry also look to the post-secondary education and training system to address skills shortages. However skills shortages are not simply caused by a shortage of skills supply which can be addressed only by increasing supply through the post-secondary education and training system. Skills shortages are produced by a range of factors, and occur in varied locations, industries and occupations.

#### 2.2 Who benefits of post-secondary education?

If participation and attainment in post-secondary education is important equitable access is important for individuals and to build human and social capital.

In Australia, the benefits of holding a post-secondary qualification (such as higher income levels and more secure attachment to the labour force) are inequitably spread across the population. In particular, those from lower socio-economic backgrounds, regional areas and Indigenous Australians are less likely to hold a post-secondary qualification above Certificate III, and are less likely to enrol in a university degree. This skewed pattern of attainment can result in losses to individuals and families, to community and broader social cohesion, and to the economy.

Education and training opportunities and outcomes are naturally strongly related to a learner's English language, literacy and numeracy levels. The Adult Literacy and Life Skills 2006 Survey suggest 40 per cent of existing workers and 60 per cent of unemployed Australians have less than effective English language, literacy and numeracy skills. For enterprises, low levels of literacy and numeracy have considerable impacts on operations and costs.

#### 2.3 Opportunities and challenges for Queensland

The overarching social and economic challenge for Queensland is to establish longterm sources of prosperity. Sustainable economic growth will depend largely on rates of productivity growth and workforce participation across the economy and not just in the resources sector. Employment growth in Queensland is broadly based across occupations.

The application of generic green skills and knowledge will be an important for achieving sustainable productivity growth in a carbon-constrained economy.

Queensland's workforce participation rates compare favourably on national and international comparisons with higher participation rates of 15-19 year olds an important part of this picture. From 2005 to 2009 there has been a steadily increasing proportion of young people working (part time or full time) or seeking work – but this may be at the expense of participation in post-secondary education and training particularly VET.

This is an emerging concern because productivity growth in Australia has fallen away since 2003-2004 with Queensland's labour productivity currently lagging behind other states and territories. If increasingly numbers of young people enter the workforce without improving the skills levels through post-secondary education and training, the state's capacity to improve productivity levels will be weakened.

Queensland's population is growing quickly. From 4.5 million residents in 2010, the population is projected to approach 6.3 million by 2030-2031 with the southeast corner of the state home to an estimated 4.2 million people.

However population growth will be accompanied by population ageing. The proportion of the population aged 65 and over is projected to grow from 12 per cent to 20 per cent by the late 2030-31. In the same period, the proportion of the population aged 25-44 will decrease from 29 per cent to 26 per cent. Population ageing will detract from growth in the labour force and growth in Gross State Product and requires high levels of initial educational attainment and ongoing skills development.

Increased participation together with high levels of population growth will require substantial increases in capacity in post-secondary education and training for campus delivery, face-to-face learning and teaching, and flexible delivery in workplaces and community settings.

Some groups within the Queensland population have disproportionately low rates of workforce participation. There is therefore also an important connection between productivity and equity. Queensland's equity challenge is to ensure that economic prosperity is underpinned by equal opportunity across the state. This cannot mean equality of economic outcomes or performance. But it can mean greater equity of access to the benefits for individuals and regional economies by lifting knowledge and skill levels across the population. Given current fiscal constraints, and competing claims for public resources, investment in post-secondary education and training must be both efficient and sufficient and must flow from a range of revenue sources. This will require a combination of policy reform and an appropriate investment framework.

# 3. The performance of the post-secondary education and training system in Queensland

The performance of the post-secondary education and training system in Queensland can be measured in a number of ways; attainment levels, participation levels and equity in relation to both of these measures, student movement between the VET and higher education sectors and levels of satisfaction. There is mixed performance across these measures.

Qualification attainment in Queensland — measured as the proportion of the population holding a qualification — continues to improve. Attainment at higher qualification levels is also improving, consistent with national trends. They are on track to meet the Q2 target that three out four Queenslanders hold a trade, training or tertiary qualification.

However these higher attainment rates are driven, primarily, by long-term social and demographic trends. It should be recognised that higher attainment rates are due, in part, to Queensland importing higher-level skills via interstate and international migration. However, projections of continuing improvements in higher-level qualification attainment cannot be taken as given. Some leading indicators (such as the number of qualifications awarded) suggest this may not be easily achieved.

In particular participation rates in post-secondary education and training in Queensland are a cause for some concern – both VET and higher education participation rates have declined over the last decade, and they are weak relative to other states.

Within VET apprenticeship commencements have risen significantly in recent years, dropped sharply after the global financial crisis but have picked up strongly compared to previous economic downturns. Growth in traineeships is also strong but is driven almost wholly by existing workers traineeships and not from those seeking to enter or re-enter the labour market.

Queensland's Year 12 retention rate is above the national average and higher than most other states and territories. However while many Queensland school leavers do go on to higher education or VET, Queensland's declining rates of participation in both sectors suggest that many school leavers are not capitalising on the available post-secondary pathways (recognising that some school leavers will enter postsecondary education later). The decline in Queensland's VET enrolments is especially worrying. It would appear that the decline is matched by an increase in the number of students choosing to work full time or part time, or to seek work.

TAFE pathways to university while well developed are not strong or well-used: those with a diploma or advanced diploma account for fewer than 10 per cent of successful university applicants through QTAC, although others enter university directly.

Consultations with universities indicate that Queensland is well placed to capitalise on demand-funded higher education, with strongly growing enrolments in 2009 and 2010. But increasing numbers of school leavers may not necessarily translate into demand for post-secondary education and training. A pressing challenge is to build the capability and demand from students in higher-level studies in the postsecondary education and training system.

This will require learners - current and potential – to have the literacy and numeracy skills and the capacity for further learning necessary for successful participation. This is a specific challenge and priority for Queensland and one that is recognised in schooling policy.

When compared with adult literacy and numeracy skills attainment in other developed countries, Australia's performance (and Queensland's) falls in the midrange. Recent NAPLAN results show significant improvements in the proportion of Queensland children exceeding the National Minimum Standard. However, the achievement profile lags the national outcome for Years 7 and 9 students. The policy priority to improving literacy and numeracy in schools must now be accompanied by a similar focus on adult literacy and numeracy to complement recent national policy and budgetary measures.

However enrolments in Certificate I and II qualifications in Queensland are not growing to meet these needs and the structure of the qualifications may not be producing the higher levels of literacy and numeracy needed for the modern workforce or further learning.

The relative proportion of Indigenous Year 12 completers going on to university or higher-level VET qualifications is much lower than that of the wider population of Year 12 completers. On the whole, Indigenous Year 12 completers are almost three times more likely to be seeking work, but have not yet gained either part-time or full-time employment.

While participation rates in both HE and VET are declining for Queensland as a whole, the decline is steeper in regional and remote Queensland, and post-secondary educational attainment levels are also lower.

As the State Government has specific responsibility for the VET sector, it is also worth looking at how that sector is performing in Queensland on some key measures.

On two key measures of employer satisfaction with VET system performance, Queensland lags NSW and Victoria, and lags the national average. Queensland employers register lower satisfaction for:

- whether formal qualifications are providing employees with the skills required for their job; and
- satisfaction with apprentices and trainees

Two additional measures are formally used to compare VET performance across jurisdictions:

- government real recurrent expenditure per publicly funded annual hour delivered; and
- government real recurrent expenditure per hour of publicly funded load pass.

On these two measures, Queensland performs poorly relative to other states. However the performance of the Queensland VET sector is much stronger when assessed against the multiple inputs and outputs using a more sophisticated and comprehensive approach (Data Envelopment Analysis). It shows that Queensland's VET performance is stronger regardless of whether the output focus is both teaching load and student success, or student success alone.

#### 4. Meeting Current and Future Challenges

To meet the challenges outlined above, Queensland will need to strengthen and improve its post-secondary education and training system, and is in a strong position to do so. Importantly, the Queensland government has established a sound policy framework upon which to build further reform of the post-secondary education and training system.

Queensland's public universities and TAFE institutes are diverse and well established, and there is a wide network of private, industry and community post-secondary providers. However, major reforms to the Queensland TAFE system are required to fully realise its potential and more effectively its capacity.

To achieve this a clearer state government policy focus is required to address some of the significant economic and demographic challenges facing the state including the decline in the underlying level of productivity growth, differential levels of workforce participation and differential rates of population growth and ageing across the state.

Specifically, the government should address the following areas of post-secondary education and training:

- low levels of literacy and numeracy, particularly among older workers where workforce participation rates have been increasing;
- declining participation rates in post-secondary education and training, including significant variations between regions and between different population cohorts;
- declines in immediate post-Year 12 pathways to post-secondary education and training, particularly the apparent overall decline in VET enrolments among Year 12 completers;
- declining levels of workforce entry trainees;
- potential for unbalanced growth between higher education and VET, with university enrolments already increasing in advance of the introduction of demand-based funding;
- the need to reduce student attrition rates and improve qualitative completion rates across the post-secondary sector, and especially in VET;
- lower than national average levels of industry satisfaction with VET delivery; and
- the need for improved work-based training and professional practice, both to ensure improved levels of work readiness for graduates.

# 5. Strengthening the post-secondary education and training system in Queensland

To meet the challenges outlined above, Queensland will need to strengthen and improve its post-secondary education and training system, and it is in a strong position to do so (having regard to the differing levels of state responsibility for VET and HE). Based on the analysis in the report and consultations; the following specific measures are suggested for the Government's consideration; together with a new investment framework to be negotiated with the Commonwealth.

#### 5.1 Improve school outcomes and post-secondary aspiration

Government leadership can do much to change community attitudes and student aspirations, particularly when the change in attitude and aspiration requires sustained, graduated social marketing. The Queensland government could consider a major campaign, in partnership with the school and post-secondary systems, designed to promote the importance and benefits of participation in post-secondary education and training.

#### 5.2 Improve retention and qualification completion rates

Policies to promote retention and qualification completion in Queensland are already in place. For example, under the current VET funding arrangements, there is a strong incentive for TAFE institutes to ensure that learners complete modules. Similarly, retention and completion rates will be elements of the post-Bradley university performance-funding framework and universities are clearly focused on reducing attrition and improving learner engagement.

These measures must be sustained and completion rates monitored to ensure continued improvements in the number of people completing post-secondary qualifications, particularly school leavers and those returning to study who don't have qualifications.

#### 5.3 Implementing accessible and well-supported post-secondary pathways

Despite the availability of VET to higher education pathways, uptake is low – only a small number of TAFE students are progressing to higher-level qualifications with credit. While these arrangements are primarily for providers to design and implement the state government could do more to facilitate and assist by:

- expanding provision of tertiary preparation programs in VET;
- facilitating professional development opportunities for VET and higher education staff in developing and implementing pathways;
- developing good practice guides on developing and implementing pathways and dual-sector qualifications;
- providing specialist expertise to help develop and implement pathways;
- requiring that VET qualifications have clear pathways to higher level qualifications.

Consideration can also be given to improving linkages between academic and nonacademic support services available to TAFE and university students.

#### 5.4 More strongly interconnected VET and higher education sectors

Strengthening pathways and facilitating student movement could include: clear arrangements for credit transfer; articulation between qualifications; well-understood and well-validated approaches to recognition of both prior and informal learning; student support services and protocols that give students a sense of seamlessness; enrolment processes that are relate well across the sectors and between institutions; marketing practices that are coherent and informative; and the establishment and maintenance of relationships between VET and higher education providers and the school sector.

The proposed merger of Central Queensland Institute of TAFE and Central Queensland University is a formal, institutional approach to strengthening pathways and facilitating student movement. This and other proposals for dual sector institutions should be supported if it can be demonstrated that they meet industry and community needs, and that they are financially viable and subject to an appropriate governance model that recognises the distinct mission of VET and higher education.

Consultations with universities and TAFE Directors suggest that other options should be fostered and considered: for example, concentrating post-secondary education provision by different institutions on shared campuses in areas of population growth in areas of population ageing and more effectively using high quality and accessible facilities.

#### 5.5 Help Queensland's universities to capitalise on the post-Bradley environment

Queensland universities are moving into a new demand based funding environment where Commonwealth funding will be driven by both aggregate levels of student demand and demand for particular institutions and courses.

In collaboration with Queensland's universities and VET sector, the Queensland government can play a role in maximising demand-based funding for undergraduate programs.

Strategies to stimulate demand could include:

- building student and community aspiration for post-secondary qualification attainment;
- helping to develop and implement post-secondary study pathways; and
- supporting dual sector institutions and dual sector delivery models.

There are a range of Commonwealth funding programs open to universities where the state can and is assisting universities to access funding.

In some areas such as population growth corridors integrated bids for funds such as those available under the Education Investment Fund might be framed around shared use proposed new physical and digital infrastructure.

#### 5.6 Strengthen work-integrated models of VET and higher education provision

Industry and workplace engagement is essential to improve the quality and relevance of graduate skills.

A cadetship scheme would help increase industry currency and relevance in postsecondary education and training, and would ensure that applied and theoretical knowledge are more effectively integrated. Negotiations could be entered into with the Commonwealth government to secure funding for employer incentives, along similar lines to apprenticeship incentives.

Across the VET and higher education sectors, both educations institutions and employers face complex processes to find and schedule and quality assure work placements for students who require work-based experience and assessment to complete qualifications. The state government could investigate and pilot, beyond apprenticeships, models for intermediary bodies to act as a 'one stop shop' for postsecondary providers and employers.

#### 5.7 Strengthening apprenticeships and refocusing traineeships

In light of its strong set of policies and programs in the area of apprenticeship training, the Queensland government should continue to support the apprenticeship reform initiatives of the Trade Training Taskforce, those recommendations that were agreed by the COAG Apprenticeship Reform Taskforce, and future advice from the Commonwealth Government's newly established *Apprenticeships for the 21st Century* expert panel.

The growth in existing working traineeships highlights the need for the State Government to negotiate with the Commonwealth to refocus the traineeship system on its original purpose; to provide structured entry-level training for young people and new entrants to the workforce.

#### 5.8 Raising foundation skill levels

A new framework for Certificate I and II programs is required to ensure that these programs increase literacy and numeracy, improve further learning skills, and provide occupational outcomes. It is recommended that the Queensland government, in cooperation with the Commonwealth, agree to the following four measures to improve literacy and numeracy levels in the adult population.

The State Government should work with national bodies to develop, or should itself develop and accredit new Certificate I and II equivalent qualifications, to increase demand, increase capability in literacy and numeracy, and skills for further learning and improve occupational outcomes.

The proposed investment framework (discussed in the next chapter), and the learner entitlement in particular, would support learners beginning with and transitioning to higher-level qualifications. It would also allow providers to enrol students to specific units or modules outside of their core qualification and consideration should also be given to a higher funding rate for particular learner cohorts, for example disengaged youth.

The Queensland government should provide formal recognition for adult and community education providers and ensure ACE providers can access funding to assist disengaged learners.

#### 5.9 Regional plans for post-secondary participation and attainment and systemwide monitoring of outcomes

To address differential levels of participation and attainment in post-secondary education across regions, the Queensland government should supplement the overarching Q2 target with specific goals and targets for post-secondary education participation and attainment in each of the non-metropolitan regions of the Department of Education and Training. Establishing regional goals and targets should occur in consultation with universities, TAFE institutes and local communities.

To achieve this and in cooperation with the Commonwealth, the Queensland government should develop for each non-metropolitan region a post-secondary education and training plan which encompasses:

- qualification completion rates;
- transitions for secondary school students to post-secondary education;
- the potential for TAFE/university partnerships to contribute to objectives and targets;
- cooperative development of, and targeted Queensland government support for, submissions made to the Education Investment Fund, particularly through the Regional Priorities Round; and
- specific strategies for Indigenous learners and Indigenous communities.

In addition a new Tertiary Education Research and Planning Unit should be established to provide integrated analysis of participation rates, demographic trends, and labour markets.

#### 5.10 Expanded role for the Queensland Skills Commission

The Queensland Skills Commission could assume responsibility for monitoring participation, attainment and outcomes from post-secondary education across Australian Qualification Framework (AQF) levels, across regions and across socio-economic groups.

To address skills shortages effectively and proactively, a cooperative and integrated approach with industry is required. The Queensland Skills Commission, in cooperation with industry and professional groups, could be charged with leading a continuing program of research into skills shortages addressing issues including:

- increasing the domestic supply of graduates;
- better targeting of incentives to individuals and enterprises, achieved in consultation with the Commonwealth;
- working with industries and companies to improve workforce attraction and retention, and to improve skills utilisation;
- improving infrastructure and service provision in regions experiencing high workforce and population growth, and skills shortages; and
- increasing skilled migration.

#### 5.11 Quality and consistency of assessment in VET

Despite various reforms, in key areas of VET delivery, there remains a lack of confidence in the quality of outcomes in particular in assessment practice, design and outcomes. Confidence in assessment standards is a bedrock condition for a trusted national VET system underpinned by mutual recognition of qualifications.

One option is to introduce a systemic, quality-assured approach to moderation and validation of outcomes across providers. Queensland could trial an assessment moderation model with Registered Training Organisations on the basis of agreed trade-offs during the trial in terms of meeting evidence requirements for Australian Quality Training Framework (AQTF) compliance.

#### 5.12 Government as the exemplar

As a significant employer in the Queensland economy, through its own human resource policies and management practices, the Queensland government plays a role in setting the workforce development culture. The Queensland government could provide support and incentives for government employees to enrol in and complete higher-level qualifications, including postgraduate coursework and research qualifications.

#### 5.13 Strengthening the 10 per cent Training Policy

There are stakeholder concerns regarding the application and effectiveness of the Queensland government's 10 per cent Training Policy. In particular, it is unclear whether the objective of workforce development — via more individuals engaged in structured training — is being achieved.

The 10 per cent policy be strengthened in two ways:

- First, clarify whether existing workers already undertaking structured training, or only new workers entering training, are counted towards a firm's 10 per cent target.
- Second, require that contract compliance plans include information on specific outcomes to be achieved from the application of the policy. The effect of the program and delivery against compliance plans should be independently monitored throughout the project and on project completion.

# 6. A revised investment framework for post-secondary education and training

#### 6.1 Current funding arrangements for post-secondary education and training

The establishment of Skills Queensland presents an opportunity to develop a coherent and broad framework for public and private investment in Queensland's post-secondary education and training delivery and outcomes.

The most recently available figures for total recorded investment in Queensland's post-secondary education and training system show:

- \$2.9 billion invested in higher education, as at 2007; and
- \$1.1 billion invested in VET, as at 2009.

However, these figures exclude private investment in private higher education and VET providers.

Funding for both VET and higher education is increasing. However, higher education funding has increased at a faster rate, and from a much higher base.

In higher education key funding decisions comprise the introduction of a student demand-based funding model, a more realistic indexation formula, and a substantial move towards meeting the full costs of research. These decisions will be built into the funding base and will help prevent further deterioration in the level of funding per student.

However, the level of higher education funding available beyond the current forward estimates is not clear.

The full benefits of the new arrangements for higher education will not be available until 2012. 2011 will be a challenging year for universities, which must position and transition themselves to take best advantage of the new system. They must also adjust to any decline in international student demand. Consultations with Queensland's vice-chancellors indicate that universities enrolments have grown strongly in 2009 and 2010 (including over enrolments in some institutions) to build up their student base in preparation for the new funding environment. As Queensland also has lower higher education participation and attainment levels, additional resourcing requirements for higher education in Queensland are likely to be higher than elsewhere in Australia.

Total investment in higher education has increased more rapidly than for VET, in particular through increased contributions from both domestic and international students. This is significant given the much higher overall level of funding for higher education.

This trend is likely to continue and even accelerate following the introduction of demand-based higher education funding and the additional funding for higher education flowing from the Commonwealth's response to the Bradley Report.

As well as differences in funding levels there are also significant and growing differences in funding policies between VET and higher education in Queensland.

These growing differences create anomalies and distortions. If left unchecked, they may distort the pattern of provision and enrolments between the sectors, with an inevitable drift to the higher education sector regardless of labour market need.

VET revenue is increasing. However, the increase is driven largely by Queensland government expenditure. Revenues from all other sources were virtually unchanged between 2004 and 2008. Queensland government expenditure on VET is low, relative to other states and territories. A major national report recently concluded that

...the funding outlook for VET appears to be, at best, static in real terms and, quite possibly, will see actual falls in revenue, particularly from government sources. As a consequence, growth in enrolments could only be achieved through further declines in funding per annual hour and enrolments, in addition to the significant declines which have been achieved in recent years.

The Commonwealth funded Productivity Places Program is due to cease in 2013, resulting in a reduction of \$115 million in VET funding for Queensland.

Queensland has allocated a larger proportion of public VET expenditure via competitive mechanisms, such as User Choice and competitive tendering and private RTOs in Queensland are winning a greater share of the state's contestable funding. In consultations stakeholders identified major issues regarding the current VET funding framework:

- The level of public funding from both levels of government and greater concern at the funding outlook for VET.
- Funding support for delivery of VET programs in regional areas.
- TAFE institutes were highly critical of approaches to setting and enforcing funding priorities through both caps on, and differential prices paid for, different qualifications.
- Some institutes argued they had been required to reduce enrolments in Certificate I and II programs, which were most appropriate for learners will low skills seeking to reengage in learning or to re-enter the labour market.
- The Australian Council for Private Education and Training (ACPET) was critical of the differential pricing policy and the level of funding available to deliver courses in low priority areas. ACPET argued for opening up the training market to areas other than User Choice.
- TAFE institutes were not necessarily opposed to greater contestability, but argued that current governance and business models, and cost structures, reduced their capacity to compete. They also argued for more explicit recognition of TAFE's implicit community service obligations.
- A number of stakeholders identified inconsistencies in funding arrangements between the VET and higher education sectors as an impediment to both developing and implementing pathways between the sectors.
- Both TAFE Institutes and private providers saw compliance and administrative requirements for VET FEE-HELP as complex, costly and not reflective of the requirements of nationally recognised VET sector programs.
- Some peak industry bodies expressed concern at potential for the Review to recommend an extension of the State Government's 10 per cent training policy (which applies to major construction projects to other purchasing policies), or the extension of the Building Industry Training Levy to other sectors.

There is a need for more coherent investment framework across the VET sector to address the needs of different learner groups and industry and to create a more effective interface with higher education.

#### 6.2 The case for a student entitlement

There is increasing interest in the extension to VET of the concept of a student entitlement, as proposed in the Bradley Report.

There is a strong case for the State Government to pursue with the Commonwealth an entitlement option where the state would fund an entitlement for individuals to acquire qualifications up to VET Advanced Diploma level with the Commonwealth to fund an entitlement to higher education undergraduate programs:

- It would create a consistent framework for funding post-secondary education and remove many of the anomalies and distortions between the sectors and within VET which are evident in the current framework.
- It would provide a transparent basis for access to public VET funding where some individuals may receive considerable subsidies for multiple qualifications while others may receive only partial subsidies for low-level qualifications.
- It is consistent with government objectives to raise levels of participation and attainment. As the Queensland population increases, and if VET demand does grow, many individuals may not find a place, or at least a place in the qualification of their choice.

However, an entitlement option is only feasible by agreement between the Commonwealth and the State to provide the level of resources required to move towards consistent eligibility criteria across the post-secondary sector.

The current funding constraints facing both the Queensland and Commonwealth governments are recognised. The introduction of any entitlement may need to be phased in over a period of time, as resources allow.

However, in the medium and long terms, governments in Australia will need to face the resourcing implications of their major commitments to raise levels of educational attainment, particularly in the context of projected population increases over the next few decades.

As it is not feasible to create a universal and ongoing entitlement regardless of levels of previous attainment, a pool of funding could be retained to support individuals seeking to undertake programs at or below the level of their current qualification, but with higher fees applying.

#### 6.3 Consistent pricing

Queensland currently operates a complex process of differential pricing for similar qualifications across industry sectors.

This model was adopted to ensure that limited public funding was allocated to areas of greatest identified need, in particular area of skills shortage. However, this model, and differential pricing in particular, has major shortcomings particularly if an entitlement model was adopted:

- It is not clear that reducing or increasing prices paid to RTOs influences learner choice.
- The current approach, particularly differential pricing, creates complexity in purchasing and accountability arrangements.

If an entitlement model is pursued it is important that funding be allocated on a consistent basis in terms of the relative cost of provision, and consistent approaches to fees and charges for individuals covered by the entitlement.

#### 6.4 Increased fee-for-service revenue in TAFE

If the Victorian VET system is used as a benchmark, fee-for-service revenue to the Queensland TAFE system could rise by almost 17 percentage points, and ancillary trading revenue could rise by 6 percentage points. If Queensland's proportion of fee-for-service revenue matched that of Victoria, there would be additional revenue of \$247m per year.

The provision of high quality training services to enterprises is far more likely to secure increased industry revenue in VET than seeking to leverage employer contributions on publicly funded training for recognised qualifications for individuals.

#### 6.5 Supporting the Strategic Investment Fund for Workforce Development

The proposed state-based Strategic Investment Fund for Workforce Development will be important to help drive productivity improvements, to address immediate skill shortages, and to raise workforce skill levels, including the emphasis on matched funding from industry. The Strategic Investment Fund should also be developed in cooperation with the Commonwealth, and should draw on redirected funding from existing worker traineeships, supplemented by state-sourced funding.

#### 6.6 VET FEE-HELP

Queensland must strengthen its position in fee-for-service markets is by increasing the number of TAFE institutes eligible as FEE-HELP providers, given the projected increase in Commonwealth provision for FEE-HELP. Issues related to the administrative and compliance complexities with VET FEE-HELP should be pursued with the Commonwealth.

#### 6.7 International Education

Queensland government can assist both VET and higher education providers to rebuild international education markets weakened by adverse events over the past two years.

#### 6.8 VET-in-Schools funding

The low level of public expenditure on VET is exacerbated by the large proportion of VET funding that is spent on the delivery of VET-in-Schools. Approximately 12 per cent of VET General Revenue — approximately \$37.5m — goes towards VET-in-Schools, double the proportion allocated in 2005-06 and in addition to the \$4 million provided from VET revenue to support VET in schools.

A transparent framework for funding VET-in-Schools is required, based on the principle that schools should meet the average senior secondary enrolment cost for all QCE subjects. Under such an arrangement, VET funding would only be drawn upon to meet the additional costs of VET modules beyond the resources already allocated to schools for delivering the average senior secondary teaching load.

#### 6.9 Information to Support Informed Choice

Accurate information about learning options and pathways is also important if an eligibility-based learning entitlement is adopted: learners making poor choices are likely to find that they cannot access subsidised training at a level equivalent to that which they have previously completed.

A comprehensive and ongoing information campaign will also be required to ensure that potential students and employers are aware of the eligibility requirements of entitlement, if that option is adopted. To this end, the approach to information provision to students and employers under User Choice in Queensland may be extended across the broader VET sector.

#### 6.10 Quality assurance

All providers engaged in the publicly funded market should be fully quality assured, have experience in proposed areas of delivery, are assessed as financially viable, report financial viability on an ongoing basis, and will meet minimum contractual load requirements (unless by specific agreement).

#### 7. Need for a Policy Statement on Post-Secondary Education and Training in Queensland

There would be significant benefit in the State releasing a policy statement on postsecondary education in Queensland based on government consideration of the findings and recommendations of this Review. That Statement should provide long term directions for the system, address specific areas where reform is required highlight the role and contribution of post-secondary education in order to boost demand from individuals and encourage greater industry engagement.

The Statement should have regional as well as statewide dimensions and carefully calibrate the State Governments role in the higher education and VET sectors and continue the reform process in upper secondary education.

## Findings, conclusions and recommendations

	Improving skills, participation and productivity
1.	Higher levels of educational attainment result in higher labour force participation rates, and longer participation in the workforce. A better-educated workforce is also important in achieving productivity improvements.
2.	Holding a post-school qualification at or above Certificate III bestows advantages on individuals and to the economy. Participation in higher education can have inter-generational benefits, underlining the long-term significance of school completion rates and pathways from school to post-secondary education.
3.	For existing workers and those seeking to join or rejoin the workforce after a period of disengagement, sources of education and training are more diverse and include informal learning. Workplaces are increasingly important and preferred site of learning.
4.	Greater recognition of the value and importance of work based and non-formal learning is required; this includes blending work-based and formal learning to give learners the capacity to quickly and effectively apply skills to improve productivity and thus improve returns to both individuals and firms.
5.	An effective post-secondary education system must therefore respond to the variety in enterprise and learner expectations, preferences, needs and learning contexts, through diversity of providers and with strong engagement with industry and enterprises.
6.	Skills shortages manifest themselves in different ways and are created by complex and often inter-related factors, including demand and supply from post-secondary education, workforce attraction and retention, migration, wage levels and locational issues. Government's approaches to addressing skills shortages must be calibrated to the nature of the skills shortage, and be undertaken in partnership with employers.
7.	Improved equity of access to and outcomes from post-secondary education are a major policy priority, with particular regard to the need to improve language, literacy and numeracy skills in the workforce.

#### Major challenges for Queensland

- 8. The overarching social and economic challenge for Queensland is to establish long-term sources of prosperity. Sustainable economic growth will depend largely on rates of productivity growth and workforce participation across the economy.
- 9. A clearer policy focus is required across the post-secondary education system to address some of the significant challenges facing the state.
  - a. Notwithstanding the impacts of the strong resources sector, it is likely that Queensland is experiencing a decline in the underlying level of productivity growth.
  - b. Both population growth and workforce ageing will drive demand for services and infrastructure, notably in growth areas. This is exacerbated by the differential impacts of growth and ageing across the state.
  - c. Queensland has higher than average levels of labour force participation but is both lower and more volatile in regional and remote areas and amongst disadvantaged groups and may be detracting from participation by young people in post-secondary education.
- 10. Increased participation together with high levels of population growth will require substantial increased capacity in post-secondary education and training for campus delivery, face-to-face learning and teaching, and e-learning flexible delivery in workplaces and community settings.
- 11. Given current fiscal constraints, and competing claims for public resources, investment, investment in post-secondary education and training must be both efficient and sufficient and must flow from a range of revenue sources. This will require a combination of policy reform and an appropriate investment framework.

#### Strengthening the post-secondary education and training system in Queensland

- 12. Participation and attainment outcomes from Queensland's post-secondary education are largely static, and there are significant variations between regions and socio-economic groups. In particular, participation levels by Indigenous learners in VET are at lower than national average levels. Participation in post-secondary education in rural and regional Queensland is well below the national average.
- 13. Levels of educational participation and attainment will need to increase in Queensland; particularly among groups with low levels of participation in post-secondary education, low aspirations to participate, and insufficient literacy and numeracy skills to participate successfully. To achieve this, education and training providers will have to attract, retain and successfully graduate learners from increasingly diverse backgrounds.
- 14. Queensland's Year 12 retention rate is above the national average and higher than most other states and territories. However, it appears that many school leavers choose not to capitalise on the post-secondary pathways available to them after completing Year 12. The decline in VET enrolments is especially worrying.
- 15. Attractive labour market opportunities reduce the incentives for post-secondary participation; it would appear that to some extent, the decline in post-secondary participation follows an increase in the number of students choosing to directly enter the workforce.
- 16. A more detailed and comprehensive framework for monitoring participation and attainment across qualification levels, industries and regions is required.

Recommendation 1	That the Queensland Government adopt the following measures to strengthen participation in the post-secondary education and training system:
	<ul> <li>continue to improve school outcomes, and help to increase aspiration for post- secondary education and training among groups with low rates of participation;</li> </ul>
	<ul> <li>develop regional plans and strategies to increase post-secondary participation and attainment in rural and regional areas;</li> </ul>
	c. facilitate and support TAFE/university partnerships;
	<ul> <li>support improved pathways between VET and higher education, coordinate networks of post-secondary institutions, and consider structural proposals (including agreement to the proposed dual sector institution in Central Queensland, subject to financial viability and an appropriate governance structure);</li> </ul>
	<ul> <li>negotiate with the Commonwealth to extend employer incentives to formal cadetships and internships in higher level VET qualifications, and in higher education (see Recommendation 7);</li> </ul>
	<ul> <li>f. provide support and incentives for government employees to enrol in and complete higher level qualifications, including postgraduate coursework and research qualifications; and</li> </ul>
	g. provide support for submissions to the Education Investment Fund (EIF), and where appropriate, consider funding for the VET component of dual sector proposals.
Recommendation 2	That the Queensland Government:
	<ul> <li>request the Queensland Skills Commission to monitor participation and attainment rates in, and outcomes from, post-secondary education, across AQF levels, across regions and across socio-economic groups; and</li> </ul>
	<ul> <li>establish a Tertiary Education Research and Planning Unit to provide integrated analysis (contextualised for the roles and purposes of the post- secondary education and training system) on participation rates, demographic</li> </ul>

	trends and labour market analysis.
<b>Recommendation 3</b> That the Queensland government, in consultation with universities, TAFE institut and local communities, set specific goals and targets for post-secondary educati participation and attainment in each of non-metropolitan regions of the Departme Education and Training. Further, in cooperation with the Commonwealth, the Queensland government develop post-secondary education and training plans for each of these regions, encompassing:	
	a. Transitions from secondary school to post-secondary education and training;
	b. TAFE/University partnerships;
	<ul> <li>Assistance to develop, and advocacy for, submissions to the Regional Priorities Round of the Education Investment Fund; and</li> </ul>
	d. Specific strategies for Indigenous learners and Indigenous communities.
Recommendation 4	That the Queensland Skills Commission, in cooperation with industry and professional bodies, leads a continuing program of research into skills shortages and the factors leading to them, and develops integrated strategies to address them. Research should analyse and seek to describe and explain the nature of skills shortages, and identify those that have critical impacts on the state. This analytical work could be undertaken by the proposed Tertiary Education Research and Planning Unit.
Recommendation 5	Government policies and funding to address skill shortages should be targeted to address the factors leading to skills shortages, which may include:
	a. Increased supply of graduates;
	b. Better targeting of incentives to individuals and enterprises, in consultation with the Commonwealth;
	<ul> <li>Working with industries and companies to improve workforce attraction and retention, and to improve skills utilisation;</li> </ul>
	<ul> <li>Improved service provision in regions experiencing workforce and population growth, and skills shortages;</li> </ul>
	e. Increased skilled migration; and
	<ol> <li>Skills required to facilitate sustainable development and the shift to a low carbon economy.</li> </ol>
17. Queensland has a strong apprenticeship and traineeship system that is growing again after declining during the global financial crisis. However, further reforms are required to improve the capacity, efficiency and effectiveness of the apprenticeship system, particularly in areas of skills shortages.	
18. Growth in traineeships is also strong but is driven almost wholly by existing workers traineeships and not from those seeking to enter or re-enter the labour market. Traineeships for new workforce entrants, including school leavers, are in decline.	
Recommendation 6	That the Queensland government:
	a. Continue to support apprenticeship reform initiatives of the Trade Training Taskforce, the COAG Apprenticeship Reform Taskforce, and future advice from the Commonwealth Government's <i>Apprenticeships for the 21st Century</i> expert panel;
	<ul> <li>Support cooperative industry initiatives aimed at boosting apprenticeship intakes and completion rates; and</li> </ul>
	c. Negotiate with the Commonwealth to refocus the traineeship system on its original purpose of providing structured entry-level training for young people

and new entrants to the workforce.

	19. Many post-secondary education students in vocational and professional programs are not able to access structured work placements to develop applied skills and competencies.		
Recommendation 7	That the Queensland government consider a cooperative venture with Queensland education and training providers, industry bodies and government agencies to improve and broker partnerships between post-secondary education and training providers and workplaces through:		
	<ul> <li>a. Increased and improved work placements for vocational and professional qualifications; and</li> </ul>		
	<ul> <li>Cadetships in Diploma, Advanced Diploma and undergraduate degrees (including dual sector qualifications) by extending state and Commonwealth support for apprenticeships, and expanding the role of Group Training Organisations.</li> </ul>		
and are less like	nders lack the literacy and numeracy skills for effective workforce and social participation by to participate in further learning. Low literacy levels also contribute to high attrition condary education and training, limited interest in lifelong learning, and poorer prospects ment.		
for students in Y	results are improving in Queensland, the achievement profile lags the national outcomes ears 7 and 9. This has implications for the ability of school leavers to progress and thrive ry education and training, and, potentially, in future employment.		
Queensland's pe in schools must	I with adult literacy and numeracy skills attainment in other developed countries, erformance falls in the mid-range. The policy priority to improving literacy and numeracy now be accompanied by a similar focus on adult literacy and numeracy to complement policy and budgetary measures.		
declining. A new	Certificate I and II qualifications are not strong and participation in these certificates is ramework for Certificate I and II programs is required to ensure they increase literacy nd further learning skills, as well as providing occupational outcomes.		
Recommendation 8	That the Queensland government, in cooperation with the Commonwealth, adopts the following measures to improve literacy and numeracy levels in the adult population:		
	<ul> <li>Develop and self-accredit new programs and qualifications (for example, Foundation Vocational Programs or Certificates of Applied Learning) with strong literacy and numeracy requirements and pathways to higher level qualifications;</li> </ul>		
	<ul> <li>Ensure that learners with literacy and numeracy needs can access specialist support;</li> </ul>		
	c. Provide formal recognition for adult and community education (ACE) providers, and target funding where ACE can assist hard-to-reach learners; and		
	<ul> <li>Maximise access by Queensland providers to new Commonwealth adult and workplace literacy initiatives.</li> </ul>		
Recommendation 9	That the Queensland Training and Employment Recognition Council commence a pilot of independent, cross-RTO assessment moderation and validation, with outcomes to be used as primary evidence of compliance with AQTF standards for delivery and assessment and pending the outcome of this pilot that the Queensland Government pursue a national agreement on a revised assessment and quality assurance model to provide for validation and moderation by external bodies.		

Recommendation 10	That the 10 per cent policy be strengthened to:
	a. clarify whether existing workers already undertaking structured training, or only new workers entering training, are counted towards a firm's 10 percent target;
	b. require that contract compliance plans include information on specific outcomes to be achieved from the application of the policy, and for the program to be independently monitored throughout the project and on project completion.

A revised investment framework for post-secondary education and training		
24. There is a high risk of growing imbalance in levels of investment and participation across the post- secondary education sector as demand-based higher education funding is implemented. Overall, the higher education sector in Queensland is poised for growth, with many universities positioning themselves to capitalise on the introduction of demand-based funding and the removal of enrolment caps from 2012.		
25. VET funding in Queensland is increasing moderately overall, but in per capita terms it is static and among the lowest of all the states and territories.		
26. Funding for the VET-in-Schools programs exceeds \$37.5 million and is growing, but is not supported by a clear funding framework. However, numbers of QCE students transitioning to VET is declining. This situation needs to be further researched and analysed.		
Recommendation 11	That Queensland Government clarify the funding framework for VET-in-Schools, based on the principle that each school in meets the cost of all QCE subjects, such that VET funding is used only to meet the additional costs of VET subjects above the average costs of other QCE subjects.	
27. Public funding to non-TAFE providers is currently higher in Queensland than any other state (although funding in Victoria is becoming fully contestable). In Queensland, non-TAFE providers are steadily increasing their market share at the expense of TAFE.		
28. The objective of leveraging industry funding has, in the main, not been achieved. There appear to be real opportunities to increase TAFE Queensland's overall level of revenue from private sources. Where industries and enterprises capture the majority of the benefit from training, a case can be made for increased levels of industry co-contributions to fund workforce development.		
	29. Private providers have played an increasing role in the delivery of VET and will have the potential to assist in growing participation and attainment levels.	
	30. Changes in the international student market will affect the revenue base of Queensland's post- secondary education providers.	
31. A clearer and more sustainable funding framework is required across the post-secondary sector, with greater consistency in eligibility for access to publicly funded programs, at least to initial qualification level.		

Recommendation 12	That the Queensland Government initiate consideration by Ministerial Council for Tertiary Education and Employment (MCTEE) and COAG, or a bilateral agreement between Queensland and the Commonwealth, of an agreed funding framework between the Commonwealth and State Government across the post-secondary education sector, encompassing: a. Agreed eligibility criteria for access by individuals to an initial post-secondary
	qualification; b. A new National Partnership Agreement for VET funding including relative roles
	and contributions by the Commonwealth and States;
	<ul> <li>Joint and/or coordinated funding to support structured pathways and student movement across the post-secondary education system;</li> </ul>
	<ul> <li>Funding loadings or performance payments consistent with the new equity- funding framework to operate in higher education;</li> </ul>
	e. A state based fund for employer-based nationally recognised training based on financial contributions by employers and Government funded through redirection of funding for employer incentives for existing worker traineeships and state funding (see Recommendation 13).
Recommendation 13	That the Queensland Skills Commission develop a revised VET funding framework based on the following principles:
	<ul> <li>A funding entitlement for individuals for a first qualification up to Advanced Diploma level in their provider of choice with consistent fees and charges in each qualification level;</li> </ul>
	<ul> <li>Agreed arrangements with the Commonwealth Government to introduce VET FEE-HELP for publicly funded VET Diplomas and Advanced Diplomas;</li> </ul>
	<ul> <li>Capped funding for students with initial qualifications up to degree level, with higher fees to reflect higher individual returns;</li> </ul>
	d. Full fees for individual students in areas of high labour market return;
	<ul> <li>Sufficient public funding and equitable student contributions to meet demand for the entitlement;</li> </ul>
	<ul> <li>Recognition of the roles of individual TAFE Institutes and their obligations as full service providers where agreed by government;</li> </ul>
	g. Increased industry leveraging by establishing the Strategic Investment Fund for Workforce Development from redirection of existing traineeship funding and additional state funding, with the aim of increasing co-contribution from industry to address structural changes and skills shortages;
	<ul> <li>Requiring industry co-contributions for access to programs funded by the proposed Strategic Investment Fund and for designated major projects and for rapid responses to skills shortages and structural change;</li> </ul>
	<ul> <li>Ensuring individuals have access to information about their entitlements, what they are entitled to receive in terms of course quality outcomes and to inform provider choice, supported with the possible extension of the Training Ombudsman's role to cover major student complaints related to this information;</li> </ul>
	<ul> <li>The capacity of the state to intervene in the market by not funding or capping specific qualifications in areas of oversupply or low priority;</li> </ul>
	<ul> <li>k. Performance funding to achieve government policy objectives e.g. equity outcomes; and</li> </ul>
	<ol> <li>Strong quality assurance beyond minimum registration requirements for all providers accessing public funding.</li> </ol>

Overarching recommendation	That the Queensland Government develop and issue a policy statement on post- secondary (or tertiary) education based on the outcomes of consideration of the Queensland Post-secondary Education and Training Review with the following objectives:
	<ul> <li>Building aspiration among younger cohorts to participate in postsecondary education and training;</li> </ul>
	<ul> <li>Ensuring that the ageing labour force is able to be re-trained and thereby sustain growing participation rates for these age groups, especially amongst low-skilled workers;</li> </ul>
	<ul> <li>Boosting participation and attainment levels in rural and regional Queensland and for Indigenous communities and individuals;</li> </ul>
	<ul> <li>Ensuring that industry and the post-secondary system work together to provide workforce skills development and improve skills utilisation;</li> </ul>
	<ul> <li>Increasing public and private sources of revenue through an appropriate investment framework to fund future participation in and improvements to the post-secondary education and training system; and</li> </ul>
	f. A three-year transformation of TAFE Queensland based on the principle that TAFE's future lies in being the dominant and preferred provider in a growing training market with diverse revenue sources.
	That the Queensland Government implements a performance measurement framework to measure progress against the policy statement.

## Chapter 1 Introduction

#### 1.1 Background

The independent review of Queensland's wider post-secondary education and training system was commissioned by the Minister for Education and Training, the Hon Geoff Wilson, to provide advice and make recommendations on the current state and future direction of the post-secondary education and training system in Queensland.

Mr Peter Noonan, Director, Allen Consulting Group, was appointed to lead the Queensland Post-secondary Education and Training (QPET) Review. Mr Noonan was a member of the Expert Panel for the Review of Australian Higher Education (the Bradley Review). He was a General Manager and Acting CEO of the Australian National Training Authority, Deputy Director General (VET) in Queensland's Department of Employment Training and Industrial Relations, and General Manager of the State Training Board of Victoria. Since 2001, he has consulted widely in education and training, both in Australia and internationally.

#### 1.2 The scope of the Queensland Post-secondary Education and Training Review

Post-secondary education and training comprises of public and private providers of accredited qualifications (from certificate through to postgraduate levels) and non-accredited education and training. Queensland's post-secondary education and training sector consists of:

- nine universities and 32 other approved higher education providers;
- 13 TAFE institutes; and
- 1,462 Registered Training Organisations (RTOs), of which 376 are schools.

In 2009-10, Queensland's post-secondary education and training enrolments comprised: 92,500 apprentices and trainees; 280,300 VET students (including 183,700 at TAFE); and 196,800 university students (including 49,200 international students).

The QPET Review Steering Committee agreed that the Review would consider the breadth of post-secondary provision, with a more detailed focus on the VET sector, and particularly the TAFE sector, since the State has primary responsibility for these areas.

State governments may influence higher education through influencing Commonwealth government policies for teaching and research, and through their ability to craft regional and statewide investment strategies to develop depth in research capability and specific research concentrations. However, higher education policy and funding falls largely in the Commonwealth's domain. Furthermore, the Commonwealth's decision to adopt many of the key measures recommended in the Bradley Review means higher education reform is already underway. In this respect QPET Review, higher education is considered in terms of both its contribution to overall post-secondary participation and attainment rates, and the nature of its relationship to the VET sector. The Review does not consider the role of Queensland Universities in the State Government's research and innovation agenda, although the importance of that contribution by the State over the past decade or more is recognised.

Similarly, while the QPET Review examines some aspects of apprenticeships and traineeships, the recent report of the Trades Training Taskforce and ongoing implementation of the Taskforce's recommendations also means that many issues in this area are already being addressed.

The Report does consider the delivery of VET-in-Schools, and the influence of school outcomes on participation in post-secondary education and training. The school sector has numerous direct relationships with providers, and the system, of post-secondary education and training. Those relationships are becoming more critical with the growing focus on matters such as youth transitions, and the reach of VET into the upper secondary sphere through VET-in-Schools, school-based apprenticeships and traineeships, and Queensland Certificate of Education (QCE) credits from VET qualifications. School leavers will continue to be the most numerous learner group for Queensland's post-secondary education and training system.

#### 1.3 Terms of Reference for the Review

The QPET Review was undertaken in accord with the Terms of Reference. Matters in the scope of the Review include:

- 1. Comparative assessment of Queensland's post-secondary education and training sector with national and other jurisdictions with particular reference to investment, participation, qualifications and other outcomes.
- 2. Analysis of the impacts on current and future workforce participation rates, industry development and productivity levels, including upon Queensland's regions.
- 3. Assessment of the impacts of current and proposed national changes to VET and higher education and opportunities for Queensland, including improved student movement between the sectors.
- 4. Analysis of the operational effectiveness of Queensland TAFE institutes including factors impacting on responsiveness and flexibility, and strategies for improvement.
- 5. Identification of opportunities to enhance the role of Queensland Universities, Queensland TAFE and private Registered Training Organisations (RTOs) in any potential new direction for post-secondary education in Queensland.

The full documentation accompanying the Terms of Reference can be found in Appendix B.

#### 1.4 Support for the Review

The process for the QPET Review was overseen by a Review Steering Committee, consisting of senior representatives from the Department of the Premier and Cabinet, Queensland Treasury, the Department of Education and Training and the Department of Employment, Economic Development and Innovation. The Steering Committee was chaired by the Director-General of Education and Training.

Over the course of the review, the Steering Committee met on eight occasions to:

- ensure that the conduct of the review met expectations;
- receive briefings on emerging findings;
- provide comment on the draft report and final report prior to submission to the Minister for Education and Training.

However the findings and recommendations outlined in this Report are those of the Allen Consulting Group as an independent review. The findings and recommendations have not been endorsed by the Queensland Government or government officials and the process of government consideration of the recommendations is separate to this report.

The Steering Committee was assisted by a Reference Group of key stakeholders from industry and education and training providers. The Reference Group met twice to provide input on key issues for the Review and to provide comment on emerging findings.

#### 1.5 Review methodology

The QPET Review comprised six main stages, as depicted in Figure 1.1. Through these stages, the Review analysed data and information from:

- the relevant literature on the economics of education and training, labour productivity, workforce development, best practice public policy, public sector efficiency in post-secondary education and training, and good governance, as well as relevant policy documents from Queensland and other jurisdictions;
- stakeholder consultations with industry groups, post-secondary education and training institution and providers (including TAFE Directors and university Vice-Chancellors), public policy academics and experts, regional business and learner groups; and
- publicly available statistical datasets, unpublished departmental administrative data, and internal departmental modelling and research.

To analyse the operational effectiveness and efficiency of the public TAFE provider in Queensland, the Review undertook extensive quantitative modelling of performance using Data Envelopment Analysis (DEA) particularly in relation to the operational effectiveness of TAFE institutes. This analysis has informed the findings and recommendations of the Review.



#### 1.6 Review Team

The Review team, led by Peter Noonan, comprised Les Trudzik, Jonathan Chew and Luke Condon at the Allen Consulting Group and Rob Sheehan from Sharp Words Editing and Writing Services.

The Review team received extensive support from the Department of Education and Training, including ongoing advice, assistance with data collection, facilitation of consultations and administrative support from Sue Fergusson, Helen Foley, Trudy Steele, Mark Driver, John Cosgrove and Paul Murphy. The assistance of these officers and the contribution of their technical and professional expertise are greatly appreciated.

#### 1.7 Structure of the report

The QPET Review Report comprises six chapters:

- Chapter 2 on 'Improving skills, participation and productivity' provides an overview of how outcomes from formal post-secondary education and training influence the supply and application of skills, workforce participation rates and productivity growth;
- Chapter 3 'Major challenges for Queensland' identifies those characteristics of Queensland's population, economy and geography which must be accounted for when shaping the future for the State's post-secondary education and training system;
- Chapter 4 presents data on the outputs and outcomes of the post-secondary education and training system in Queensland, with comparisons of performance against other jurisdictions; and

- Chapter 5 builds on the foundations laid in earlier chapters to provide a series of recommendations to extend and improve the post-secondary education and training system in Queensland in response to the trends and drivers outlined in earlier volumes; and
- Chapter 6 discusses the level of investment in post-secondary education and training, key sources of revenue, and the potential for improving the current VET funding framework.
- Matters relating specifically to the operational effectiveness of TAFE Queensland are the subject of separate advice to the Government.

# *Chapter 2* Improving skills, participation and productivity

#### 2.1 Introduction

The Terms of Reference for the QPET Review recognise the relationships between the policy goals of expanding high value economic capacity by securing the supply and application of knowledge and skills, increasing workforce participation rates, and lifting productivity growth. The school and post-secondary education and training sectors are important contributors to each of these policy goals. The effectiveness of their contributions is determined by their ability to forge links between formal education and training, learner needs, enterprise needs, and the broader social and economic contexts in which the sectors operate.

This chapter identifies a range of drivers for post-secondary education relevant to these policy goals.

#### 2.2 Knowledge and skills influence workforce participation and productivity

Higher levels of educational attainment are related to higher workforce participation rates, and to the length of time that people stay in the workforce (Productivity Commission 2005). This is true for office administrators and tradespeople as much as for research scientists and professionals. As Figure 2.1 shows, those with higher-level qualifications are significantly more likely to have a secure attachment to the labour force from age 25, and to stay in the workforce to age 70. Figure 2.1 also shows that workforce participation declines rapidly after age 55 for all groups, but less markedly for those with higher qualifications.



Source: Kennedy, S., Stoney, N. Vance, L (2009) using ABS Census, 2006

Skills Australia (2010) has also noted that:

There is also a clear association between the level of educational achievement and labour force participation. In 2008, some 86 per cent of people with a non-school qualification were in the labour force, compared to 71 per cent of those without one (these figures relate to 25 to 64 year olds). People without post-school qualifications make up 44 per cent of 25 to 64 year old people not in the labour force, compared to 39 per cent of all people in this age group.

A better-educated workforce is also important in achieving productivity improvements. A higher level of educational attainment across the population means that the stock of skills in the workforce, and across industry sectors, is wider and deeper. A more highly skilled and knowledgeable workforce can, for example, adapt more readily to new technologies and new forms of work organisation, and can adapt more quickly to new job roles requiring skills and knowledge beyond those acquired through initial post-school qualifications.

Research shows that higher average levels of qualifications in a given population are correlated with higher levels of labour productivity. Figure 2.2 demonstrates this relationship for Australia's States and Territories.



Figure 2.2 CORRELATION BETWEEN POST-SCHOOL QUALIFICATIONS AND LABOUR PRODUCTIVITY

Source: Eslake, 2010

Figure 2.2 highlights the link between the depth and breadth of skills and knowledge in the workforce and high levels of productivity and the gap between Queensland and the highest performing states. However, the relationship is difficult to quantify: it is complex and interrelated rather than causal. The strength of the link is subject to a wide range of other conditions, such as capital investment in new technology, the extent of the 'innovation gap' between innovation originators and innovation users, the adequacy of infrastructure, and skills shortages. The notion of multi-factor productivity (MFP) recognises that labour productivity is but one ingredient in productivity outcomes. For example, the adoption of new information and communication technologies has played a significant role in improving MFP across the Australian economy in recent decades.

#### The contribution of labour productivity to economic outcomes

The contribution of labour productivity to economic outcomes varies across industry sectors, within enterprises in the same industry sector, between regions and according to prevailing economic conditions. Four concepts further illustrate this point.

- 1. It is important that a well-educated workforce is educated in the kinds of skills and knowledge that underpin productivity growth. For example, there are a diminishing number of secondary school students studying science, mathematics and languages in the final years of secondary school and at postsecondary level. This means there is a narrowing knowledge and skills base from which to grow workforce capability, and maintain workforce depth, in occupations, industries and enterprises which rely on formation of aptitude in those disciplines. It can also mean that the viability of, and depth in, postsecondary teaching in these disciplines is compromised. Lack of numeracy skills can be an impediment to undertaking apprenticeships in many trades, may impact on completion of an apprenticeship, or may slow completion despite the availability of fast track completion arrangements.
- 2. Productivity improvements are commonly achieved at the enterprise level whether the enterprise is a multinational mining company, a hospital or a cinema complex.
- 3. Constraints on productivity growth may relate to social, economic, political and legislative factors. Such constraints are beyond the scope of individual enterprises to influence. However, governments and industry have pursued economy-wide reforms that deliver substantial productivity gains.
4. Technical skills and knowledge are central to improved workforce participation and to productivity. However, industry has long emphasised the centrality of employability skills. These include skills in communication, teamwork, problem solving, self-management, knowing how to learn, as well as characteristics such as punctuality and reliability (see, for example, Australian Chamber of Commerce and Industry, 2007, pp 179-182). It is generally accepted that lack, or underdevelopment, of these skills directly influences workforce participation (through recruitment decisions) and productivity (through lower firm performance). Acquisition of such skills is now embedded in curriculum and competency-based frameworks in the school and post-secondary sectors. The OECD's sponsoring of the ambitious Assessment of Higher Education Learning Outcomes (AHELO) project is an example of the continuing interest in measuring the acquisition of such skills. AHELO will consider measurement options for both generic skills common to all students (such as critical thinking) and discipline-specific skills.

## 2.3 The contribution of education and training reform

The report of the Cutler Review of Australia's national innovation system, *Venturous Australia*, (Cutler and Company, 2008, p45), states that:

Formation of high-quality human capital requires attention at all levels of education from early childhood education and schooling, through vocational education and training, and higher education, and into the workplace.

Economic modelling, including analysis by the Productivity Commission, suggests that educational reforms are one of the key policy levers for stimulating economic growth over the long term. Accordingly, the relationship between skills and educational achievement and labour force participation and productivity underpins the policies and strategies of the Council of Australian Governments (COAG) and the Queensland Government which aim to boost participation and attainment in education and training.

The COAG and Q2 attainment targets exemplify the policy effort required, with a particular focus on school leavers, existing workers without a qualification at Certificate III or above, and those who are marginally attached to the labour market.

The potential benefits of these reforms are summarised in the following table.

#### Table 2.1

# POTENTIAL CONTRIBUTION OF EDUCATIONAL REFORMS TO PRODUCTIVITY GROWTH

Recommendation	Impact*	Year
Competition and regulation reforms (COAG NRA) including: • Regulatory compliance costs	1.7% GDP (\$17bn in \$2005-06) • 1.3% • 0.4%	2007
<ul> <li>Improved ports, road rail infrastructure</li> </ul>		
Competition in electricity and gas		
Education and training (COAG NRA) including:	1.2% GDP (by 2030)	2007
Transitions from school	• 0.5%	
Literacy and numeracy	• 0.3%	
Adult learning	• 0.4%	
Health Services (COAG NRA)	0.4% GDP (\$4bn in \$2005-06)	2007
Auto assistance	0.2% GDP	2008
Removing all forms of current     assistance		
TCF assistance	\$70 million (pa till 2015)	2008
Current assistance reduction     plan		
Other	Not provided	Various
Taxation reform		
Improved consumer protection     policies		

Note: \*Modelling of some reforms do not fully capture costs.

Source: Productivity Commission reports

#### 2.4 Formal qualifications matter

It is certainly important that the post-secondary education and training system provides access to skill sets, to individual units of study and units of competency, and to non-accredited training. These options provide targeted skills and knowledge for particular employment contexts. They allow individuals to improve their employment prospects or change careers. But skill sets have limited long-term value for individuals without a formal, post-school qualification, and limited long term value for enterprises, or for the broader economy and the labour force.

Accredited qualifications play an important role for individuals and for employers. The Australian Industry Group's report, *Skilling the existing workforce* (2007), notes that formal qualifications are:

... essential for entry to many (but not all) skilled jobs, particularly in licensed trades and occupations and for progression within occupations, particularly where career paths, progression and wages are linked to qualification levels. Qualifications are also a broad signal to an employer of essential competence, although specific hiring decisions are likely to take into account other factors. Qualifications, particularly where they are linked to national competency standards, should (but do not always) signify consistency and quality of outcomes.

Holding a post-school qualification at or above Certificate III bestows advantages on individuals and to the economy. As already noted in this chapter, those with a post-school qualification boost workforce participation because they are more likely to have a secure attachment to the labour force, and to remain in employment to an older age. Because they have a wider and deeper knowledge and skills base, they are more able to adapt to changes in technology and work organisation, thus contributing to improved productivity.

Returns to formally accredited qualifications are high. The National Centre for Social and Economic Modelling (AMP & NATSEM, 2008) reports that in 2003-2004:

The average income of male university graduates peaks at age 40-44 at \$1,549 a week. The income of men with certificates or diplomas peaks at the age of 50-54 at \$933 dollars a week. The highest average income of men with no post-school qualifications is of those aged 30-34 at \$811 a week.

Participation in higher education can have inter-generational benefits, underlining the long-term significance of school completion rates and pathways from school to post-secondary education.

Importantly, those who complete a post-secondary qualification are more likely to complete further post-secondary qualifications. Enterprises and industries with more highly skilled workers can adapt to changing conditions more readily because the workforce is more inclined to upskill, reskill or extend its knowledge base.

#### 2.5 Workforce development — focusing on industries and firms

Venturous Australia also observes (p 53) that:

Innovation does not happen with a 'eureka' moment in a laboratory; it only happens when an idea is put to work. And innovative changes, from small to big, happen on the factory floor, in the office, or in the paddock. The often unglamorous innovation and performance breakthroughs from new ideas that drive productivity gains occur in workplaces and within work teams ... Following on from the foundation of a skilled, motivated and engaged workforce, Australia's workplaces must adequately nurture and tap into the creativity and skills of workers at all levels.

Workforce development has emerged as an organising framework for effectively planning, delivering and evaluating training and education for existing workers. The primary objectives of workforce development strategies include embedding innovative cultures within workplaces, and ensuring enterprise workforces have the knowledge, skills and dispositions to extract the greatest benefit from innovation.

Workforce development also targets industry-wide innovation through ensuring that education and training systems expose learners (both pre-vocational and existing workers) to contemporary, cutting edge skills and knowledge. The teaching-research nexus in higher education is often cited as critical in this endeavour. In VET, the emphasis on the 'industry currency' of trainers is emphasised as this ensures that the benefits of innovation are maximised by trainers who are themselves competent in the latest advances in industry.

The need for an innovation mindset and innovative practice extends to the postsecondary education and training system. The Australian Industry Group's report, *Skilling the existing workforce* (Noonan & Australian Industry Group, 2007), notes that workforce development requires innovative policies and strategies at the education and training system level, and specific strategies at the enterprise level.

Richardson (2004, pp 14-15) showed that employees' participation in all forms of training (on-the-job, external and in-house) declines after age 50. In an ageing workforce, this will need to change if the benefits of innovation are to be realised.

According to Richardson, 'people in higher paid/status occupations receive more hours of training than do those in lower occupations.' Even so, Richardson notes that such individuals received on average less than a week of training each year. Investment in education and training needs to recognise that the benefits of innovation, including improved productivity, are achieved through improvements in skills and knowledge across enterprise and industry workforces.

At the firm level, workforce development takes a holistic view, assessing what skills and knowledge are necessary for sustained and sustainable high performance. For training that enterprises seek from external providers, a workforce development approach requires those providers to customise to enterprise circumstances, integrating codified and tacit knowledge and skills, and formal and informal training. It also requires education and training providers to respond to a more diverse range of learning contexts, and a more diverse group of learners.

#### 2.6 Knowledge and skills are developed in many contexts

The school and post-secondary education and training systems are particularly important in knowledge and skills formation for learners yet to enter the workforce. For existing workers and those seeking to join or rejoin the workforce after a period of disengagement, the sources of education and training are more diverse.

The workplace is also a site of learning, and often a preferred site of learning. Firms and their employees often prefer informal, workplace learning because: learning needs may be ad hoc, and not justify the expense of entering formal training arrangements; formal training that adequately matches workplace needs may not exist; and they may not see a benefit in obtaining a formal qualification (Australian Industry Group and Allen Consulting Group, 2006). Accredited and non-accredited leadership development programs offered by universities and private providers increasingly incorporate action research projects based on the learner's immediate job roles and performance criteria.

Often, the workplace is the only viable site of learning for some knowledge and skills. One characterisation of the kinds of skills and knowledge is to label them as codified (know-what and know-why) and tacit (know-how and know-who) (OECD, 1996).

Some qualifications are only awarded after a period of mandated industry training is completed. Apprenticeships and the medical profession share this requirement. However, there are limited opportunities for learners to undertake concurrent onthe-job training and competency-based training outside these mandated areas. For example, the demand for work placements in the medical field exceeds supply. Recognising that structured programs that integrate cadetships or internships with higher-level qualifications are uncommon, Universities Australia has proposed a national internship scheme (Universities Australia, 2008).

The value which employers place on work experience has led to a growth in industry-based learning, or work-integrated learning, schemes attached to qualifications in both the VET and higher education sectors. Work experience, and part-time work, for secondary school students is acknowledged as a valuable contribution to post-school transitions.

Recognising tacit knowledge and skills as prior informal learning is an important aspect of education and training provider responsiveness, and offers efficiencies – it validates work experience and on-the-job learning; it reduces education and training costs for enterprises and learners; and it reduces the opportunity cost of time committed to education and training; it reduces 'redundant' teaching and assessment through which no substantive new learning occurs.

Knowledge and skills formation is not the preserve of the school or post-secondary education and training systems. Full-time, on-campus education and training directed at an accredited qualification is one of many options. An effective post-secondary education system must respond to the variety in enterprise and learner expectations, preferences, needs and learning contexts through diversity of institutions and providers.

#### 2.7 Responding to skills shortages

Shortages of skilled labour are a fundamental constraint on productivity improvement. In addition, where skilled jobs are available but there is a mismatch between demand and supply, they are also a constraint on workforce participation.

Skills shortages are not simply caused by a supply shortage of required skills, which can typically be addressed by increasing supply through the post-secondary education and training system. Skills shortages are the result of a range of factors, and occur in varied locations, industries and occupations.

Richardson's (*What is a skill shortage?*, 2007) classification of skills shortages is helpful in analysing why skills shortages emerge:

- Level 1 shortage: There are few people with the essential technical skills who are not already using them, and there is a long training time to develop the skills.
- Level 2 shortage: There are few people with the essential technical skills who are not already using them, but there is a short training time to develop the skills.
- **Skills mismatch:** There are sufficient people with the essential technical skills who are not already using them, but they are not willing to apply for the vacancies under current conditions (such as low wages, overtime and travel requirements).
- **Quality gap:** There are sufficient people with the essential technical skills who are not already using them, and who are willing to apply for the vacancies, but they lack some qualities that employers consider are important (such as customer service skills, flexibility about working hours, low levels of literacy).

Richardson's framework steps away from a mechanistic view of skills shortages as a simple matter of demand and supply for technical skills. It introduces four considerations which can contribute to the emergence of skills shortages:

- technical skills (acquired through formal or informal learning);
- qualities (people's attitudes to work and the particular jobs on offer);
- non-technical skills (like levels of literacy); and
- conditions of employment.

The interplay of these factors is dynamic, depends on labour market conditions, and influences enterprises and potential employees in different ways.

Firms can and do initiate their own strategies for managing skills shortages, without government intervention. Indeed, Skills Australia (2009) suggests that labour markets and local planning deal reasonably efficiently with some kinds of skills shortages. The Australian Industry Group/Deloitte *National CEO survey: skills shortages – a high risk business* (2010) asked CEOs to nominate favoured strategies for managing skilled shortages. The most favoured were: to upskill existing staff; outsource or subcontract; redesign jobs around available skills; limit production; and recruit from overseas.

Employer approaches to attraction and retention of appropriately skilled workers could be added to this list. Industry sector associations can also play a role in generating interest among school students and for students planning their postschool transitions. The adequacy of enterprise and industry approaches to managing skills shortages may be an appropriate focus for industry policy, and there may be a role for education and training providers in that policy context.

It is therefore important for governments to decide which kinds of skills shortages it should respond to through the education and training system, and how to do so effectively. Skills Australia (2009) suggests that one kind of shortage governments are best placed to deal with is a shortage arising from significant expansion in particular industries in relatively short timeframes. When there is an immediate demand for particular skills, but there are long lead times for developing them, government intervention could be targeted at boosting supply. One example is the need to increase the stock of 'green skills' for sustainable development and the transition to a low carbon economy (see Section 2.10).

Demographic change is a key influence on skills supply and demand. A straightforward example is offered by internal migration which brings skills to Queensland. The question is whether they are the right skills for local circumstances. If someone moves to Brisbane to take up a specific job, there is a direct match. If lifestyle is a key ingredient in a Bendigo couple's decision to move to Cairns, there may not be jobs to match their existing knowledge and skills.

A more complex element of demographic change is workforce ageing. For example, Queensland's share of Australia's tradespersons increased from 18 per cent to 22 per cent between 1991 and 2006 – a good outcome. Yet, over the same period, the average age of Australia's tradespersons increased from 33 years to 37 years: tradespersons are ageing more quickly that the rest of the Australian workforce. Some trade occupations are ageing more quickly than the overall trade's workforce (see Lewis and Corliss, 2010). Responding to skills shortages where both ageing and specialised skills are involved requires nuanced planning.

A geographical dimension to skills shortages arises when people with skills are not prepared to live in areas where their skills are required. Many people do not work in occupations for which they trained. Others work at higher or lower levels than their training suits them to. Some choose to reduce working hours or not work at all.

This analysis suggests that government's role in addressing skills shortages must be evidence based, calibrated to different industries and occupations, and seek to influence decisions of individuals, firms and education and training providers. It is not useful to rely on simplistic assumptions about the supply and demand of graduates. In particular, in regional areas consultations highlight the availability of quality housing, services, school and lifestyle considerations as arguably as important as increasing graduate supply in mitigating skills shortages.

#### 2.8 Equity and social inclusion — benefits for all

The benefits of holding a post-secondary qualification (such as higher income levels and more secure attachment to the labour force) are inequitably spread across the population. In particular, those from lower socio-economic backgrounds, regional areas and Indigenous Australians are less likely to hold a post-secondary qualification above Certificate III, and are less likely to enrol in a university degree. This skewed pattern of attainment can result in losses to individuals and families, to community and broader social cohesion, and to the economy.

The *Final Report* of the Bradley Review of the Australian Higher Education (Bradley et al, 2008) notes that:

A student from a high socio-economic background is about three times more likely to attend university than a student from a low socio-economic background. The current access rate for this latter group is about 16 per cent, and has remained relatively unchanged since 2002. If students from this group were adequately represented, their access rate would be 25 per cent.

In addition, the Review notes that Indigenous Australians are vastly underrepresented in higher education. In addition, they pass subjects 'at a rate 23 per cent below their non-Indigenous peers' and their retention rate 'has been between 19 per cent and 26 per cent below the rate for other students during the last six years'.

Low access and participation rates in higher education characterise those from rural and remote areas. But the Bradley Review also notes variations in the disciplines and qualification levels in which they are enrolled:

Regional and remote students are more highly represented in the fields of study of education, agriculture, health (mainly nursing) and veterinary science than other fields. Both of these groups are poorly represented in medicine, dentistry and some of the paramedical sciences as well as in law. They are also poorly represented in higher-level courses, with participation in higher degree research courses at only about 10 per cent of the total pool.

In August 2010, the National VET Equity Advisory Council (NVEAC) released its *Equity Blueprint*, sub-titled 'Creating futures: achieving potential through VET'. The *Blueprint* draws attention to the diversity of VET learners who experience disadvantage and social exclusion. They include those with low language, literacy and numeracy skills, those in remote communities, those from low socio-economic status (SES) backgrounds, those in correctional facilities, Indigenous Australians, new arrivals and refugees. The *Blueprint* identifies a series of design elements for VET that will influence life outcomes for this range of learners, noting that:

This very diversity must be taken into account in the design of each aspect of VET – whether it is funding policy; how VET monitors and reports on its performance; how it supports and prepares its teachers; how it allocates time and resources to teaching; or the cluster of services that VET harnesses to support and meet the needs of learners. We want to see pathways through to certificate III and beyond for all learners.

The *Blueprint* underscores the importance of COAG agreements and targets as a framework for improving equity and inclusion for disadvantaged groups. The COAG National Agreement for Skills and Workforce Development specifies two targets which are pertinent from equity, access and participation perspectives:

- by 2020, to halve the proportion of Australians aged 20-64 without qualifications at Certificate III or above; and
- by 2020, to double the number of diploma and advanced diploma completions.

To these targets might be added the Youth Compact incorporated in COAG's National Partnership Agreement on Youth Attainment and Transitions. The Compact entitles those under age 25 to an education or training place (subject to course requirements and availability).

It is likely that TAFE Queensland, as the public provider, will play the greatest role in delivering on COAG targets and undertakings. This observation is made against a backdrop of static VET participation rates in Queensland (which have declined relative to population growth) and comparatively low levels of qualification attainment across the Queensland population. These outcomes from the VET system are most stark for disadvantaged groups.

Formal, post-secondary qualifications have manifest advantages for individuals, enterprises and the economy, as outline earlier in this chapter. Both the Bradley Review and NVEAC's *Blueprint* emphasise that formal, post-secondary qualifications are a primary means of mitigating or removing the long run effects of disadvantage and social exclusion.

The post-secondary education sector has a primary role in securing a public good – equitable access to education and training across the community. Focusing the sector on equity and social inclusion outcomes has many implications. A more diverse cohort of learners, whether on campus or on-the-job, means wider differentials in entry level skills and preparation, requiring adjustments to learning, teaching and assessment designs. Learning support services and flexible delivery and assessment arrangements are critical.

Spreading the benefits of post-secondary education and training attainment entails strong, ongoing partnerships between schools, VET and higher education providers, and industry and enterprises.

The post-secondary sector is responding to COAG agreements and targets, and to policy and programs established in response to the Bradley Review. More will need to be done if equity and social inclusion are to improve through access to post-secondary education and training.

# 2.9 Language, literacy and numeracy — foundations for higher-level educational attainment

The ability to take advantage of education and training opportunities is related to a learner's skill level with English language, literacy and numeracy. The Department of Education, Employment and Workplace Relations (2010) reports that:

Findings from the Adult Literacy and Life Skills 2006 Survey suggest 40 per cent of existing workers and 60 per cent of unemployed Australians have less than effective English language, literacy and numeracy skills.

Language, literacy and numeracy skills impact on labour force participation and income. Data from the Household, Income and Labour Dynamics in Australia survey (HILDA, 2010a, pp 134-140) indicates that:

For females, moving from very poor to excellent literacy is associated with an approximate increase in the hourly wage of 14 per cent and moving from very poor to excellent numeracy is associated with an approximate increase in the hourly wage of 15 per cent. For males ... moving from very poor to excellent numeracy is associated with an approximate increase in the hourly wage of 39 per cent.

For enterprises, low levels of literacy and numeracy have considerable impacts on operations and costs. In a survey conducted for the National Workforce Literacy Project, industry respondents reported impacts such as poor completion of documents and wasted time due to rework (more than 40 per cent each), ineffective work and wastage (30 per cent each), ineffective training, non-compliance and injuries (Australian Industry Group, 2010).

Consultations for the Review confirm these findings, with additional concerns expressed about declining access to or participation rates in language, literacy and numeracy programs.

Improving language, literacy and numeracy skills requires particular attention to learner needs and learning contexts. Access to supportive learning environments is crucial for adult learners who wish to improve their language, literacy and numeracy skills. Such environments may not be easy for large institutional providers of education and training to create, staff and maintain. Community-based provision is often preferred by adults seeking to improve their language, literacy and numeracy skills. For school leavers with low language, literacy and numeracy skills, education and training providers must co-deliver these skills with certificate level pre-vocational training so that students can successfully complete units of competency.

In workplaces, language, literacy, numeracy and workplace training must be highly contextualised to the enterprise, and to the job roles of those receiving training.

#### 2.10 Applying green skills and knowledge across the workforce

The transition to a low carbon economy is now a fixture on the strategic horizon for enterprises and governments. The VET sector is working through the implementation of the COAG National Green Skills Agreement. Among other initiatives, the Agreement mandates incorporating sustainability principles and competencies into all Training Packages. The Agreement includes a commitment to upskill VET professionals in delivering sustainability skills to pre-vocational learners and existing workers. These strategies provide a baseline capacity for applying green skills.

However, many existing workers will not necessarily come into contact with green skills and knowledge through formal qualifications, or skill sets. If spreading 'generic' green skills and knowledge across the workforce is prioritised, then a workforce skills development approach may have considerable value. The European Centre for the Development of Vocational Training (2010) notes that:

... many of the skills needed for low-carbon jobs can be found in existing occupations. A balance of generic skills (for example autonomy and communication), generic green skills (such as reducing waste and improving energy and resource efficiency) and 'topping up' existing job related skills is much more important to developing a low-carbon economy than more specialised, green skills.

The permeation of generic green skills and knowledge across the Queensland workforce may be a proving ground for the effective application of workforce development approaches, and a signal of the capacity for innovation across Queensland's industry sectors. Importantly, the application of generic green skills and knowledge will be an important for achieving sustainable productivity growth in a carbon-constrained economy.

#### Improving skills, participation and productivity — Findings and conclusions

- 1. Higher levels of educational attainment result in higher labour force participation rates, and longer participation in the workforce. A better-educated workforce is also important in achieving productivity improvements.
- 2. Holding a post-school qualification at or above Certificate III bestows advantages on individuals and to the economy. Participation in higher education can have inter-generational benefits, underlining the long-term significance of school completion rates and pathways from school to post-secondary education.
- 3. For existing workers and those seeking to join or rejoin the workforce after a period of disengagement, sources of education and training are more diverse and include informal learning. Workplaces are increasingly important and preferred site of learning.
- 4. Greater recognition of the value and importance of work based and non-formal learning is required; this includes blending work-based and formal learning to give learners the capacity to quickly and effectively apply skills to improve productivity and thus improve returns to both individuals and firms.
- 5. An effective post-secondary education system must therefore respond to the variety in enterprise and learner expectations, preferences, needs and learning contexts, through diversity of providers and with strong engagement with industry and enterprises.
- 6. Skills shortages manifest themselves in different ways and are created by complex and often inter-related factors, including demand and supply from post-secondary education, workforce attraction and retention, migration, wage levels and locational issues. Government's approaches to addressing skills shortages must be calibrated to the nature of the skills shortage, and be undertaken in partnership with employers.
- 7. Improved equity of access to and outcomes from post-secondary education are a major policy priority, with particular regard to the need to improve language, literacy and numeracy skills in the workforce.

# Chapter 3 Major challenges for Queensland

# 3.1 Introduction

In common with other States and Territories, Queensland must adjust to new challenges brought about by economic and demographic change. As Chapter 2 suggests, there are common understandings that inform and underpin the shape of education and training and policy. Policy for post-secondary education and training in Queensland must respond to national economic conditions. It must take advantage of the opportunities which Commonwealth government policy settings open up. It must recognise that Queensland's economic challenges, demographic profile and population distribution impose particular demands.

This chapter seeks to identify the major challenges that Queensland must meet in coming decades, and to indicate in broad terms how the post-secondary education and training system might assist in responding to those challenges. Many of these challenges have long been recognised in Queensland, and strategic responses to them have driven government policy for two decades. The Smart State Strategy, now in its third stage, and the 2006 and 2008 Queensland Skills Plans are examples of strategic responses bearing directly on the post-secondary education and training sector.

# 3.2 Sustainable economic prosperity for Queensland — building a diversified industry profile

Strong demand for resources is a feature of Queensland's economy. The resources sector provided a strong buffer against the impact of the global financial crisis. It is a driver of Queensland's economic growth now, and will be so well into the future.

However, the resources sector's output and revenues are subject, among other things, to cyclical demand adjustments, domestic monetary policy, exchange rates, and national and global environmental policy.

The overarching social and economic challenge for Queensland is to establish longterm sources of prosperity. Sustainable economic growth will depend largely on rates of productivity growth and workforce participation across the economy and not just in the resources sector.

# 3.3 Labour force growth Queensland

Support for the skills and knowledge requirements of the resources sector must be accommodated in any strategic setting for Queensland's post-secondary education and training system. However, the needs of the resources sector cannot predominate or overwhelm those strategic settings. Employment growth in Queensland is broadly based across occupations and forecast to remain so.

As Figure 3.1 shows, all major occupation groups are expected to grow in absolute numbers through to 2016-2017. Average annual growth rates in the major occupation groups vary considerably, with the highest forecasts for managers, professionals, and machinery operators and drivers.





Source: Monash Employment Projections, Centre of Policy Studies, September 2009

For Queensland's post-secondary education and training sector, these growth forecasts offer broad indications of where education and training effort should be directed. Planning knowledge and skills delivery for this kind of employment profile requires an evidence base about where, and in which industries, these jobs are located.

An adaptable skills and knowledge base is important for both workers and enterprises. For example, an expanding resources sector workforce does not necessarily imply that skills applied in the sector are transferable to other industries. Those entering the resources sector workforce for the first time (say recent school leavers) are often taking advantage of good wages for low skilled or semi-skilled jobs. Their long-run employment outlook may be compromised should the number of these jobs decline, or should they wish to move to other industries. A question for government and the resources industry is how to provide some 'future-proofing' for resources sector employees who have no post-secondary qualifications, or low level qualifications, or skill sets specific to the resources sector.

Equally, it is important to understand the characteristics of workers in each occupation group. Managers, for example, are likely to be recruited from the existing workforce, and many will have post-secondary qualifications. Personal service workers are likely to be recruited from those who have completed a first qualification after leaving school, but may also be recruited from existing workers wishing to retrain. It is common for people to work in jobs other than those related to their post-secondary qualifications. It is common for people to work in jobs above and below levels that their formal qualifications objectively suit them to.

#### 3.4 Strong labour force participation in Queensland

As indicated in Chapter 2, the evidence shows that high levels of skills are strongly related to high levels of workforce participation. Higher levels of workforce participation will be crucial if projected job opportunities are to be filled, particularly in those regions where population ageing is most pronounced.

Queensland's workforce participation rates compare favourably on national and international comparisons. Figure 3.2 compares Queensland's workforce participation rates with the national rate, from 1978 to 2010. While Queensland has experienced higher rates of labour force participation since the early 1990s, the gap between the Queensland and national rates has widened in recent years. This is driven by the strong growth in participation at both the younger and older ends of the working age spectrum — as seen below in Figure 3.7 and Figure 3.8.



On international comparisons of labour force participation, Queensland performs well. Figure 3.3 shows that compared with 12 developed economies (including Australia) only Canada, New Zealand, Singapore and Sweden exceed Queensland's workforce participation rate.



Source: ILO LABORSTA 2008, ABS Cat. No. 6202.0 2010

#### 3.5 Declining productivity growth

#### Australia's multi-factor productivity story

Australia's productivity growth surged in the 1990s, due to the significant national economic reforms (such as the float of the Australian dollar and the progressive dismantling of tariffs) undertaken by the Commonwealth government during the mid to late 1980s. At the peak of productivity growth during the 1993-94 to 1998-99 productivity cycle, average annual MFP growth reached 2.3 per cent; second highest among OECD countries at the time.

However, the benefits from these reforms began to taper in the late 1990s – an outcome that the Productivity Commission (2010) suggests was to be expected. Between 1998-1999 and 2003-2004, annual average MFP growth slowed to 1.1 per cent, in line with Australia's long-term average.

Between 2003-2004 and 2009-2010, MFP declined by an average annual rate of -0.2 per cent – a substantial fall from the long term average.<sup>1</sup> The Commission notes that the extent of the decline, and the deterioration since 2003-2004 in particular, is unexpected. Improving productivity growth is now a central policy concern for the nation.

The Productivity Commission (2010) estimates that 70 per cent of the decline at the national level since 2003-2004 is accounted for by distortions in three sectors:

- mining, due to declining resource quality and large capital investment that has not yet translated into output;
- utilities (electricity, gas, water), due to capital investment and reduced rainfall; and
- agriculture, due to drought.

Even so, after controlling for MFP declines in these three sectors, national annual average MFP growth since 2003-2004 stands at 0.7 per cent, still less than the long-term average of 1.1 per cent.<sup>2</sup>

#### Labour productivity in Queensland

Queensland must create the conditions for sustained productivity growth – this is a principal feature of a dynamic and resilient economy. However, Figure 3.4 shows that Queensland's labour productivity is currently lagging behind other states and territories.

While noting that Queensland has significant representation from the three sectors with the greatest distortionary influence on productivity measures (as discussed in the previous section), the challenge for Queensland is to nonetheless secure sustained increases in productivity growth.

Productivity growth can vary due to productivity improvements or changes in capacity utilisation of inputs (for example labour and capital may be hoarded and under-utilised during downturns). To minimise the effects of the latter, productivity growth is best measured as an average over a cycle. The ABS recently declared the last productivity peak was in 2007-08. Productivity growth after this point should be treated with caution.

The December 2010 MFP update due to be released in the near future is likely to show that average annual MFP growth has been even lower.



More recent analysis undertaken by the Grattan Institute presented in Figure 3.4B shows that Queensland's productivity performance lags behind the national average because it has below average productivity levels in its industries overall even after differences in industry composition are taken into account.







Sustaining productivity growth means new challenges at different time horizons:

- In the short-term, it is uncertain how strong the global economic recovery will be following the global financial crisis. Queensland's trading partners, and the global economic outlook more broadly, are prone to aftershocks.
- In the long-term, productivity growth may be adversely affected by the impacts of climate change, and the impact of a national or global price on carbon.

A constant pressure over coming decades is that population ageing will detract from growth in the labour force and growth in Gross State Product. The first of the baby boomers reaches 65 years of age in 2010. While attachment to the notion of 'retirement at 65' is waning, baby boomers are expected to leave the workforce in increasing numbers over the next two decades. In demographic circumstances where the labour force grows at a slower rate, and dependency ratios rise, it is imperative that MFP growth is high with labour productivity a core component of MFP growth.

#### 3.6 Managing population growth and population ageing

Population change influences post-secondary education and training in many ways. Student numbers in disciplines must grow differentially – the need for engineers and plumbers will grow quickly, while the aged care workforce will grow slowly in the short term and more quickly in the medium term. The diversity of learner needs, and their ages, will transform learner profiles. The location and number of campuses will need review. University, VET and school workforces will expand.

Queensland's population is growing quickly. From 4.5 million residents in 2010, the population is projected to approach 6.3 million by 2030-2031 (with a range of 5.7-7.0 million). Approximately two-thirds 4.2 million (with a range, 3.9-4.7 million) will reside in the south-east corner of the state (OESR 2008).

Population growth will be accompanied by population ageing. The proportion of the population aged 65 and over is projected to grow from 12 per cent to 20 per cent by late 2030-31 (OESR 2008). In the same period, the proportion of the population aged 25-44 will decrease from 29 per cent to 26 per cent (OESR 2008).

Queensland is nonetheless expected to have the highest absolute growth in young people of any State or Territory (Figure 3.5). Continued strong international and interstate migration will also moderate the ageing of Queensland's population.







#### Implications for government service delivery

Population growth for Queensland from 2008 to 2009 was 2.7 per cent, second only to Western Australia for that period. Population growth and ageing will drive demand for services and infrastructure. However, demand for services and infrastructure will be differentiated by regional population profiles — more aged services in some regions, new schools in others.

Figure 3.8 depicts the substantial variations in population growth across the state – in those areas shaded red, population grew at 3 per cent or more between 2008 and 2009. If these patterns of growth persist, demand for infrastructure will be high in the south-eastern corner and regional coastal centres with higher demand for post-secondary education and training.

This level of population growth will require substantial increases in the capacity of the post-secondary education and training system but not just through campus delivery. Flexible delivery in workplaces and community settings and through ICT enabled learning should also increase capacity.







Source: ABS Cat. No. 3218.0 2010

Population ageing has clear implications for the aged dependency ratios. In 2008-09, there were 5.0 Queenslanders of working age (aged 20 to 64) for every person aged 65 and over. By 2031, this ratio is projected to fall to 2.8 working age persons for every person aged 65 and over (OESR 2008). Overall, the ratio of Queenslanders age 20 to 64 to all other age groups will decrease from 1.5 to 1.3 by 2030-31 (OESR 2008).

There will be increased demands on governments to provide additional services. However, Queensland's rate of economic growth, and the Queensland government's capacity to raise revenue, will be reduced over the medium to long term by an ageing population. Because population ageing in Queensland is expected to be more moderate, the fiscal challenge for the Queensland government will be lesser than that faced by other Australian governments. Relative to other States and Territories, the absolute number of young people will grow at a faster rate, and their proportion in the total population will decline more slowly.

#### 3.7 Lifting workforce participation among older Queenslanders

In Queensland, workforce participation has risen across older age groups, as shown in Figure 3.7. In particular, it is worth noting:

- the accelerated rise in participation among those aged 55-59 up from around 50 per cent in the early eighties to around 70 per cent in 2010;
- the steady and recent rise for those aged 60-64 years up from just above 30 per cent in the late nineties to around 50 per cent in 2010; and
- the lift in participation rates among those aged 65 years or older from a long run average of around 6-7 per cent to just over 10 per cent in 2010.



Older people will be an important source of workers. Therefore, the increasing workforce participation rate of older people is a very positive trend. However, the increasing participation of older workers poses several challenges for Queensland's post-secondary education and training system:

- older workers are likely to seek flexible working and learning arrangements and will typically have a limited, or more dated, knowledge and skills base;
- older workers are therefore likely to need retraining or significant upskilling if they are to contribute most effectively to an enterprise's labour productivity;
- they are likely to be suited to a more limited range of occupations and industries than a school leaver, though they may, for example, play a crucial role in staffing service industries and the personal care workforce; and
- their familiarity with digital learning technologies will be more limited, as will their familiarity with structured workplace learning.

Learning, teaching and assessment designs and delivery models are likely to need review in order to meet the needs of this growing cohort of workers. Recognition of informal and prior learning will grow in importance. Workforce development approaches may be particularly relevant for older workers who have long experience of informal workplace learning, and who may have limited experience of structured on-campus learning environments.

#### 3.8 Enriching post-school destinations for young Queenslanders

A more confounding part of Queensland's workforce participation picture relates to those aged 15-19. Figure 3.8 charts workforce participation rates for Queenslanders aged 15-19 and 20-24, compared to national rates for those age groups.

Over a 30 year period, Queenslanders aged 15-19 have been significantly more likely – by between 4 and 6 percentage points – to engage in work than has been the case nationally. Since 2000, the gap has widened with the participation rate for 15-19 year old Queenslanders consistently running 7 or 8 percentage points higher than the national average.

For 20-24 year olds, national and Queensland workforce participation rates have been in lock step since 1979, though since 2004 the participation rate for Queenslanders been consistently higher by around 2 percentage points.



The markedly higher participation rates of 15-19 year olds is an important part of the explanation for Queensland's higher labour force participation rate, compared to Australian and international levels (Figure 3.2 and Figure 3.3 respectively).

The challenge for Queensland becomes more apparent when the higher workforce participation rate is set beside the data in Figure 3.9 which shows the destinations of Queensland's Year 12 completers, based on the Next Step Survey (2005-2009), which is administered four to seven months after completion of Year 12.

The percentage of Year 12 completers going to university is relatively stable, hovering around 35 per cent. However, the percentage going to VET has fallen in each year, from just over 30 per cent in 2005 to just fewer than 25 per cent in 2009.

In sum, the proportion of Queensland's Year 12 completers who go on to postschool education and training is in decline, and the decline is in VET participation.

This trend, it maintained, has serious long term implications for workforce participation and productivity growth in Queensland; it cannot be assumed that current high levels of workforce participation will be sustained as skills requirements in the labour market intensify.

From 2005 to 2009, the steadily increasing proportion of those working (part time or full time) or seeking work is consistent with the data on increasing labour force participation rates among the young — and is likely to explain the decline in VET participation.

It should be recognised that some students commence post-secondary education one or more years after Year 12. By the same token, attrition rates among those in the first year of post-school study are high.



Figure 3.10
MAIN DESTINATIONS OF QUEENSLAND YEAR 12 COMPLETERS

Completing a post-secondary qualification immediately after finishing school is a 50-year investment. The evidence tells us post-school qualifications:

- lift lifetime income;
- lift workforce participation rates;
- extend working lives;
- establish a pattern of lifelong learning those who complete a post-school qualification are more likely to complete additional qualifications; and
- make for a more secure future in the labour force.

For all these reasons, the steady decline in the proportion of Year 12 completers enrolling in VET, and the static numbers transitioning to higher education, is cause for concern.

As the trend among 15-19 year olds to join the workforce has materially increased Queensland's workforce participation rate, it will also have lessened labour shortages and (to a lesser extent) skills shortages in some areas of the economy, which is of immediate benefit. But it is questionable whether choosing work over a post-secondary qualification has long-term benefits for the individuals concerned, or for the broader economy in terms of workforce participation and productivity. A key objective must be to combine the preference of many young Queenslanders to join the workforce with concurrent participation in post-secondary education and training.

In addition, the national targets established for increasing undergraduate completions to 40 per cent of 25-34 year olds by 2025, and doubling the number of advanced diploma and diploma holders by 2020, are made harder to meet in Queensland if the number of VET enrolments remains at low levels. A key means of lifting undergraduate completions is to provide pathways through VET qualifications. Such pathways bolster the readiness of young people who are less well prepared for tertiary study. However, if the pool of VET enrolments shrinks, there will be fewer young people to follow the pathways available.

Compared to the total Australian 15-19 year old cohort, it has long been the case that a higher proportion of young Queenslanders chooses to join the workforce. Given that longer view, the Next Step Survey outcomes may not be surprising. But given the benefits of post-secondary education and training to individuals over their lifetimes, and to the economy more broadly, changing the mindset of more young Queenslanders seems a necessary task. A key role for the school system is to build aspirations for post-secondary study and to ensure sound preparation for it.

The post-secondary education and training system could consider how best to work with secondary schools, ensuring relevance of pathways is maximised and that postschool transitions highlight opportunities for work *and* study. The post-secondary education and training system could consider how best to work with industry, implementing strategies to increase workplace and work-based qualification delivery to school leavers. The success of the School-based Apprenticeship and Trainee System offers Queensland a foundation for designing such strategies.

# 3.9 Making equity gains

Queensland's equity challenge is to ensure that economic prosperity is underpinned by equal opportunity across the state. This cannot mean equality of economic outcomes or performance. But it can mean greater equity of access to the benefits for individuals and regional economies from lifting knowledge and skill levels across the population. Some groups within the Queensland population have disproportionately low rates of workforce participation.

As Figure 3.10 shows, workforce participation rates vary widely between Queensland's regions. In Wide Bay-Burnett the rate in mid-2010 stood at approximately 55 per cent – in inner city Brisbane and Northern-North West, the rate stood at approximately 75 per cent. Differing levels of investment in human capital development is one possible explanation for this variation.



Youth unemployment and long term unemployment are higher outside Brisbane, as depicted in Figure 3.11.

#### Figure 3.12

CHARACTERISTICS OF UNEMPLOYMENT IN BRISBANE AND IN REGIONAL AND RURAL QUEENSLAND



Note: The incidence of long-term unemployment is the proportion of unemployed persons who are long-term unemployed.

Source: ABS Labour Force Survey, unpublished data

Queensland's economy needs workers with the right skills and knowledge. It needs to lift workforce participation and skills levels to meet the challenges of population ageing and growing dependency ratios. Engaging unemployed young people and reengaging the long term unemployed in the labour market makes economic sense, and it improves the life chances of those estranged from work.

Figure 3.12 shows similar disparities in unemployment outcomes between Indigenous Queenslanders and the broader Queensland population. Such disparities are well known and are subject to policy targets at both the state and national levels. The gap between Indigenous unemployment and the broader Queensland unemployment rate is closing; however, more recent data are not yet available.



Figure 3.13

Note: \*Data for 2005 to 2007 are based on *Closing the Gap* (Queensland Government 2009). Data for 2008 is taken from the National Aboriginal and Torres Strait Islander Social Survey, which was administered in August 2008 to April 2009 and OESR statewide unemployment rate from April 2009.

#### 3.10 The sustainability challenge

For Queensland, the progressive growth of less carbon intensive industries will be important in the effective transition to a low carbon economy. Diversifying the state's economic base is central to long-term prosperity. The transition will require the flexible flow of economic resources (notably labour) to sectors (existing and new) with lower carbon footprints. The flexible flow of labour will necessarily rely on sophisticated approaches to workforce development and innovation, to upskilling and retraining. Green skills, delivered as part of an enterprise-focused workforce development strategy can support the push to a higher skills economy.

Both the VET and university sectors will be called upon to provide skills and knowledge formation in new occupations and industries that emerge from the shift towards more sustainable use of resources, and the use of renewables.

Source: Queensland Government 2009, ABS cat. No. 4714.0 2010, OESR 2009

#### 3.11 Investing in post-secondary education and training

Given the demands emerging as Queensland's demography rapidly changes, improvements in post-secondary education and training must compete with other demands for government investment in infrastructure and services. It is important to select wise investments in post-secondary education and training: those which will improve the state's longer term fiscal position through rising levels of qualification attainment, workforce participation and productivity growth. These outcomes will be important contributors to long-term economic growth.

In making investments to underpin long-term economic growth, it is important to acknowledge that because state governments do not raise taxes through income or consumption based taxes (e.g. income tax and GST) stronger economic growth does not translate directly to higher tax revenue. Relative to the Commonwealth Government, Queensland's revenue and expenditure sources — and thus its fiscal position — are less closely linked to economic performance.

Given current fiscal constraints, and competing claims for budgetary allocations, investment in post-secondary education and training must be sufficient to meet demand and government targets, efficiently allocated, and must flow from a range of revenue sources. This will require a combination of policy reform and an appropriate investment framework as outlined in chapter 5 and 6 of this report.

#### Major challenges for Queensland — Findings and conclusions

- 8. The overarching social and economic challenge for Queensland is to establish long-term sources of prosperity. Sustainable economic growth will depend largely on rates of productivity growth and workforce participation across the economy.
- 9. A clearer policy focus is required across the post-secondary education system to address some of the significant challenges facing the state.
  - a. Notwithstanding the impacts of the strong resources sector, it is likely that Queensland is experiencing a decline in the underlying level of productivity growth.
  - b. Both population growth and workforce ageing will drive demand for services and infrastructure, notably in growth areas. This is exacerbated by the differential impacts of growth and ageing across the state.
  - c. Queensland has higher than average levels of labour force participation but is both lower and more volatile in regional and remote areas and amongst disadvantaged groups and may be detracting from participation by young people in post-secondary education.
- 10. Increased participation together with high levels of population growth will require substantial increased capacity in post-secondary education and training for campus delivery, face-to-face learning and teaching, and e-learning flexible delivery in workplaces and community settings.
- 11. Given current fiscal constraints, and competing claims for public resources, investment, investment in post-secondary education and training must be both efficient and sufficient and must flow from a range of revenue sources. This will require a combination of policy reform and an appropriate investment framework.

# Chapter 4

# The performance of the post-secondary education and training system in Queensland

# 4.1 Introduction

The performance of the post-secondary education and training system in Queensland can be measured in a number of ways; attainment levels, participation levels and equity in relation to both of these measures, student movement between the VET and higher education sectors and levels of satisfaction. There is mixed performance across these measures.

This chapter highlights the outputs and outcomes of the post-secondary education and training system in Queensland. It focuses on:

- attainment of higher level qualifications, long term attainment projections and key factors that ensure a more highly qualified future labour force, especially:
  - rates of participation in post-secondary education; and
  - emerging pathways to post-secondary education.
- attainment of foundational skills in Queensland, the need to continue strengthening outcomes in this critical area, and factors that contribute to improved literacy and numeracy outcomes, including:
  - the effectiveness of the school system; and
  - the declining popularity of Certificates I and II.
- equity of attainment across the state, including the geographic and demographic differences and underlying reasons for these differences, including aspiration, ability and participation.

#### 4.2 Attainment of higher level qualifications

The Queensland government has emphasised improving access to, and participation in, education and training at higher skills levels. That is an important objective for a contemporary, developed economy.

Qualification attainment in Queensland, measured as the proportion of the population holding a qualification, continues to improve. Attainment at higher qualification levels is also improving, consistent with national trends. Modelling undertaken by the Department of Education and Training shows (Figure 4.1) that attainment rates for higher-level qualifications will continue to increase. They are on track to meet the Q2 target that three out four Queenslanders hold a trade, training or tertiary qualification.

#### Figure 4.1

ATTAINMENT RATE IN QUEENSLAND – CERTIFICATE III AND ABOVE – ACTUAL AND PROJECTED – 2001-2020



Figure 4.2 shows that the improved attainment rate is broadly based across the population. Since 2001, all five-year age cohorts record a steady rise in the proportion holding a Certificate III qualification or higher. The exception is the 20-24 year age group.



Figure 4.2 PERCENTAGE OF THE QUEENSLAND POPULATION WITH CERTIFICATE III OR HIGHER – BY FIVE YEAR AGE COHORTS – 2001, 2005 AND 2009

Higher attainment rates are driven primarily by long-term social and demographic trends. It should be recognised that higher attainment rates are due, in part, to Queensland importing higher-level skills via interstate and international migration.

However, projections of continuing improvements in higher-level qualification attainment cannot be taken as given. Some leading indicators (such as the number of qualifications awarded) suggest this may not be easily achieved. Figure 4.3 shows the relatively static number of undergraduate qualifications awarded, which is cause for concern. Further analysis shows that the number of undergraduate and postgraduate qualifications awarded in Queensland is falling gradually, relative to the national total, despite strong population growth in the state.

The number of VET qualifications has grown strongly since 2003-2004, and the number of VET qualifications awarded has been increasing relative to the national total, however this is mainly at the certificate III level as Figure 4.3B shows.

Figure 4.3 A and B









Source: DEEWR Award Course Completions 2001-2008, NVCER VOCSTATS data 2002-2009

However, the Q2 target does not account for disparities in attainment between population sub-groups, including the potential for lower levels for attainment amongst regional and remote populations, Aborigines and Torres Strait Islander groups and lower socio-economic households (see Section 4.4). As such, the overarching target needs to be supported by detailed monitoring — and targeting — of attainment levels across subsets of the population.

Whether the positive trend in higher-level attainment continues will depend on:

- participation rates in post-secondary education and training; and
- the effectiveness of pathways to VET and higher education

As discussed below, in Queensland the status of both needs close attention.

#### Participation in post-secondary education and training

Participation rates in post-secondary education and training in Queensland are a cause for some concern – both VET and higher education participation rates have declined over the last decade, and they are weak relative to other states. Limited participation will limit the spread and application of higher-level skills in enterprises, and will constrain the life opportunities of those who elect not to participate, or whose access is restricted.

In higher education, the participation rate has declined quickly – from a nationleading 5.5 per cent in 2002, to lagging behind all states (other than South Australia) at 5 per cent in 2008. However, this trend may have changed in 2009-10 as universities have reported that undergraduate enrolments have risen strongly (although this trend is apparent in all states).



HIGHER EDUCATION PARTICIPATION RATE FOR 15-64 YEAR OLDS – AUSTRALIA AND MAINLAND STATES – 2002-2008



Source: DEEWR Higher Education Statistics Collection

VET Participation is also declining. Figure 4.5 shows that Queensland's relative position has deteriorated between 2004 and 2009. In 2004, Queensland's VET participation rate ranked ahead of the ACT and Western Australia. By 2009, Queensland had the lowest VET participation rate of all States and Territories.

The decline in Queensland's participation rate commenced in 2006. No other State or Territory recorded a lower participation rate in 2009 than it recorded in 2006, with the exception of NSW. However, as can be seen from Figure 4.4, the NSW higher education participation rate picked up quickly from 2005 onwards, offsetting the decline in VET participation. Queensland records a fall in both higher education and VET participation over the same period.



Source: NCVER 2009, ABS Cat. No. 3201.1 2008

While participation in post-secondary education and training is declining in Queensland, completion rates at the module level have improved for those who are enrolled in VET — in 2009, completion rates in Queensland exceeded national average (Figure 4.6). Part of the explanation for improved completion rates lies in the introduction of funding formulas which place a higher value on module completions for providers. However, high module completion rates do not necessarily translate into full qualification completion rates, which have always been low in VET in Australia.

Figure 4.6



Apprenticeship and traineeship numbers in Queensland have experienced strong growth. Since 1995, the number of ongoing traineeships has increased almost 25 times. At its peak in mid-2008, the number of ongoing apprenticeships was double 1995 levels (Figure 4.7). Apprenticeship commencements dropped sharply after the global financial crisis but have picked up strongly compared to previous economic downturns — in part due to a range of direct government interventions developed by the Trades Training Taskforce and the government's close working relationship with industry.



The data for new traineeship commencements (see Figure 4.8) shows that since 2000, the number of trainees not coming from the workforce has hovered between 24,000 to 26,000 individuals. However, since 2000, the number of those commencing traineeships that are existing workers rose from less than 5000 to almost 20,000 — an increase of almost 300 per cent.

Growth in traineeships — as seen in Figure 4.7 — is driven almost wholly by existing workers and not from those seeking to enter or re-enter the labour market. Growth is not coming from those seeking to enter or re-enter the labour market. This conclusion is in part supported by the declining popularity of traineeships among school leavers (see Figure 4.10).



#### Pathways to VET and higher education

School education establishes aspiration, readiness and adequate preparation for post-secondary education and training. Queensland's Year 12 retention rate is above the national average and higher than most other states and territories, as Figure 4.9 shows. Completing Year 12 increases the likelihood of success in post-secondary education and training due to better levels of readiness and preparation for further study.





There are many influences on whether a school leaver chooses to participate in post-secondary education and training. While many Queensland school leavers do go on to higher education or VET, Queensland's declining rates of participation in both sectors suggest that a shrinking proportion is choosing to do so; this hypothesis is partly supported by Figure 4.10, which shows that many school leavers choose not to capitalise on the available post-secondary pathways although some school leavers will enter post-secondary education later.

Those Year 12 completers who do go on to participate in post-secondary education and training are not taking advantage of the improved readiness and preparation that completing Year 12 bestows. As noted earlier, the decline in Queensland's VET enrolments is especially worrying.

It would appear that the decline is matched by an increase in the number of students choosing to work full time or part time, or to seek work. The data on the destination of Year 12 completers shows that in the short run — i.e. at completion of Year 12 and six months thereafter — these patterns are relatively stable.



Figure 4.10 MAIN DESTINATIONS OF QUEENSLAND YEAR 12 COMPLETERS

Attractive labour market opportunities reduce incentives for post-secondary participation. Partnerships between schools, post-secondary education and training providers, and industry are important if:

- there is to be universal value on the importance of post-secondary education; and
- the full value of higher-level qualifications is to be unlocked for young people and enterprise.

For those Queensland school leavers who do enrol in VET, apprenticeships and Certificate IV and above qualifications are popular, as Figure 4.11 shows. However, traineeships for young people show continuing decline. As discussed above, the increase in overall traineeships numbers is driven primarily by the growing number of existing workers taking on traineeships.

Figure 4.11 MAIN VET DESTINATIONS OF QUEENSLAND YEAR 12 COMPLETERS – 2005 TO 2008



Queensland Tertiary Admissions Centre (QTAC) data shown in Figure 4.12 indicate that just over half those who successfully apply for university admission through QTAC are school leavers. A further 25 per cent have completed, or partially completed, a university award.

Figure 4.12

SUCCESSFUL QTAC APPLICANTS TO QUEENSLAND UNIVERSITIES BY HIGHEST ENTRY LEVEL QUALIFICATION – 2001 TO 2009



The QTAC data is notable for showing that TAFE pathways to university are not strong or well-used: those with a diploma or advanced diploma account for fewer than 10 per cent of successful university applicants. This may change with improved collaboration between VET and higher education providers, emerging models of delivery, improved credit recognition and uncapped demand. It should also be noted that QTAC data shows only a partial picture. While QTAC is a significant university entrance channel, those with VET qualifications may apply directly to universities. Some consultations also suggest low demand for pathways, with students either wanting just a VET qualification or preferring to go straight to university. Consultations with universities indicate that Queensland is well placed to capitalise on demand-funded higher education, although some campuses such as the Gold Coast will face major capacity constraints. While The University of Queensland and Queensland University of Technology are planning modest growth in undergraduate enrolments, with a primary focus on postgraduate programs all others are seeking rapid growth in a context where the number of young people is growing quickly. Southern Cross University is also planning to expand at its Coolangatta campus.

Consultations with universities also highlight a potential capacity constraint in the Ipswich, Springfield and Logan areas. Major capital proposals for Logan and Springfield are yet to be determined by the Commonwealth and significant higher education growth at the Ipswich Campus of the University of Queensland is unlikely. The overall level of TAFE provision, role of campuses and institutes is also not clear.

More young school leavers may not necessarily translate into demand for postsecondary education and training. A pressing challenge is to build capability and demand from students in higher level studies in the post-secondary education and training system. This will require learners - current and potential – to have the literacy and numeracy skills and the capacity for further learning necessary for successful participation. This is a specific challenge and priority for Queensland and one that is recognised in schooling policy.

## 4.3 Attainment of foundational skills

The depth of a person's language, literacy and numeracy skills has significant implications for social and economic participation. The case for lifting post-school qualification attainment has been canvassed – there are, for example, benefits to income (and therefore to government revenue), innovation uptake, workforce participation and lifelong learning. As noted in Chapter 3, the capacity to take advantage of education and training opportunities is related to a learner's skill level with English language, literacy and numeracy.

When compared with literacy and numeracy skills attainment in other developed countries, Australia's performance (and Queensland's) falls in the mid-range. Figure 4.13 presents data from the Adult Literacy and Lifeskills Survey (ABS 2006).

The Australian Industry Group's National Workforce Literacy Project (2010) indicates that the minimum requirement to function in a modern workplace is Level 3 for prose literacy, document literacy and numeracy. As Figure 4.13 shows, more than 40 per cent of working age Australians fall below this minimum on prose and document literacy, and about 50 per cent fall below this minimum for numeracy.





Note: Queensland data includes those aged up to 75, rather than aged up to 65 only – comparable data is unavailable at State and Territory level. Literacy and numeracy are generally weaker at older age groups, so Queensland's performance is likely to be on a par with the Australian experience.

Source: ABS Cat. No. 42280DO001

Compared to other Australian jurisdictions, the proportion of population in Queensland at skill level 3 or above is in line with the national average, but lags behind New South Wales, Western Australia and South Australia on most domains.



The reasons for low foundational skills levels among Queensland's working age population can be explained to some degree by:

below average outcomes from school education; and
• low and declining levels of attainment and quality of, and interest in, Certificates I and II.

#### Building foundational skills at school

Recent National Assessment Program – Literacy and Numeracy (NAPLAN) results show significant improvements in the proportion of Queensland children exceeding the National Minimum Standard. However, the achievement profile lags the national outcome, as Figure 4.15 shows for Years 7 and 9 students.







Too many students do not benefit from participation in full secondary education and of those who do participate, too many do not derive the full benefits. Unpublished Queensland Studies Authority data show that of 62,879 students who participated in upper secondary and were due to graduate from Year 12 in 2009, only 43,420 completed a Senior Statement — just under 70 per cent of the cohort.

Of those who are enrolled until the last day of Year 12, most receive a QCE, a VET qualification, an Overall Position (OP) score, a Queensland Certificate of Individual Achievement (QCIA) or some combination of these secondary certificates — see Figure 4.16. However, almost 6 per cent of Year 12 school leavers finish without an upper secondary qualification. This suggests a need to think differently about VET-in-Schools — to conceive of it as a sound vehicle which can support increased competence in literacy, numeracy and general employability.

#### Figure 4.16

# PROPORTION OF QUEENSLAND SCHOOL LEAVERS RECEIVING EACH TYPE OF UPPER SECONDARY QUALIFICATION (2010)



Note: Groups are mutually exclusive and sum to 100 per cent. However, this excludes the 19,459 students in the Year 12 cohort that are not enrolled on the last day of Year 12, do not receive a Senior Statement, and are therefore excluded from the above categories.

Source: Unpublished data, Queensland Studies Authority, 2010

#### Building foundations skills through Certificate I and II

The policy priority to improve literacy and numeracy in schools must now be accompanied by a similar focus on adult literacy and numeracy to complement recent national policy and budgetary measures.

Certificate I and II qualifications play a specific role in the Australian Qualifications Framework. Graduates from Certificate I qualifications should have the knowledge and skills for initial work, community involvement and for further learning. Graduates from Certificate II qualifications should have the knowledge and skills for work in a defined context and for further learning.

Competencies in Certificates I and II qualifications should establish a minimum baseline for secure and productive workforce participation, but literacy and numeracy levels from these qualifications are not sufficient. This is particularly important for Australia, given the increased workforce participation of older cohorts for whom foundational skills are most lacking. VET provision is an important contributor. It remains the case, too, that VET — and TAFE in particular — has a wide mission to provide education and training to a diverse group of learners. Older workers with no post-school qualifications and who need retraining are as much part of the TAFE brief as school leavers enrolled in an advanced diploma.

Given the low levels of literacy and numeracy skills in Queensland's working age population, and their lower levels among older workers in an ageing workforce, enrolments in Certificate I and II qualifications in Queensland are not growing to meet the literacy and numeracy shortfall. In fact, as Figure 4.17 shows, the number of Queenslanders enrolled in Certificate I and II qualifications fell between 2002 and 2009.



# 4.4 Equity of attainment

As discussed in Chapter 2, the uneven level of post-secondary attainment across the population can result in losses to individuals and families, to community and broader social cohesion, and to the economy. In particular, it is likely to mean that the benefits are not achieved from attaining formal, post-secondary qualifications as a primary means of mitigating or removing the long run impacts of disadvantage and social exclusion.

#### Indigenous post-secondary attainment

Post-secondary attainment begins with educational attainment within the school system. By Year 3, Indigenous children are already falling behind non-Indigenous children on basic English literacy and numeracy skills (Nereda and Wood 2009).

As Figure 4.18 below shows, the relative proportion of Indigenous Year 12 completers going on to university or higher-level VET qualifications is much lower than that of the wider population of Year 12 completers. On the whole, Indigenous Year 12 completers are almost three times more likely to be seeking work, but have not yet gained either part-time or full-time employment.



As Figure 4.19 shows, the number of VET qualifications awarded to Indigenous students in Queensland has grown since 2004 — albeit not as strongly as the overall number of VET qualifications awarded in the State. Higher education qualifications on the other hand, are static and remain at low levels.

#### Figure 4.19



QUALIFICATIONS AWARDED TO INDIGENOUS STUDENTS

Source: NCVER course completions 2002-2009

#### Inequity in post-secondary participation rates

Figure 4.20 shows Indigenous VET participation rates in Queensland. Queensland's rates for all age groups lag all other States and Territories except for Tasmania.





Source: Report on Government Services 2010

Figure 4.21

The picture of Indigenous participation in Queensland in post-secondary education is a matter of serious concern. Issues associated with trends in, and outcomes from, Indigenous post-secondary education participation, including pathways from school warrant further and more detailed analysis.

Similarly, Figure 4.21 shows VET participation rates among non-English speakers. Again, Queensland lags all other states and territories, except for the ACT.



# VET PARTICIPATION RATE FOR THOSE SPEAKING A LANGUAGE OTHER THAN ENGLISH AT HOME – 2008

Source: Report on Government Services 2010

Figure 4.23

While participation rates in both higher education and VET are declining for Queensland as a whole, the decline is steeper in regional and remote Queensland. As Figure 4.22 shows, higher education participation rates in the south-east corner are relatively stable, though there was a decline of less than one percentage point in Brisbane between 2002 and 2008. For that same period, however, the declines in regional and remote areas are more marked and the downward trend is clear.

#### Figure 4.22 HIGHER EDUCATION PARTICIPATION RATE FOR QUEENSLAND RESIDENTS BY STATISTICAL DIVISION – 2002 TO 2008



Falls in VET participation rates are not as consistently stark as they are for higher education participation. However, as Figure 4.23 indicates, the declines in Fitzroy, Mackay and Northern statistical divisions are pronounced.



These regional data highlight the importance of ensuring that education and training is relevant and accessible, closely reflecting local circumstances.

Concerns about regional access to post-secondary education were evident from consultations.

### 4.5 Industry satisfaction and skills utilisation

Industry satisfaction and skills utilisation are key measure of the outputs and outcomes of the Queensland post-secondary education and training system.

As Figure 4.24 shows, on two key measures of employer satisfaction with VET system performance, Queensland currently lags NSW and Victoria, and lags the national average. Queensland employers register lower satisfaction for:

- whether formal qualifications are providing employees with the skills required for their job; and
- employer's registered satisfaction levels with apprentices and trainees (Roberts 2010).

On one measure – satisfaction with nationally recognised training – Queensland employers record significantly higher levels of satisfaction than the national average, and much higher satisfaction levels than employers in Victoria and NSW. The reasons for this variation from the other two measures are unclear. One interpretation may be that Queensland employers have high regard for competency-based training and training packages, but are less satisfied with how they are delivered.





EMPLOYER SATISFACTION WITH ASPECTS OF THE VET SYSTEM – NATIONAL AVERAGE, NSW, VICTORIA AND QUEENSLAND – 2005, 2007 AND 2009

The relatively low levels of industry satisfaction are, in part, reflected in the low overall levels of private VET expenditure, as discussed in Chapter 6. However, these outcomes do not appear to be supported by the findings of the National Centre for Vocational Education Research (NCVER) VET Student Outcomes Survey. As Figure 4.25 shows, on a number of relevant measures — for example, post-training employment, including among those previously unemployed — Queensland's performance in slightly better than the national average.



Consultations with employers and providers revealed diverse views. Employers and providers offered compelling case studies demonstrating effective partnerships between industry and VET providers, and TAFE in particular. However, the Review was also briefed by the Chamber of Commerce and Industry Queensland on the outcomes of an employer survey. Survey data records relatively high levels of industry dissatisfaction about the employability of post-secondary education and training graduates. Similarly, a recent survey conducted by the Australian Chamber of Commerce and Industry found that skills development ranked highly as 'of concern': almost 70 per cent of small businesses expressed concern that employees did not have 'good' levels of numeracy and literacy.

Industry dissatisfaction can be explained, in part, by limited work-based education and training outside the apprenticeship system. A recent Australian study (Patrick, Peach & Pocknee 2009) highlighted the need for a collaborative, systematic approach to offering a sustainable, widely accessible work-integrated learning curriculum. Industry has long called for structured development of non-academic, or nontechnical, skills as part of learning, teaching and assessment. These skills are variously referred to as generic skills, employability skills, 'soft' skills and graduate attributes. Employability skills are now incorporated into all units of competency in national training packages. Universities are yet to adopt a systemic approach, development of such skills in curriculum is patchy, and assessment of and reporting about them is inconsistently approached.

Some industry respondents also contrasted the level of continuing industry engagement with VET in Queensland with other systems. Some Queensland providers operating in other jurisdictions also commented favourably on Queensland's management of competitive funding and AQTF compliance.

#### 4.6 Efficiency of the publicly funded VET system

Given the Review's primary focus on VET, and particularly TAFE, this section presents some contemporary measures of the efficiency of the publicly funded VET system in delivering the range of outputs and outcomes discussed above.

Two measures are formally used to compare VET performance across jurisdictions:

- government real recurrent expenditure per publicly funded annual hour delivered; and
- government real recurrent expenditure per hour of publicly funded load pass.

Data for these measures is shown in Figures 4.26 and 4.27. On these two measures, Queensland performs poorly relative to other States.



Figure 4.26

Source: NCVER 2009, PC 2010



However, these are narrow measures of efficiency. The inputs are confined to recurrent government expenditure. They may exclude some demand-based sources of funding, which is an increasing proportion of sector revenue in many states. Similarly, the outputs are one-dimensional, based primarily on annual hours delivered. This does not consider the qualifications profile under which hours are delivered, or whether these hours result in successful outcomes for students (that is, the actual completion of modules and qualifications).

The Review applied Data Envelopment Analysis (DEA), to provide a broader measure of TAFE efficiency. A detailed discussion of DEA and the results of this analysis are provided in a separate technical report.

In summary, the performance of the Queensland VET sector is much stronger when assessed against the multiple inputs and outputs used in the DEA approach. Performance is stronger regardless of whether the output focus is both teaching load and student success, or student success alone.

When both teaching load and the number of successful students are taken into account, Figure 4.28 shows that from 2004 to 2006, Queensland's relative efficiency is at the performance frontier (with a score of one). It continued to outperform the other large states, other than South Australia, in 2007 and 2008.



Source: Allen Consulting Group analysis

If the level of hours delivered is omitted and the focus is solely on student success, Queensland's performance is frontier-leading in all years from 2004 to 2008.



Figure 4.29

Source: Allen Consulting Group analysis

# Strengthening the post-secondary education and training system in Queensland – Findings and conclusions

- 12. Participation and attainment outcomes from Queensland's post-secondary education are largely static, and there are significant variations between regions and socio-economic groups. In particular, participation levels by Indigenous learners in VET are at lower than national average levels. Participation in post-secondary education in rural and regional Queensland is well below the national average.
- 13. Levels of educational participation and attainment will need to increase in Queensland; particularly among groups with low levels of participation in post-secondary education, low aspirations to participate, and insufficient literacy and numeracy skills to participate successfully. To achieve this, education and training providers will have to attract, retain and successfully graduate learners from increasingly diverse backgrounds.
- 14. Queensland's Year 12 retention rate is above the national average and higher than most other states and territories. However, it appears that many school leavers choose not to capitalise on the post-secondary pathways available to them after completing Year 12. The decline in VET enrolments is especially worrying.
- 15. Attractive labour market opportunities reduce the incentives for post-secondary participation; it would appear that to some extent, the decline in post-secondary participation follows an increase in the number of students choosing to directly enter the workforce.
- 16. A more detailed and comprehensive framework for monitoring participation and attainment across qualification levels, industries and regions is required.
- 17. Queensland has a strong apprenticeship and traineeship system that is growing again after declining during the global financial crisis. However, further reforms are required to improve the capacity, efficiency and effectiveness of the apprenticeship system, particularly in areas of skills shortages.
- 18. Growth in traineeships is also strong but is driven almost wholly by existing workers traineeships and not from those seeking to enter or re-enter the labour market. Traineeships for new workforce entrants, including school leavers, are in decline.
- 19. Many post-secondary education students in vocational and professional programs are not able to access structured work placements to develop applied skills and competencies.
- 20. Many Queenslanders lack the literacy and numeracy skills for effective workforce and social participation and are less likely to participate in further learning. Low literacy levels also contribute to high attrition rates in post-secondary education and training, limited interest in lifelong learning, and poorer prospects in future employment.
- 21. While NAPLAN results are improving in Queensland, the achievement profile lags the national outcomes for students in Years 7 and 9. This has implications for the ability of school leavers to progress and thrive in post-secondary education and training, and, potentially, in future employment.
- 22. When compared with adult literacy and numeracy skills attainment in other developed countries, Queensland's performance falls in the mid-range. The policy priority to improving literacy and numeracy in schools must now be accompanied by a similar focus on adult literacy and numeracy to complement recent national policy and budgetary measures.
- 23. Outcomes from Certificate I and II qualifications are not strong and participation in these certificates is declining. A new framework for Certificate I and II programs is required to ensure they increase literacy and numeracy and further learning skills, as well as providing occupational outcomes.

# Chapter 5

# Strengthening the post-secondary education and training system in Queensland

# 5.1 The case for post-secondary reform

To meet the challenges outlined in earlier sections of this report, Queensland will need to strengthen and improve its post-secondary education and training system, and it is in a strong position to do so. The Queensland government has varying levels of influence over the VET and higher eduction sectors. The Commonwealth is the primary funder and in the future regulator of higher education, and while the VET system is shaped very substantively by state policy decision it is subject to a patchwork of national agreements, and quality, funding and regulatory arrangements.

The Queensland government has established a sound policy framework for the postsecondary education and training system. Policy has been progressively recalibrated to match emerging demands on the system. Innovative policy and programs have matched, and often led, the national effort to craft a contemporary and responsive post-secondary education and training system. (Appendix A provides a brief summary of the policy context for post-secondary education and training in Queensland.)

Through the Queensland VET system, young people have access to a strong apprenticeship system, extensive VET-in-Schools offerings, and a broad and flexible senior secondary certificate. In addition, there are innovative statewide approaches to skills recognition and extensive and flexible options for adults.

In higher education, the Queensland State Government has played a leading role in supporting Queensland's universities under the Smart State strategy and other strategies. However, the Australian higher education system is undergoing fundamental change; the short-term focus will be on stimulating demand to take advantage of demand-based funding and uncapped places, which will be introduced from 2012 onwards.

Universities also operate in regional, national and international contexts. The growing focus on internationalisation within the university sector has a variety of implications for students, academics, and research organisation – collaboration with other universities, across national boundaries, is an increasing focus for all Australian universities. In this broader landscape, international rankings and benchmarking assume ever-greater significance and are of immense importance to Queensland's position in the global knowledge based economy.

On the whole, Queensland's public universities and TAFE institutes are diverse and well established, and there is a wide network of private post-secondary providers. However, major reforms to the Queensland TAFE system are required to fully realise its potential and more effectively its capacity.

A contemporary and clearer state government policy focus is now required to address some of the significant economic and demographic challenges facing the state which are outlined earlier in this report. They include:

- the likely decline in the underlying level of productivity growth;
- · differential rates of population growth and ageing across the state; and
- differential levels of educational attainment and workforce participation in regional and remote areas, and among disadvantaged groups.

Specifically, the government must address the following issues in post-secondary education and training in Queensland:

- low levels of literacy and numeracy, particularly among older workers where workforce participation rates have been increasing;
- declining participation rates in post-secondary education and training, including significant variations between regions and between different population cohorts in particular for Indigenous Queenslanders;
- declines in immediate post-Year 12 pathways to post-secondary education and training, particularly the apparent overall decline in VET enrolments among Year 12 completers;
- declining levels of workforce entry trainees;
- potential for unbalanced growth between higher education and VET, with university enrolments already increasing in advance of the introduction of demand-based funding;
- the need to reduce student attrition rates and improve completion rates across the post-secondary sector, and especially in VET;
- lower than national average levels of industry satisfaction with VET delivery; and
- the need for improved work-based training and professional practice, both to ensure improved levels of work readiness for graduates, and also to maintain and increase levels of post-secondary education and training in light of increasing levels of workforce participation among both young and old.

Meeting Queensland's skills and knowledge requirements will rely on agile and strategic responses from an expanding post-secondary education and training system, including actions to increase the overall level of investment from both public and private sources. The VET investment and pricing framework is discussed at length in Chapter 6.

The remainder of this chapter sets out a suite of reform options and initiatives for further consideration.

# 5.2 Improve school outcomes and post-secondary aspiration

Demand for post-secondary education and training depends on both the ability and desire amongst young Queenslanders to pursue VET and/or higher education qualifications. It is essential to recognise that aspiration, and preparedness, for post-secondary education and training must be engendered in primary and secondary schools. School improvement plans can incorporate specific objectives to build aspiration and preparedness. As recent research has shown (Longitudinal Surveys of Australian Youth, 2010):

... those who had positive attitudes to school when they were in Year 9 were more likely to continue at school to Year 12 and beyond, and those who intended to remain at school and go to further study were more likely to do so. Furthermore, students' attitudes to school were only weakly associated with their background characteristics and previous achievement, indicating that the formation and encouragement of positive attitudes to school can provide a vehicle for influencing educational intentions and subsequent participation ...

Apprenticeships offer a good illustration of this point. Apprenticeships have benefited from strong employer incentives, through both State and Commonwealth initiatives. But the growth in apprenticeship numbers is underpinned by changing social and cultural perceptions of the trades as realistic and desirable options for school leavers. This change in perception was spearheaded in part by government policy and communication strategies. In Queensland the communications included strong encouragement to commence apprenticeships prior to completing Year 12 through school-based apprenticeships.

Aspiration to participate in VET and higher education study, particularly among groups with low participation levels, will require improvement in school outcomes. Improved outcomes will, in turn, underpin learner confidence and capability during their post-secondary studies.

Queensland's universities have agreed to allocate all low socio-economic schools in specified geographic areas to each of the State's eight universities. The agreement will support long-term relationships with schools that specifically seek to build aspiration for post-secondary study among students. The agreement facilitates a strategic approach to lifting participation among low SES students by pursuing funding under the Higher Education Participation and Partnerships Program (HEPPP), based on collaboration rather than competition. It facilitates the formulation and implementation of complementary measures in schools and among post-secondary providers to raise student outcomes and aspiration.

Government leadership can do much to change community attitudes and student aspirations, particularly when the change in attitude and aspiration requires sustained, graduated social marketing. The Queensland government could consider a major campaign, in partnership with the school and post-secondary systems, designed to promote the importance and benefits of participation in post-secondary education and training.

#### 5.3 Improve retention and qualification completion rates

At present, attrition rates vary between institutions. While nationally about one in five undergraduate students do not complete their degree, some regional universities have attrition rates of greater than 25 per cent. Attrition is greatest among first year students; from a university's perspective, every first year student who does not complete an undergraduate degree means the loss of funding for the balance of that student's uncompleted study.

Figure 5.30 shows that full qualification completion rates in Queensland are very good relative to other states and territories, but nonetheless, could be as low as 25 per cent once apprenticeships and traineeships are excluded.



Retention is likely to be improved through better preparation at school for postsecondary study, and through the availability of accessible and well-supported pathways.

Attrition in higher education has occurred primarily among those who enter university directly from school, and who are therefore typically regarded as well prepared. Access to a university place, therefore, does not automatically imply success. Changed learning, teaching and assessment practices that generate student engagement are needed, as are appropriately resourced academic and other support services.

Much attention has centred on enrolments in a context of expanding student numbers but given the importance and value of full qualifications (as discussed in Chapter 2) attention needs to be given to improving student retention and full qualification completion rates — particularly in VET. Improvement in VET qualification completions would significantly contribute to achievement of the COAG and Q2 targets. Both universities and VET providers need strategies for improving retention that are aligned with the needs of their students. It is likely that appropriate responses to promoting retention and full qualification completion will have features than can be applied across both VET and higher education.

Policies to promote retention and qualification completion in Queensland are already in place. For example, under the current VET funding arrangements, there is a strong incentive for TAFE institutes to ensure that learners complete their modules; this appears to have raised full qualification completion rates in recent years (Figure 5.30). Similarly, retention and completion rates will be elements of the post-Bradley university performance-funding framework and universities are clearly focused on reducing attrition and improving learner engagement.

These measures must be sustained and completion rates monitored to ensure continued improvements in the number of people completing post-secondary qualifications, particularly school leavers and those returning to study who do not have qualifications.

## 5.4 More strongly interconnected VET and higher education sectors

The boundaries between the VET and higher education sectors are being re-shaped and are becoming more fluid. So too are the boundaries between them and the school sector. At present there is some confusion engendered by the use of the terms 'tertiary sector', 'dual sector', 'multi-sector' and 'post-secondary sector'. The confusion is understandable, induced by the need to find new words and new ways for operationalising a new concept – an interconnected post-secondary sector. It is a concept which at the onetime preserves the separate identities of VET and higher education, but also takes advantage of their common ground and common purposes to support heightened collaboration and improved individual, social, educational and economic outcomes.

Analysis undertaken for the Review reveals the importance of strengthening pathways and facilitating student movement between the VET and higher education sectors. Pathways and student movement must be understood as two-way – from VET to higher education, and from higher education to VET. As the report of the Bradley Review of Higher Education notes (Bradley et al, 2008, p180):

The panel has concluded that although distinct sectors are important, it is also vital that there should be better connections across tertiary education and training to meet economic and social needs which are dynamic and not readily defined by sectoral boundaries. Apart from some professional, associate professional and trade jobs, there is no neat relationship between the level or field of qualifications obtained by students and subsequent occupations. Most firms demand a mixture of workforce skills acquired from either or both sectors and skills acquired on the job become more important the longer someone has been in the labour force.

It is also important to note that the Bradley Review — in arguing for the concept of a broader tertiary education sector — recognises the important differences between the sectors and the need to accord equal value to each sector.

Dual sector qualifications hold much promise in extending job readiness and the ability to adapt to changing workforce demands. Such qualifications may take many forms: VET certificates and diplomas can be embedded within higher education undergraduate and postgraduate degrees; two year Associate Degrees can be offered by VET providers, with an option to complete a third year, and therefore an undergraduate degree, with a higher education providers; pathways can be offered from school sector VET qualifications, through either or both VET and higher education qualifications; higher education providers can auspice a VET provider to deliver some proportion of their undergraduate degrees.

There are many operational dimensions to strengthening pathways and facilitating student movement. They include: clear arrangements for credit transfer; articulation between qualifications; well-understood and well-validated approaches to recognition of both prior and informal learning; student support services and protocols that give students a sense of seamlessness; enrolment processes that relate well across the sectors and between institutions; marketing practices that are coherent and informative; and the establishment and maintenance of relationships between VET and higher education providers and the school sector.

The proposed merger of Central Queensland Institute of TAFE and Central Queensland University is a formal, institutional approach to strengthening pathways and facilitating student movement. This and other proposals for dual sector institutions should be supported if it can be demonstrated that they meet industry and community needs, and that they are financially viable and subject to an appropriate governance model that recognises the distinct missions of VET and higher education.

Consultations with universities and TAFE Directors suggest that other options should be considered: for example, concentrating post-secondary education provision by different institutions on shared campuses in areas of population growth (such as Logan and Springfield), and in areas of population ageing, and more effectively using high quality and accessible facilities, such as the Southbank precinct.

These arrangements may involve several institutions, the use of Crown or designated land, urban and regional planning, and transport planning. They may have spin-off benefits through commercial opportunities, such as student accommodation, retail and other services. There are opportunities to link postsecondary education campuses with major institutions (such as hospitals), to create precincts which integrate knowledge generation, knowledge sharing and work. The Queensland government should actively encourage and facilitate negotiations for shared use of campuses and precincts, specifically by more clearly specifying the role and future structures of Queensland TAFE institutes.

# 5.5 Implementing accessible and well-supported post-secondary pathways

As outlined above, improved pathways across the post-secondary education system will help to build an inter-connected post-secondary education system.

Queensland's TAFE and university sectors have developed a broad suite of pathways that deliver guaranteed credit, clearly articulated qualifications and joint qualifications. However, despite the availability of pathways, uptake is low – only a small number of TAFE students are progressing to higher-level qualifications with credit, as noted earlier in this report.

While these arrangements are best negotiated and implemented between TAFE institutes and universities, the State Government could play a role in:

- expanding provision of tertiary preparation programs;
- facilitating professional development opportunities for VET and higher education staff in developing and implementing pathways;
- developing good practice guides on developing and implementing pathways and dual-sector qualifications;
- · providing specialist expertise to help develop and implement pathways; and
- helping to ensure that Diplomas and Advanced Diplomas have clear pathways to higher education as will be required under the revised AQF.

Consideration should also be given to improving linkages between academic and non-academic support services available to TAFE and university students. A seamless service experience for pathway students assists them to relate their qualification and institutional journeys. TAFE-university partnerships in delivery of these services would promote greater understanding between the partners, and may also offer scales that improve service and reduce costs. If cost reductions are feasible, and assuming that the *Student Services and Amenities Bill 2010* passes through the Commonwealth Parliament, then universities would benefit through freeing funds to commit to other student services.

A specific policy issue for consideration is the extent to which VET qualifications should be linked to specific occupational outcomes, or whether for young people VET qualifications should be available which have a more explicit (or even primary) focus on preparation for higher-level qualifications. These programs exist in Queensland, but their relative priority is debated. Under the entitlement model proposed in Chapter 6, decisions to undertake tertiary preparation programs in VET would be learner driven, and opens the possibility for jointly funded VET and higher education programs with guaranteed entry for successful students.

# 5.6 Help Queensland's universities to capitalise on the post-Bradley environment

Queensland universities are moving into a new demand based funding environment where Commonwealth funding will be driven by both aggregate levels of student demand and demand for particular institutions and courses.

The higher education sector reforms flowing from the Commonwealth government's response to the Bradley Review of Higher Education are supported by additional budget measures and a refocusing of program spending. The post-Bradley environment has encouraged universities to review their strategic intent, to differentiate their missions, and to revise their operating assumptions.

In collaboration with Queensland's universities and VET sector, the Queensland government can play a role in maximising demand-based funding for undergraduate programs. The Queensland government should formulate strategies for higher education which help stimulate demand (particularly from groups with low participation levels), strengthen relationships with industry, increase participation in postgraduate programs, and assist universities to address changed conditions in international education.

Strategies to stimulate demand could include:

- building student and community aspiration for post-secondary qualification attainment;
- helping to develop and implement post-secondary study pathways; and
- supporting dual sector institutions and dual sector delivery models.

In addition, the Queensland Government could continue to work with the Commonwealth Government in coordinating and supporting such arrangements, and in improving retention rates in undergraduate programs.

There are a range of Commonwealth funding programs open to universities where the State can and is assisting universities to access funding. For example, the various elements of the Higher Education Participation and Partnerships Program (HEPPP), changes to regional loading funding, and access to the Education Investment Fund and the Structural Adjustment Fund are not well-integrated from a state point of view. It is important that the State Government broker a coherent, statewide approach linked to a coherent long-term view of the future shape of the post-secondary education and training system.

A neglected recommendation of the Bradley Review of Higher Education proposed:

That the Australian Government initiate a process with key stakeholders to determine the needs of outer metropolitan and regional areas for higher education and the best ways to respond to those needs.

A coherent, statewide approach can maximise allocations to universities, and positively influence outcomes for TAFE institutes and their students, through effective planning for tertiary provision. For example, in some areas such as population growth corridors, integrated bids for funds such as those available under the Education Investment Fund might be framed around shared use of proposed new physical and digital infrastructure.

In particular, there is a need for a long term integrated approach to provision of post-secondary education across the Logan, Springfield and Ipswich growth corridors. Given the level of projected population growth in these areas, it is not possible to paint a clear picture with any certainty of the shape of university campuses at Logan and Springfield, in the long term role of the Ipswich campus and the University of Queensland in relation to expanded undergraduate provision.

Adjustments to the Commonwealth Grant Scheme funding rates are expected during the next two years, along with adjustments to tagged funding for teaching and learning. The Tertiary Education Quality and Standards Authority will soon commence its work and its operating brief will become clear. The Queensland government can focus on developments in each of these areas, and be assertive in advocating for policy settings and funding arrangements that most effectively support Queensland's universities, and the higher education system more generally.

The Review acknowledges that a number of the issues outlined in this report are already being discussed by the working parties of the Higher Education Forum.

# 5.7 Strengthen work-integrated models of VET and higher education provision

Industry seeks job-ready graduates from both the VET and higher education sectors – that is, graduates with both technical and generic skills and knowledge that, in combination, prove to be assets to both firms and graduates. As discussed earlier, industry has long called for the structured development of non-academic, or non-technical skills, as part of learning, teaching and assessment in qualification delivery.

There are however, impediments to incorporating graduate attributes and their assessment in university program curricula (Barrie, Hughes and Smith, 2009). In the main, the need for integration and assessment of graduate attributes into curricula is under development in the Australian university sector. A more determined approach is necessary. The development of academic standards for academic disciplines, currently being managed by the Australian Learning and Teaching Council, will go some way to addressing this shortcoming, but is unlikely to go far enough.

Barrie, Hughes and Smith (2009) considered the impediments to incorporating graduate attributes and their assessment in university program curricula:

The graduate attributes agenda is unusual in that it traverses taken-for-granted boundaries that define our practices; for instance crossing disciplines, courses, programs, teachers, the academy and industry. It is also unusual in that it touches on the intentions and contributions of many different members of the university community; students and teachers, managers, support and liaison staff, industry affiliates and professional bodies. It is an agenda that also involves the many structures that support or enable teaching and learning; the state, university governance, schools/departments, and individual academic roles. This complexity demands a collaborative and intellectual engagement in the graduate attributes endeavour, not the least because it is, at its heart, about the quality of student learning.

Universities have long experience in linking supervised work placements to certain professional qualifications, most particularly in the fields of health, teaching and social work. Such placements have been driven by professional accreditation requirements, either for students or for academic programs. Supervised work placements are analogous to trade apprenticeships. While some universities have embedded work placements in their curricula for other professions and vocations over a long period, it is only in recent years that the practice has become more widespread. Work integrated learning, or industry based learning, schemes are now more commonly encountered.

Most VET sector qualifications are competency based, but many students do not have the opportunity to engage in structured, work-based learning or assessment in the workplace. Limited opportunities for work-based and workplace learning, teaching and assessment fuels ongoing debate about the relevance and effectiveness of some qualifications and some delivery modes.

There is therefore considerable potential for extending the number and quality of well-supervised work placements for those enrolled in both vocational and professional qualifications. Such work placements would ensure that codified skills and knowledge is complemented sooner, and with greater insight, by tacit skills and knowledge about how workplaces operate. The need for close collaboration between industry and post-secondary providers would be essential to the success, as would intergovernmental cooperation in implementing supportive models of funding and regulation.

Cadetships involving a combination of paid work and study should be formally incorporated into a wide range of undergraduate programs in Queensland universities as a means to secure greater consistency in the development of generic attributes across the sector. A cadetship scheme would help increase industry currency and relevance in postsecondary education and training, and would ensure that applied and theoretical knowledge are more effectively integrated. Negotiations could be entered into with the Commonwealth government to secure funding for employer incentives, along similar lines to apprenticeship incentives.

Across the VET and higher education sectors, both educational institutions and employers face complex processes to find, schedule and quality assure work placements for students who require work-based experience and assessment to complete qualifications. The Queensland Government could investigate and pilot, beyond apprenticeships, models for intermediary bodies to act as a 'one stop shop' for post-secondary providers and employers.

#### 5.8 Strengthening apprenticeships and refocusing traineeships

Queensland has a strong apprenticeship and traineeship system that is growing again after a brief period of decline as a result of the global financial crisis. However, further reforms will be required to improve the capacity, efficiency and effectiveness of the apprenticeship system, particularly in areas of skills shortages.

As discussed in Appendix A, the Queensland Government has undertaken reforms to the apprenticeship system in both the 2006 and 2008 Skills Plans, including a series of initiatives to lift recruitment, retention and completion rates for apprenticeships. Integrating delivery of apprenticeships and traineeships, and prevocational training, across schools, post-secondary providers and workplaces is now a feature of the Queensland training system.

More recently, the Queensland government established the Trade Training Taskforce to develop a range of actions to help combat the impact of the global financial crisis on apprentices and trainees in Queensland. These actions — particularly those aimed at maintaining commencement levels, retaining apprentices and trainees in training, and upskilling recently completed apprentices and trainees — will continue to be relevant well beyond the global financial crisis.

In light of its strong set of policies and programs in the area of apprenticeship training, the Queensland government should continue to support the apprenticeship reform initiatives of the Trade Training Taskforce, those recommendations that were agreed by the COAG Apprenticeship Reform Taskforce, and future advice from the Commonwealth Government's newly established Apprenticeships for the 21st Century expert panel. It is further recommended that the government support cooperative industry initiatives aimed at boosting apprenticeship intakes and completion rates.

However, a key area of concern for this Review is the ongoing focus and take-up of traineeships in Queensland, and across Australia. As discussed earlier, total traineeship numbers are increasing. However, this increase is almost wholly driven by growth in existing worker traineeships; traineeships for new workforce entrants, including school leavers, are in decline.

The *Investment in VET* report prepared for Skills Australia argued that the absence of an enterprise incentive funding stream was a shortcoming in national VET funding arrangements. The report argued that:

This shortcoming has fostered the development of existing worker traineeships through the use of Commonwealth employer incentive funding. Although there are examples of these traineeships working well for enterprises, they are not being used for the purpose that traineeships were intended, to create entry-level training pathways for new employees, particularly young people. Existing employees and employers enter into contracts of training which were designed to protect the interests of new, mainly young workforce entrants and to ensure that they met their obligations to their employer, whereas existing, particularly older employees, require highly flexible and targeted programs relevant to their diverse needs. There is also no requirement for the incentive to be used to purchase training or guidelines to prevent cost shifting from internal training expenditure to taxpayer funded expenditure, and employer incentives may be used to subsidise wages of existing employees rather than on the costs of training (Noonan et al 2010).

Consultations with some employer bodies indicated that this shift would be favourably received if funding was retained in the sector but used more effectively across a broader range of industries.

The growth in existing working traineeships highlights the need for the State Government to negotiate with the Commonwealth to refocus the traineeship system on its original purpose: to provide structured entry-level training for young people and new entrants to the workforce.

This would help to address the trend for young people to enter the workforce in Queensland but not participate in post-secondary education.

### 5.9 Raising foundational skill levels

Earlier it was noted that many Queenslanders lack the literacy and numeracy skills for effective workforce and social participation. In common with other states, many adults in Queensland do not have the literacy, numeracy and related skills required for many existing, new and emerging jobs, or to effectively undertake further learning. Low literacy levels also contribute to high attrition rates in post-secondary education and training and lifelong learning, and poorer prospects in future employment.

While NAPLAN results are improving, as discussed earlier, it appears that the development of foundational skills of literacy and numeracy in the Queensland school system continues to lag behind other states.

The VET system plays an important role in building foundation skills. However, recent evidence and consultations with industry and providers suggest that the outcomes from Certificates I and II are not strong and participation in these qualifications has been declining.

A new framework for Certificate I and II programs is required to ensure that these programs increase literacy and numeracy, improve further learning skills, and provide initial entry points to occupations. It is recommended that the Queensland government, in cooperation with the Commonwealth, agree to the following four measures to improve literacy and numeracy levels in the adult population.

#### 1. Develop new Foundation Vocational Programs

Stakeholders agree that a new framework for Certificate I and II qualifications is needed. The need to improve foundation level qualifications has been identified and agreed, and work is underway through the National Quality Council and the Department of Education, Employment and Workplace Relations in developing a Framework for Foundation Skills. The State Government should work with national bodies to develop, or should itself develop and accredit new Certificate I and II equivalent qualifications to:

- increase provision of and demand for foundation level consensus;
- · increase capability in literacy, numeracy and skills for further learning; and
- improve occupational outcomes.

Consideration should be given to developing a broad based qualification which has merit and standing in the community, such as the General Educational Development (GED) programs in the United States. The GED provides a high school equivalent program for students who have not achieved a high school diploma and is widely recognised and accepted across the US as an entry qualification for post-secondary education.

## 2. Funding priority learner support

A consistent theme during consultations for this Review has been concern at funding for foundation level courses, in particular:

- that the focus on higher level qualifications has led to decreased priority for Certificates I and II, leading to a decline in enrolments; and
- that funding levels do not sufficiently provide levels of support required by learners, not only to deal with literacy and numeracy requirements, but to help address learner's often complex social and emotional circumstances which can include the need for providers to work with other service delivery agencies.

The proposed investment framework (discussed in the next chapter), and the learner entitlement in particular, would support learners beginning with and transitioning to higher-level qualifications. It would also allow providers to enrol students into specific units or modules outside of their core qualification. Consideration should also be given to a higher funding rate for particular learner cohorts, for example disengaged youth.

#### 3. A greater role for adult and community education

The level of provision through the adult and community education (ACE) sector in Queensland is low relative to other states. In Victoria, some 350 ACE providers deliver community based learning programs to more than 110,000 learners, representing 8 per cent of total VET effort. In Queensland, a range of providers is involved in delivering such programs, in particular through funding for employment related programs.

In 2009, the Queensland government issued Adult community education – Toward Q2: a statement on adult community education in Queensland. However, there does not appear to be a systematic process in place which guides the cooperative or targeted implementation of the statement's objectives.

In developing literacy and numeracy skills, the ACE sector has two advantages: it is relatively low-cost, and it is very effective in engaging marginal and disengaged learners. ACE delivery outcomes can establish pathways to higher-level qualifications for hard-to-reach groups and can provide an important bridge between formal and informal learning.

The Queensland government should, therefore, provide formal recognition for adult and community education providers and ensure ACE providers can access funding to assist disengaged learners. In particular, ACE providers should have access to funding to deliver qualifications under the entitlement model proposed in Chapter 6.

The effective involvement of ACE providers will entail:

- research which builds an evidence base about the current scope of ACE in Queensland;
- research which identifies geographic areas, and specific learner groups and communities, where ACE provision could be expanded; and
- strengthening ACE providers' capacity to deliver programs in high priority areas and to high priority groups.

#### 4. Leveraging Commonwealth programs

In the 2010-11 Budget, the Commonwealth Government announced important new initiatives to improve adult literacy and numeracy, including the Foundations Skills Package worth \$119 million over four years. The Queensland Government should work with VET and ACE providers to maximise access to these new programs.

# 5.10 Regional plans for post-secondary participation and attainment and system-wide monitoring of outcomes

The Queensland government, through its Q2 targets, has committed to higher rates of participation and attainment in post-secondary education and training. These commitments are critical now and for the future. However, given the variability in post-secondary participation and attainment levels between regions and vulnerable groups, there is a need for more specific plans at the regional level.

Such planning will need to balance regional and statewide needs. One way of proceeding is to adopt an approach similar to that used for infrastructure planning through the South East Queensland Regional Plan and the South East Queensland Infrastructure Plan and Program.

The Queensland government should supplement the overarching Q2 target with specific goals and targets for post-secondary education participation and attainment in each of the non-metropolitan regions of the Department of Education and Training. Establishing regional goals and targets should occur in consultation with universities, TAFE institutes and local communities.

To achieve this, in cooperation with the Commonwealth Government, the Queensland government should develop for each non-metropolitan region a post-secondary education and training plan which encompasses:

- qualification completion rates
- transitions for secondary school students to post-secondary education;

- the potential for TAFE/university partnerships to contribute to objectives and targets;
- cooperative development of, and targeted Queensland government support for, submissions made to the Education Investment Fund, particularly through the Regional Priorities Round; and
- specific strategies for Indigenous learners and Indigenous communities.

To support more relevant regional participation and attainment targets, there is a need for integrated analysis of post-secondary participation rates, demographic trends, workforce requirements, and the responses required from both the VET and higher education sectors. A new Tertiary Education Research and Planning Unit should be established to provide integrated analysis of participation rates, demographic trends, and labour markets.

Much of this capability already exists, albeit in separate sections within the Department of Education and Training.

## Expanded role for the Queensland Skills Commission

The Queensland Skills Commission could assume responsibility for monitoring participation, attainment and outcomes from post-secondary education across AQF levels, across regions and across socio-economic groups.

In addition, the Queensland Skills Commission, in cooperation with industry and professional groups, could be charged with leading a continuing program of research into skills shortages. The policy response to skills shortages should reflect the fact skills shortages result from a range of factors, including: demand for, and supply from, post-secondary education; workforce attraction and retention; migration; wage levels; and locational issues.

With analytical support from the proposed Tertiary Education Research and Planning Unit, the Queensland Skills Commission would be well-placed to consider the range of factors leading to skills shortages. This additional evidence base would enable the Commission to develop integrated strategies that span all underlying factors that lead to skills shortages. Such strategies may include:

- increasing the domestic supply of graduates;
- better targeting of incentives to individuals and enterprises, achieved in consultation with the Commonwealth;
- working with industries and companies to improve workforce attraction and retention, and to improve skills utilisation;
- improving infrastructure and service provision in regions experiencing high workforce and population growth, and skills shortages; and
- increasing skilled migration.

# 5.11 Other actions to strengthen the post-secondary system in Queensland

#### Quality and consistency of assessment

There are continuing concerns about the quality of provision in some areas of VET The opening up of the training market under User Choice in the late 1990s led to the widespread adoption by providers of inappropriate practices (Schofield 1999), provider failure and contract cancellations. These experiences are being repeated a decade later in some jurisdictions but concern has shifted to international education provision.

In addition, compliance costs under the current AQTF regime are high. Attending to compliance requirements often detracts from core roles in delivery and assessment.

Despite various reforms in key areas of VET delivery, there remains a lack of confidence in the quality of outcomes — in particular in assessment practice, design and outcomes. Confidence in assessment standards is a bedrock condition for a trusted national VET system. Assessments of competency leads to the issuing of VET qualifications and statements of attainment. Consistent assessment of competency is the currency for mutual recognition of training outcomes between providers, and national recognition of training outcomes by providers, employers, jurisdictions, and regulated trades and professions. The assurance of assessment standards is the basis of a credible national training system. Consultation with the Training Ombudsman confirmed this concern, particularly in relation to the integration of an 'on and off the job' assessment and the sign-off of apprentices and trainees.

A different approach is required if confidence in competency-based assessment is to be lifted.

A stronger VET assessment framework offers an additional and important benefit. Post-secondary education and training pathways are critical if Queensland is to improve the rate of post-secondary participation and secure improved rates of attainment at higher AQF levels. Lifting the quality and consistency of VET assessment will strengthen pathways between VET and higher education providers by facilitating articulation agreements, and by providing a trusted foundation for credit transfer.

The National Quality Council has prepared a *Code of professional practice for validation and moderation*, which was released in 2009. The Code is complementary to the relevant requirements of the AQTF, but cannot be enforced on a systemic basis.

One option is to introduce a systemic, quality-assured approach to moderation and validation of outcomes across providers. Queensland has much to offer in this regard – it can readily point to, and call upon, the experience of the Queensland Studies Authority in moderating QCE assessment across multiple providers. New Zealand also operates an extensive moderation process, and Skills Australia has proposed a similar option.

This approach represents a significant change from the current AQTF model which relies on input standards and is process-oriented. The proposed new assessment moderation model would require national agreement. Queensland could trial an assessment moderation model with RTOs, on the basis of agreed trade-offs during the trial in terms of meeting evidence requirements for AQTF compliance.

#### Government as the exemplar

As a significant employer in the Queensland economy, through its own human resource policies and management practices, the Queensland Government plays an important role in setting the workforce development culture. The Queensland government could provide support and incentives for government employees to enrol in and complete higher-level qualifications, including postgraduate coursework and research qualifications within its existing investment in professional development.

#### Strengthening the 10 per cent Training Policy

There are stakeholder concerns regarding the application and effectiveness of the Queensland government's 10 per cent Training Policy. In particular, it is unclear whether the objective of workforce development — via more individuals engaged in structured training — is being achieved.

It is therefore recommended that the 10 per cent policy be strengthened in two ways:

- First, clarify the intent of the policy; should existing workers already undertaking structured training, or only new workers entering training, are counted towards a firm's 10 per cent target.
- Second, require that contract compliance plans include information on specific outcomes to be achieved from the application of the policy. The effect of the program and delivery against compliance plans should be independently monitored throughout the project and on project completion.

# 5.12 A revised investment framework for post-secondary education

The establishment of Skills Queensland presents a timely opportunity to develop a coherent and broad framework for public and private investment in Queensland's VET system, to complement the new Commonwealth higher education funding system.

A comprehensive revision of the post-secondary investment framework based on in depth analysis of existing funding arrangements and flows is presented in the following chapter.

Strengthening the po	st-secondary education and training system in Queensland — Recommendations
Recommendation 1	That the Queensland Government adopt the following measures to strengthen participation in the post-secondary education and training system:
	a. continue to improve school outcomes, and help to increase aspiration for post- secondary education and training among groups with low rates of participation;
	<ul> <li>develop regional plans and strategies to increase post-secondary participation and attainment in rural and regional areas;</li> </ul>
	c. facilitate and support TAFE/university partnerships;
	<ul> <li>support improved pathways between VET and higher education, coordinate networks of post-secondary institutions, and consider structural proposals (including agreement to the proposed dual sector institution in Central Queensland, subject to financial viability and an appropriate governance structure);</li> </ul>
	<ul> <li>negotiate with the Commonwealth to extend employer incentives to formal cadetships and internships in higher level VET qualifications, and in higher education (see Recommendation 7);</li> </ul>
	<ul> <li>f. provide support and incentives for government employees to enrol in and complete higher level qualifications, including postgraduate coursework and research qualifications; and</li> </ul>
	g. provide support for submissions to the Education Investment Fund (EIF), and where appropriate, consider funding for the VET component of dual sector proposals.
Recommendation 2	That the Queensland Government:
	<ul> <li>request the Queensland Skills Commission to monitor participation and attainment rates in, and outcomes from, post-secondary education, across AQF levels, across regions and across socio-economic groups; and</li> </ul>
	<ul> <li>establish a Tertiary Education Research and Planning Unit to provide integrated analysis (contextualised for the roles and purposes of the post- secondary education and training system) on participation rates, demographic trends and labour market analysis.</li> </ul>
Recommendation 3	That the Queensland government, in consultation with universities, TAFE institutes and local communities, set specific goals and targets for post-secondary education participation and attainment in each of non-metropolitan regions of the Department of Education and Training. Further, in cooperation with the Commonwealth, the Queensland government develop post-secondary education and training plans for each of these regions, encompassing:
	a. Transitions from secondary school to post-secondary education and training;
	b. TAFE/University partnerships;
	<ul> <li>Assistance to develop, and advocacy for, submissions to the Regional Priorities Round of the Education Investment Fund; and</li> </ul>
	d. Specific strategies for Indigenous learners and Indigenous communities.

Recommendation 4	That the Queensland Skills Commission, in cooperation with industry and professional bodies, leads a continuing program of research into skills shortages and the factors leading to them, and develops integrated strategies to address them. Research should analyse and seek to describe and explain the nature of skills shortages, and identify those that have critical impacts on the state. This analytical work could be undertaken by the proposed Tertiary Education Research and Planning Unit.
Recommendation 5	Government policies and funding to address skill shortages should be targeted to address the factors leading to skills shortages, which may include:
	a. Increased supply of graduates;
	<ul> <li>Better targeting of incentives to individuals and enterprises, in consultation with the Commonwealth;</li> </ul>
	<ul> <li>Working with industries and companies to improve workforce attraction and retention, and to improve skills utilisation;</li> </ul>
	<ul> <li>Improved service provision in regions experiencing workforce and population growth, and skills shortages;</li> </ul>
	e. Increased skilled migration; and
	<ul> <li>Skills required to facilitate sustainable development and the shift to a low carbon economy.</li> </ul>
Recommendation 6	That the Queensland government:
	<ul> <li>Continue to support apprenticeship reform initiatives of the Trade Training Taskforce, the COAG Apprenticeship Reform Taskforce, and future advice from the Commonwealth Government's Apprenticeships for the 21st Century expert panel;</li> </ul>
	<ul> <li>Support cooperative industry initiatives aimed at boosting apprenticeship intakes and completion rates; and</li> </ul>
	c. Negotiate with the Commonwealth to refocus the traineeship system on its original purpose of providing structured entry-level training for young people and new entrants to the workforce.
Recommendation 7	That the Queensland government consider a cooperative venture with Queensland education and training providers, industry bodies and government agencies to improve and broker partnerships between post-secondary education and training providers and workplaces through:
	<ul> <li>Increased and improved work placements for vocational and professional qualifications; and</li> </ul>
	d. Cadetships in Diploma, Advanced Diploma and undergraduate degrees (including dual sector qualifications) by extending state and Commonwealth support for apprenticeships, and expanding the role of Group Training Organisations.
Recommendation 8	That the Queensland government, in cooperation with the Commonwealth, adopts the following measures to improve literacy and numeracy levels in the adult population:
	<ul> <li>Develop and self-accredit new programs and qualifications (for example, Foundation Vocational Programs or Certificates of Applied Learning) with strong literacy and numeracy requirements and pathways to higher level qualifications;</li> </ul>
	<ul> <li>Ensure that learners with literacy and numeracy needs can access specialist support;</li> </ul>
	c. Provide formal recognition for adult and community education (ACE) providers, and target funding where ACE can assist hard-to-reach learners; and
The Allen Consulting Grou	74

	<ul> <li>Maximise access by Queensland providers to new Commonwealth adult and workplace literacy initiatives.</li> </ul>					
Recommendation 9	That the Queensland Training and Employment Recognition Council commence a pilot of independent, cross-RTO assessment moderation and validation, with outcomes to be used as primary evidence of compliance with AQTF standards for delivery and assessment and pending the outcome of this pilot that the Queensland Government pursue a national agreement on a revised assessment and quality assurance model to provide for validation and moderation by external bodies.					
Recommendation 10	That the 10 per cent policy be strengthened to:					
	<ul> <li>clarify whether existing workers already undertaking structured training, or only new workers entering training, are counted towards a firm's 10 percent target;</li> </ul>					
	<ul> <li>require that contract compliance plans include information on specific outcomes to be achieved from the application of the policy, and for the program to be independently monitored throughout the project and on project completion.</li> </ul>					

# Chapter 6

# The post-secondary investment and funding framework

This section of the Report looks at:

- overall levels of investment in post-secondary education in Queensland;
- the pattern of investment across the sectors and from different revenue sources; and
- effectiveness of the current investment framework.

Recommendations are made for a more effective investment framework, particularly for VET where the Queensland government has direct responsibility.

### 6.1 Total Investment in post-secondary education and training

The most recently available figures for total recorded investment in Queensland's post-secondary education and training system show:

- \$2.9 billion invested in higher education, as at 2007; and
- \$1.1 billion invested in VET, as at 2009.

However, these figures exclude private investment in private higher education and VET providers.

Figure 6.1 shows funding for both VET and higher education is increasing. However, higher education funding has increased at a faster rate, and from a much higher base.



## 6.2 Trends and outlook for higher education funding

Figure 6.2 depicts sources of revenue for higher education. It shows that the primary drivers of funding increases from 2002 to 2007 were student fees and charges, and Commonwealth government expenditure. This reflects the fact that the Commonwealth is the dominant funder of higher education following the transfer of state funding responsibility for universities to the Commonwealth in 1973. State government funding accounts for a small proportion of higher education provider revenue, and is mainly allocated for specific research and innovation projects. However the Queensland Government has played a more active role in higher education funding than other states with its contribution increasing in recent years.







The Review of Australian Higher Education (*Bradley Review*, December 2008) found that levels of higher education funding, and the funding framework, were inadequate to meet Australia's future needs. The Commonwealth responded to the Bradley Review's recommendations in its 2009 Budget through a package of policy and funding initiatives entitled *Transforming Australia's Higher Education System*.

The package allocated \$5.4 billion for higher education and research over four years, with a promise to provide additional funding over the next 10 years. Of the total, \$1.5 billion was specifically allocated for teaching and learning.

While a number of the Bradley Review recommendations were not accepted or deferred, on balance the Government largely accepted the findings and proposed reforms to higher education funding. In particular, the key long-term funding decisions comprise the introduction of a student demand-based funding model, a more realistic indexation formula, and a substantial move towards meeting the full costs of research. These decisions will be built into the funding base and will help prevent further deterioration in the level of funding per student.

However, the level of higher education funding available beyond the current forward estimates is not clear.

The full benefits of the new arrangements will not be available until 2012. It is expected that 2011 will be a challenging year for universities, which must position and transition themselves to take best advantage of the new system. They must also adjust to any decline in international student demand, which represents a significant revenue stream for some institutions. Consultations with Queensland's vice-chancellors indicate that universities' enrolments have grown strongly in 2009 and 2010 (including over-enrolments in some institutions) to build up their student base in preparation for the new funding environment.

Table 6.2 reports modelling completed in 2010 by the Group of Eight (Go8), based on best estimates of long run demographic trends. The modelling suggests that at current rates of tertiary participation, the growth in enrolments nationally will be significant.

Qualification level	Projected growth			
Qualification level	2020	2030		
Undergraduate degrees	67,000	155,000		
Postgraduate coursework	31,000	53,000		
Postgraduate research	9,000	15,000		
Source: Go8, 2010				

#### Table 6.2 PROJECTED ENROLMENT GROWTH — CONSERVATIVE SCENARIO

The Go8 concludes that this level of growth could be met if the Commonwealth's current forward estimates were extended to 2030.

However, the Go8 forecasts much higher enrolment requirements (see Table 6.3) if the scope of tertiary education is taken to include Diplomas and Advanced Diplomas, international students in Australia for more than ten months, and applying a range of scenarios for increased participation in higher education across undergraduate and postgraduate study.

	Projected growth to 2030			
Qualification level	Low-side projection	High-side projection		
Diplomas and Advanced Diplomas	40,000	164,000		
Bachelor	203,000	296,000		
Postgraduate	82,000	356,000		

#### Table 6.3

# PROJECTED ENROLMENT GROWTH — GROWTH SCENARIOS

The Report also highlights the fact that high levels of population growth in Queensland, particularly among youth cohorts, will impact more significantly in Queensland than in other states. As Queensland also has lower higher education participation and attainment levels, the additional resourcing requirements for higher education in Queensland are likely to be higher than elsewhere in Australia.

This more robust view of the potential for increased enrolments against an uncertain future financial base is shared by other higher education analysts and commentators (*The Australian*, October 23, 2010).

## 6.3 The VET funding framework in Queensland

As outlined above VET funding is Queensland is a shared responsibility of the Commonwealth and the States through two agreements: the National Agreement for Skills and Workforce Development (\$253.1 million); and the National Partnership Agreement on Productivity Places Program (\$115.9 million in 2010). Under these agreements, Commonwealth funding flows to Queensland, and together with funding appropriated through the State Budget (\$736 million), is allocated by the Department.

These arrangements secure the involvement of the State Government in the national VET system. They give effect to COAG decisions on skills and productivity, and apply nationally agreed standards for provider registration, competency standards and qualifications. It is important to note that all Commonwealth funding for delivery of nationally recognised VET programs now flows through these agreements. This mechanism reverses an trend which emerged under the former Coalition government whereby the Commonwealth directly purchased training through skills vouchers, and which was the mechanism used in the first year of the Productivity Places Program.

The various sources of VET funding in Queensland are discussed below.

### State sources of funding

#### VET Revenue General (VRG) payments to TAFE institutes

Funding is allocated through funding agreements with TAFE Institutes to purchase training in agreed areas. In 2010-11, this amounted to \$321 million across the 13 TAFE Queensland institutes.

Funding is allocated on a weighted cost per student contact hour. The weighting reflects: the relative cost of delivery for metropolitan, regional and remote institutes; the type of course by industry training group; and whether or not the student completes the module or course. Table 6.4 provides examples. VRG funding does not take into account the characteristics of enrolled students.

Specific targets are set within each TAFE institute agreement, in particular through funding caps. In the past, caps have been applied to low priority areas. It is understood that this approach is now being relaxed.

#### Table 6.4

#### SAMPLE MODULES AND VRG PRICES PAID

Module	Area	ITG price category	Price	Hours	Student outcome	VRG price paid
Child care module	Regional	А	\$11.38	24	Completed	\$273
Child care module	Metro	А	\$9.98	48	DNC	\$192
Child care module	Metro	А	\$9.98	48	Completed	\$479
General education module	Metro	С	\$13.77	80	Completed	\$1,102
General education module	Remote	С	\$33.05	80	DNC	\$1,058
Offsite construction module	Metro	D	\$17.19	28	Completed	\$481

Source: DET and Allen Consulting Group analysis

# User Choice

User Choice in Queensland applies to funding for apprentices and trainees. It is allocated on a competitive basis to eligible providers, based on the provider nominated in the training agreement between the employer and the apprentice/trainee.

The formula for User Choice pricing is complex. In addition to the course type and AQF level, the formula also takes into account: the average class size (according to industry training group); point of delivery (metropolitan, regional or remote); hours of curriculum; module outcome; and, importantly, the government's priority category. The pricing approach to funding priorities is illustrated in Table 6.6.

Table 6.5 provides examples to illustrate how User Choice prices paid vary between different courses, provider location, government funding priorities and student characteristics.

#### Table 6.5

# SAMPLE USER CHOICE COURSES AND PRICES PAID

		Funding priority		Student characteristic	
Qualification Name	Area	Priority level	Subsidy	Priority Population Groups & SATs	All Others Students
Certificate III in Home and Community Care Traineeship CHC30308	SEQ	1	100%	\$3,400	\$3,400
Certificate III in Community Services Work Traineeship CHC30108	SEQ	2	75%	\$2,900	\$2,175
Certificate III in Concreting Traineeship CPC30308	SEQ	2	75%	\$7,800	\$5,850
Certificate III in Carpentry Apprenticeship CPC30208	SEQ	1	100%	\$11,100	\$11,100
Certificate III in Carpentry Apprenticeship CPC30208	Country	1	115%	\$12,765	\$12,765
Certificate III in Carpentry Apprenticeship CPC30208	Remote	1	175%	\$19,425	\$19,425
Table 6.6 USER CHOICE FUNDING PRIORITIES

User Choice pricing levels reflect assessed priorities in the following categories:

- *Priority One* (100 per cent subsidised) those qualifications which lead to occupations identified as critical priorities as identified in the Queensland Skill Shortage List.
- Priority Two (75 per cent subsidised) those qualifications which lead to occupations not on the Queensland Skill Shortage List but are identified as high priorities which demonstrate a high level of occupational linkage with skills development, and are required to meet legislative requirements related to skills.
- Priority Three (50 per cent subsidised) those qualifications which lead to
  occupations not on the Queensland Skill Shortage List but are identified as medium
  priorities which demonstrate a lower level of occupational linkage, and are not
  required to meet legislative requirements related to skills.
- Priority Four (25 per cent subsidised) those qualifications which lead to non-entry level occupations and provide a key workforce development opportunity for existing workers and industry. These qualifications will be funded under User Choice arrangements as a component of the Productivity Places Program, a joint Commonwealth and Queensland government initiative.
- Unfunded those which lead to occupations not on the Queensland Skill Shortage List and which are not a funding priority. This includes those qualifications which are not entry level qualifications identified by industry.

Source: User Choice Policy 2011-2015

#### Funding to support employment programs

In 2010-11, \$30.425 million was provided by the Department of Education and Training to the Department of Employment, Economic Development and Innovation to provide training for persons engaged in employment programs provided by the Queensland government. These programs are designed to assist unemployed people and represent a continuing and close relationship between these programs and VET programs which developed when they were in the same department.

#### Commonwealth sources of funding

#### Existing Worker Traineeship Funding

Most traineeships for existing workers do not attract User Choice funding for training delivery from Department of Education and Training, but Commonwealth employer incentives of a minimum of \$1,250 are available for existing worker trainees. It is common for employers and RTOs to enter into agreements to use these incentives to pay for some or all of the costs of training delivery. Based on an average incentive payment of \$4,000, up to \$150 million could be available for VET delivery through this source, depending on how employers use Commonwealth incentives.

#### **VET FEE-HELP**

RTOs are also able to access VET FEE-HELP: a program administered by the Commonwealth through which students in full fee VET programs have the meet the upfront costs of their study met by the Commonwealth, with repayments made on an income contingent basis through the taxation system. Fifteen Queensland RTOs are currently registered for VET FEE-HELP, including the two statutory institutes.

Data on revenue flows to Queensland RTOs from VET FEE-HELP is unavailable. However, the 2010-11 Commonwealth Budget makes provision of \$205 million nationally for VET FEE-HELP, rising to \$310 million in 2013-14. On a proportional basis, Queensland providers should currently earn around \$40 million through VET FEE-HELP, rising to \$60 million in 2013-2014, although fewer TAFE institutes are registered for VET FEE-HELP in Queensland than Victoria. The Commonwealth has extended VET FEE-HELP to cover publicly subsidised VET Diplomas and Advanced Diplomas in Victoria, as part of that state's skills reforms. The offer to extend access to VET FEE-Help has been made to other jurisdictions, but to date has not been accepted.

#### Private sources of funding

#### International student fees

Australian Education International data indicates there were 31,219 full fee paying international VET students in Queensland in 2009, although this figure is expected to decline in 2010. Some VET Providers are also active on the English Language Intensive Courses for Overseas Students (ELICOS) market. Assuming fee of between \$10,000 and \$15,000 per year, VET revenue from international students in 2009 can be estimated at between \$300-\$400 million. However, this revenue stream may have declined by up to 30 per cent in 2010.

#### Private domestic expenditure on VET

Although data on private investment in VET is unavailable, several studies suggest that expenditure by industry and individuals may equal or exceed public expenditure.

Much of this expenditure will not be on accredited training, and it would include expenditure by firms and individuals on various forms of workforce and personal development.

#### 6.4 VET and higher education funding

Figure 6.3 shows the composition of investment between VET and higher education. Total investment in higher education has increased more rapidly than for VET, in particular through increased contributions from both domestic and international students. This is significant given the much higher overall level of funding for higher education (Figure 6.1).

This trend is likely to continue and even accelerate following the introduction of demand-based higher education funding and the additional funding for higher education flowing from the Commonwealth's response to the Bradley Report.



Figure 6.3

As well as differences in funding levels there are also significant and growing differences in funding policies between VET and higher education in Queensland:

- There are major differences and anomalies in fee charging practices and access to FEE-HELP. Universities cannot charge domestic students full fees for undergraduate programs, and students in subsidised courses can access HECS-HELP. However, TAFE institutes can charge full fees for students in areas of public funding, but HECS-HELP is unavailable for students in publicly funded programs.
- VET funding is increasingly contestable. Universities can operate or establish RTOs and access VET funding from the state, but TAFE institutes and private providers cannot access Commonwealth higher education funding, and can only offer higher education courses on a full-fee basis, despite the recommendations of the Bradley Committee that the tertiary education entitlement should be extended to students in TAFE and private higher education institutions.
- Higher education funding will be largely driven by student demand. VET funding in Queensland has been highly regulated on both volume and price.

These growing differences create anomalies and distortions. If left unchecked, they may distort the pattern of provision and enrolments between the sectors, with an inevitable drift to the higher education sector regardless of labour market need.

#### 6.5 Trends and outlook in public VET funding

VET expenditure is largely financed through public sources of revenue. As Figure 6.4 shows, VET revenue is increasing in nominal terms. However, the increase is driven largely by Queensland government expenditure. Revenues from all other sources were virtually unchanged between 2004 and 2008 (noting that some Commonwealth expenditure may be captured within the fee-for-service category).



Figure 6.4 VET OPERATING REVENUES BY CATEGORY – 2004-2009

Queensland government expenditure on VET is low, relative to other states and territories. Figure 6.5 shows that Queensland government expenditure per capita (for persons aged 15-64) is the lowest in Australia over time, with South Australia's expenditure falling to a similar per capita level in 2008.



GOVERNMENT REAL RECURRENT EXPENDITURE PER PERSON AGED 15-64, BY STATE AND TERRITORY – 2004-2008 (IN 2008 DOLLARS)



In a project for Skills Australia, undertaken by Peter Noonan Consulting, the Australian Council of Educational Research (ACER) and the Centre for Economics of Education and Training (CEET) at Monash Universities, the researchers argued that across VET revenue sources nationally:

...the funding outlook for VET appears to be, at best, static in real terms and, quite possibly, will see actual falls in revenue, particularly from government sources. As a consequence, growth in enrolments could only be achieved through further declines in funding per annual hour and enrolments, in addition to the significant declines which have been achieved in recent years.

This assessment is now even more sobering as the Commonwealth funded Productivity Places Program is due to cease in 2013, resulting in a reduction of \$115.9 million in VET funding for Queensland.

#### Levels of competitive public funding in VET

As outlined above there are substantial differences in Queensland between VET and higher education in terms of the levels of funding available on a competitive basis. Higher education funding will become fully demand driven from 2011. At present, only students enrolling in providers currently accessing public funding will be able to access subsidised places.

Figure 6.6 shows that since 2004, compared to most other jurisdictions, Queensland has allocated a larger proportion of public VET expenditure via competitive mechanisms, such as User Choice and competitive tendering. This proportion has declined since 2004, particularly compared to Victoria. That difference is set to grow significantly as all Victorian VET funding becomes fully contestable from 2011.







Although the proportion of funding allocated through competitive mechanisms in Queensland has declined relative to Victoria since 2004, private RTOs in Queensland are winning a greater share of the State's contestable funding, as is outlined in Figure 6.7.



#### Figure 6.7 PROPORTION OF GOVERNMENT RECURRENT FUNDING PAID TO NON-TAFE PROVIDERS FOR VET DELIVERY (2008) AND REAL CHANGE FROM 2007 TO 2008



This trend is demonstrated by internal DET analysis which examines enrolments in institutions other than TAFE from all funding sources for Queensland. The share of enrolments to non-TAFE institutes has been increasing at the expense of TAFE enrolments. The analysis shows that the market share of non-TAFE institutions is higher in Queensland than the national average.

A key issue for the future is the extent to which VET funding should become increasingly or fully contestable. If more funding becomes contestable, under what model should that occur, and how is the role of TAFE Queensland as the public VET provider to be addressed?

#### 6.6 The VET funding framework – issues for consideration

A focal point for this Review is the extent to which the current VET funding framework is appropriate for securing the twin goals outlined in the earlier sections of this report: boosting Queensland's workforce participation rate and productivity growth.

In the course of consultations, stakeholders identified several major issues regarding the current VET funding framework:

- There was strong concern from most stakeholders about the level of public funding from both levels of government and greater concern at the funding outlook for VET, particularly in terms of skills shortages, population growth and demand based funding in higher education.
- A number of stakeholders argued that there was insufficient funding support for delivery of VET programs in regional areas, and that where programs were funded, providers frequently offered cheap and inappropriate delivery options which compromised quality.

- TAFE institutes were highly critical of approaches to setting and enforcing funding priorities through both caps on, and differential prices paid for, different qualifications. They argued that caps, in some instances, had reduced their capacity to meet delivery targets, and did not recognise local and regional needs. They argued that employers, particularly small and medium-sized businesses, resisted paying the differential where government funding was less than the cost of delivery in areas of low priority. This was particularly so where employers could access programs in the same area from other providers, or through other funding sources such as the Productivity Places Program.
- Some institutes argued they had been required to reduce enrolments in Certificate I and II programs, which were most appropriate for learners with low skills seeking to reengage in learning or to re-enter the labour market. One university also expressed concern about the funding priority for TAFE courses preparing students for higher education studies, although department officers indicated that this was a decision for individual institutes.
- The Australian Council for Private Education and Training (ACPET) was critical of the differential pricing policy and the level of funding available to deliver courses in low priority areas. ACPET argued for opening up the training market to areas other than User Choice, and advocated VET funding reforms like those introduced in Victoria and under consideration in South Australia. TAFE institutes were not necessarily opposed to greater contestability, but argued that current governance and business models, and cost structures, reduced their capacity to compete. They also argued for more explicit recognition of TAFE's implicit community service obligations.
- A number of stakeholders identified inconsistencies in funding arrangements between the VET and higher education sectors as an impediment to both developing and implementing pathways between the sectors. They identified anomalies in fee charging policies between the sectors such that TAFE students may have to pay full fees (with or without VET FEE-HELP) whereas universities cannot charge full fees in fields such as nursing.
- Compliance and administrative requirements for VET FEE-HELP were seen by both TAFE Institutes and private providers as complex, costly and not reflective of the requirements of nationally recognised VET sector programs. The Allen Consulting Group has found similar concerns in relation to VET FEE-HELP from consultations with TAFE institutes for a project in another jurisdiction.
- Some peak industry bodies expressed concern at potential for the Review to recommend an extension of the State Government's 10 per cent training policy which currently applies to major construction projects to other purchasing policies, or the extension of the Building Industry Training Levy to other sectors. They argued that investment in training was a business decision appropriate to the needs of individual firms. They indicated that firms would invest where training was of high quality and would result in a pay-off for the firm. On the other hand, union representatives argued that employers generally had obligations to make greater investments in training, were critical of compliance monitoring of the 10 per cent training policy, and were critical of firms not committed to training which 'poached' final year apprentices and tradespeople from firms engaging their people in training.

There is a need for more coherent investment framework across the VET sector to address the needs of different learner groups and industry and to create a more effective interface with higher education.

#### 6.7 The case for a student entitlement

There is increasing interest in the extension to VET of the concept of a student entitlement, as proposed in the Bradley Report. The student entitlement model was central to the Bradley Review recommendations aiming to increase participation and attainment in higher education.

The OECD, in its *Thematic Review of VET in Australia*, proposed an entitlement model while that option was concurrently under consideration and subsequently adopted in Victoria (provided a learner enrolled in a qualification at a level above the highest qualification already held). South Australia is also considering an entitlement model. Skills Australia has included an entitlement model is its VET Roadmap. In effect, under User Choice in Queensland, a funding entitlement already exists for apprentices and trainees.

COAG has also agreed to a partial entitlement through its agreement to a Youth Compact based on three principles:

1. Anyone under the age of 17 must be earning or learning, you must be in full time school, training or work.

2. If you are under the age of 20 and are not working, you will be provided with a training place with the first priority – a year 12 or equivalent VET qualification.

3. If you are under the age of 25 and you are not working you are guaranteed a training place to ensure you have the skills needed to be part of the recovery.

The Compact has largely been implemented within the current envelope of VET resources. The Commonwealth, in its 2010-11 Budget, foreshadowed the potential incorporation of Productivity Places Program funding within an overall allocation to the state if the state committed to an entitlement and other VET reforms. However, cessation of the PPP program in 2013-14 does not make that offer a viable option as the states would be left with the ongoing costs of meeting the entitlement commitment.

Nonetheless, there is a strong case to pursue with the Commonwealth an entitlement option where the state would fund an entitlement for individuals to acquire qualifications up to VET Advanced Diploma level, and the Commonwealth funds an entitlement to higher education undergraduate programs:

- It would create a consistent framework for funding post-secondary education and remove many of the anomalies and distortions between the sectors and within VET which are evident in the current framework.
- It would provide a transparent basis for access to public VET funding where some individuals may receive considerable subsidies for multiple qualifications while others may receive only partial subsidies for low-level qualifications.
- It is consistent with government objectives to raise levels of participation and attainment. As the Queensland population increases, and if VET demand does grow, many individuals may not find a place, or at least a place in the qualification of their choice.

However, an entitlement option is only feasible by agreement between the Commonwealth and the State to provide the level of resources required to move towards consistent eligibility criteria across the post-secondary sector.

The current funding constraints facing both the Queensland and Commonwealth governments are recognised. The introduction of any entitlement may need to be phased in over a period of time, as resources allow. However, in the medium and long terms, governments in Australia will nonetheless need to face the resourcing implications of their major commitments to raise levels of educational attainment, particularly in the context of projected population increases over the next few decades.

An entitlement option also raises the question of access by individuals who have already acquired an initial qualification, as it is not feasible to create a universal and ongoing entitlement regardless of levels of previous attainment. Victoria has addressed this issue by limiting its Training Guarantee to qualifications at a higher level than those already acquired, with students enrolling in qualifications at or below the level they already hold required to pay full fees (subject to a range of exemptions). As the Training Guarantee is yet to be fully implemented, the impact of this approach is unclear. Concerns have been expressed about the impact on individuals wishing to change careers, particularly if their initial qualification was acquired some time ago. Individuals already holding degrees and postgraduate qualifications can access subsidised higher education courses, but not subsidised VET programs, again highlighting the importance of establishing consistent eligibility criteria across the post-secondary sector.

An alternative approach would be to retain a pool of funding to support individuals seeking to undertake programs at or below the level of their current qualification, but with higher fees applying. This approach explicitly recognises the level of public investment already accessed by the individual, and the personal returns from that investment.

#### 6.8 Reforming pricing and priority setting

As outlined above, Queensland currently operates a complex process of differential pricing for similar qualifications across industry sectors. It has operated a detailed planning process, involving targets and caps, for distributing VRG funding to TAFE institutes.

This model was adopted to ensure that limited public funding was allocated to areas of greatest identified need, in particular area of skills shortage. However, this model, and differential pricing in particular, has major shortcomings:

- It is not clear that reducing or increasing prices paid to RTOs influences learner choice. It may influence decisions by RTOs to increase provision in priority areas. But unless provision is matched by student demand, the result may be that many students enrol in under-funded courses, or have to pay higher fees, including for initial qualifications.
- Many people work in areas unrelated to their initial qualification. Evidence suggests it is essential that they gain technical skills *and* broader capabilities, both of which are critical for the workforce and for further learning. The objective of securing broader capabilities would be compromised if qualifications were only partly funded.

The current approach, particularly differential pricing, creates complexity in purchasing and accountability arrangements.

Discussions with the Department, and with some industry bodies, highlighted concerns about the potential for public funding to increase in low priority areas and for skills shortages to be exacerbated. This is a legitimate concern. However, the State Government can influence outcomes in other ways: for example, working with industry to encourage students into areas of skills shortages, and if required, intervening in the market to cap levels of provision, or not fund courses with poor labour market and learning outcomes.

The Queensland Government could also provide specific loadings or performance payments to support specific policy objectives, as recommended in the Bradley Review and accepted by the Commonwealth in relation to improved equity in higher education — which already happens to a degree under User Choice. The Commonwealth also provides additional incentives for employers of apprentices in skills shortages areas.

If an entitlement model is pursued it is important that funding be allocated on a consistent basis in terms of the relative cost of provision, and there must be consistent approaches to fees and charges for individuals covered by the entitlement.

#### 6.9 Increasing Private investment

As Figure 6.8 shows, Queensland's private investment in VET (as measured by feefor-service income, student fees, and other sources) is low in comparison to Victoria and NSW. Both Victoria and NSW have recorded substantial increases in private investment in VET since 2004, while other States and Territories have recorded little or no growth over that period. It is likely that there will be some decline in private investment in VET in 2009 data, and further falls in 2010, as a consequence of declines in the international student market.









If the Victorian VET system is used as a benchmark, fee-for-service revenue to the Queensland TAFE system could rise by almost 17 percentage points, and ancillary trading revenue could rise by 6 percentage points. If Queensland's proportion of fee-for-service revenue matched that of Victoria, there would be additional revenue of \$247 million per year, although it is recognised that this benchmark would be difficult to achieve with the composition of the Queensland economy and size of firms. Similarly, increasing the proportion of ancillary trading and other sources to equal the proportion in Victoria would raise \$47 million.

In the long term, the provision of high quality training services to enterprises is far more likely to secure increased industry revenue in VET than seeking to leverage employer contributions on publicly funded training for recognised qualifications for individuals.

#### Supporting the Strategic Investment Fund for workforce development

Chapter 2 of this report outlined the important, if complex, link between the acquisition of skills and qualifications and productivity gains. This dynamic relationship involves the application of skills in workplaces, in particular where skills utilisation is integral to broader enterprise workforce development strategies.

The entitlement model outlined above is arguably more appropriate for individual learners, although existing employees in enterprises would be eligible to the entitlement up to Advanced Diploma level. However, a specific program aimed at boosting productivity in industry, as well as improving workforce skill levels, could complement the entitlement model.

The current Productivity Places Program has a specific component where access to PPP funding for nationally recognised training is driven by enterprise needs. A contribution was required from enterprises, although consultations suggest that the ways in which this was met has been highly variable and that places funded under the PPP were not necessarily in areas of industry need or priority.

In addition, as outlined above, many enterprises also access Commonwealth employer incentives for existing worker traineeships for enterprise-based training.

The *Investment in VET* report prepared for Skills Australia argued for incentives currently associated with existing worker traineeships be redirected into the enterprise-based PPP. Skills Australia, in its discussion paper on *The future of VET*, raises this option for consideration in improving workplace learning, and as a means of securing co-financing from employers.

With the pending cessation of PPP funding, the proposed state-based Strategic Investment Fund for workforce development will be important to help drive productivity improvements, to address immediate skill shortages, and to raise workforce skill levels. The Review supports the work in DET that is already underway to establish such a fund, including the emphasis on matched funding from industry. The Strategic Investment Fund should also be developed in cooperation with the Commonwealth, and should draw on redirected funding from existing worker traineeships, supplemented by state-sourced funding.

#### Encouraging higher levels of fee-for-service activity

The significant point about Victoria's higher levels of fee-for-service income is that these are achieved mainly through commercial contractual arrangements with industry and through provision of fee-for-service training for individuals. Victoria's success in fee-for-service programs stems from a major development strategy implemented across institutes, and from the capacity of its institutes to operate in a commercial manner (including retaining earnings for reinvestment).

Queensland TAFE institutes operate in similar markets. For example, Sunshine Coast Institute of TAFE operates the engineering and construction school of the Australia Pacific Technical College, and SkillsTech Australia recently won a major contract associated with the LNG project in Papua New Guinea. However, a more explicit business focus is required across Queensland's TAFE institutes.

In the long term, the provision of high quality training services to enterprises is far more likely to secure increased industry revenue in VET than seeking to leverage employer contributions on publicly funded training for recognised qualifications for individuals. It is a reality that holding a recognised qualification increases workforce mobility for individuals, meaning that individual employers do not necessarily capture the benefit of their investment. However, co-financing of programs through the Strategic Investment Fund for Workforce Development, as proposed in the previous section, is directed at existing workers in specific areas of enterprise need. This should increase industry contributions and help expand training provision.

The other major area where Queensland must strengthen its position in fee-forservice markets is by increasing the number of TAFE institutes eligible as FEE-HELP providers, given the projected increase in Commonwealth provision for FEE-HELP.

More generally the Queensland government can assist both VET and higher education providers to rebuild international education markets weakened by adverse events over the past two years.

#### 6.10 VET-in-Schools

The low level of public expenditure on VET is exacerbated by the large proportion of VET funding that is spent on the delivery of VET-in-Schools. On average, approximately 12 per cent of VET General Revenue — approximately \$37.5 million — goes towards VET-in-Schools. This is about double the proportion allocated in 2005-06. Some institutes allocate over 19 per cent of VRG fund to VET-in-Schools. This is in addition to the \$4 million that has been provided from VET revenue since 1997 to support VET in schools as part of a national initiative.

This situation appears to have evolved over time for several reasons:

- institutes have sought to build linkages with schools;
- schools have argued that they cannot afford to provide VET-in-Schools from within school resources; and
- possibly as a means by which institutes could meet delivery targets.

Whatever the reason, this situation is unsustainable when government's fundamental objective is to grow participation and attainment levels overall. If VET funds are used to support students already participating in school, overall participation and attainment levels will be reduced — even accepting that some students undertaking VET-in-School may drop out if they cannot access their preferred study area. This has particularly important implications for the retraining of the existing workforce, and for assisting the entry or re-entry to the workforce of those not in the labour market.

The initial decision to support development of VET-in-Schools was taken to help stimulate growth and support product and curriculum development. It was not intended as a general subsidy, or as substitution for funding from the schools sector.

Of particular concern is that despite this growing level of funding fewer QCE students are studying VET after leaving school (apart from apprenticeships) although some students may leave school to undertake full time VET pathways. This situation however needs to be analysed in more detail in terms of the destinations and experiences of students undertaking VET in schools.

A transparent framework for funding VET-in-Schools is required, based on the principle that schools should meet the average senior secondary enrolment cost for all QCE subjects. Under such an arrangement, VET funding would only be drawn upon to meet the additional costs of VET modules beyond the resources already allocated to schools for delivering the average senior secondary teaching load. A fixed amount of VET funding per enrolment could also be used to cover the costs of VET compliance and administration.

#### 6.11 Information for users

There has been an increasing focus on importance of information on provider performance in national VET policy in recent years. However, the focus of that information has tended to relate to learner outcomes, student and employer satisfaction levels, AQTF audit outcomes, and other performance related issues.

Learners and employers engaged in publicly funded training typically receive little information about the levels of funding paid by the state on their behalf as the 'proxy purchaser'. In turn, the state has little direct information about the extent to which learners receive education and training commensurate with contractual agreements with the state, although this situation will improve with the full implementation of learner engagement surveys under the AQTF. Student satisfaction levels are not necessarily a good indicator of whether services provided by the RTO are at a level consistent with the funding they have received; students are generally unaware of either specific AQTF requirements, or funding agreements and contracts.

Accurate information about learning options and pathways is also important if an eligibility-based learning entitlement is adopted: learners making poor choices are likely to find that they cannot access subsidised training at a level equivalent to that which they have previously completed. This can be a particular issue where students undertake training as part of an enterprise-wide approach to skills upgrading or induction training.

Drawing on the recommendations of the Review into International Students (Baird 2010), this weakness could be addressed by independently providing all learners and employers with:

- specific information about funding levels received by the RTO for the course in which they have enrolled;
- a precise summary of AQTF and contractual requirements;
- a statement of the level of provision they are entitled to expect;
- fees and charges requirements;
- · learner and employer obligations necessary to successfully complete; and
- contact information for the Training Ombudsman and registration and accreditation bodies, where complaints are not addressed by the RTO.

This final action should be supported with the possible extension of the Training Ombudsman's role to cover major student complaints related to this information.

A comprehensive and ongoing information campaign will also be required to ensure that potential students and employers are aware of the eligibility requirements of entitlement, if that option is adopted. To this end, the approach to information provision to students and employers under User Choice in Queensland may be extended across the broader VET sector.

#### 6.12 Quality Assurance

Another important consideration is the quality assurance regime that should apply to RTOs in which learners can use their entitlement to access funding for the Strategic Investment Fund for Workforce Development. As outlined in other sections of this report, there are continuing concerns about the quality of provision in some areas of VET.

The publicly funded provider market in Queensland has stabilised and is more mature, with many providers having successfully delivered under government contracts for many years. However, experience suggests some providers will react quickly and inappropriately to the availability of government subsidies, particularly in new and poorly informed markets.

A further consideration is one of market design. For example, it is difficult and complex to monitor contracts with large numbers of small providers. Providers not achieving a critical mass of delivery are highly likely to fail, exposing both students and the state to significant risk. In these circumstances, it would be prudent to ensure that all providers engaged in the publicly funded market are fully quality assured, have experience in proposed areas of delivery, are assessed as financially viable, report financial viability on an ongoing basis, and will meet minimum contractual load requirements (unless by specific agreement).

Currently, RTOs must be approved as 'pre-qualified suppliers' to deliver publicly funded training and assessment services to apprentices under User Choice. This approach provides the starting point for a more rigorous quality assurance regime.

#### 6.13 Conclusion

The analysis outlined in this chapter makes a case for major reforms to funding for postsecondary education in Queensland, principally through a new funding framework for VET. This framework cannot be developed and implemented by the Queensland Government alone, and can only be achieved in partnership with the Commonwealth, recognising that VET funding is a shared responsibility.

This could be achieved either through a revised National Partnership Agreement across all States and Territories, or through a bilateral agreement with the Commonwealth. However, the process for negotiating a multilateral agreement is time-consuming, complex and may not yield and agreement that meshes with Queensland government policy intent and priorities. Therefore, a bilateral agreement, such as that negotiated by Victoria to support that state's skills reforms, might be a more effective way forward.

More generally governments will need to consider levels of public investment across the post-secondary education sector, and relative levels of investment between the sectors.

The post-secondary i	nvestment and funding framework – Findings, conclusions and recommendations
secondary educ higher educatior	isk of growing imbalance in levels of investment and participation across the post- ation sector as demand-based higher education funding is implemented. Overall, the a sector in Queensland is poised for growth, with many universities positioning apitalise on the introduction of demand-based funding and the removal of enrolment
	Queensland is increasing moderately overall, but in per capita terms it is static and st of all the states and territories.
a clear funding f	VET-in-Schools programs exceeds \$37.5 million and is growing, but is not supported by ramework. However, numbers of QCE students transitioning to VET is declining. This to be further researched and analysed.
Recommendation 11	That Queensland Government clarify the funding framework for VET-in-Schools, based on the principle that each school in meets the cost of all QCE subjects, such that VET funding is used only to meet the additional costs of VET subjects above the average costs of other QCE subjects.
funding in Victor	o non-TAFE providers is currently higher in Queensland than any other state (although ia is becoming fully contestable). In Queensland, non-TAFE providers are steadily market share at the expense of TAFE.
opportunities to industries and e	leveraging industry funding has, in the main, not been achieved. There appear to be rea increase TAFE Queensland's overall level of revenue from private sources. Where nterprises capture the majority of the benefit from training, a case can be made for of industry co-contributions to fund workforce development.
	s have played an increasing role in the delivery of VET and will have the potential to garticipation and attainment levels.
30. Changes in the i	nternational student market will affect the revenue base of Queensland's post-secondar

	ore sustainable funding framework is required across the post-secondary sector, with ncy in eligibility for access to publicly funded programs, at least to initial qualification		
Recommendation 12	That the Queensland Government initiate consideration by Ministerial Council for Tertiary Education and Employment (MCTEE) and COAG, or a bilateral agreement between Queensland and the Commonwealth, of an agreed funding framework between the Commonwealth and State Government across the post-secondary education sector, encompassing:		
	<ul> <li>Agreed eligibility criteria for access by individuals to an initial post-secondary qualification;</li> </ul>		
	<ul> <li>A new National Partnership Agreement for VET funding including relative roles and contributions by the Commonwealth and States;</li> </ul>		
	<ul> <li>Joint and/or coordinated funding to support structured pathways and student movement across the post-secondary education system;</li> </ul>		
	<ul> <li>Funding loadings or performance payments consistent with the new equity- funding framework to operate in higher education;</li> </ul>		
	e. A state based fund for employer-based nationally recognised training based or financial contributions by employers and Government funded through redirection of funding for employer incentives for existing worker traineeships and state funding (see Recommendation 13).		
Recommendation 13	That the Queensland Skills Commission develop a revised VET funding framework based on the following principles:		
	<ul> <li>A funding entitlement for individuals for a first qualification up to Advanced Diploma level in their provider of choice with consistent fees and charges in each qualification level;</li> </ul>		
	<ul> <li>Agreed arrangements with the Commonwealth Government to introduce VET FEE-HELP for publicly funded VET Diplomas and Advanced Diplomas;</li> </ul>		
	c. Capped funding for students with initial qualifications up to degree level, with higher fees to reflect higher individual returns;		
	d. Full fees for individual students in areas of high labour market return;		
	e. Sufficient public funding and equitable student contributions to meet demand for the entitlement;		
	f. Recognition of the roles of individual TAFE Institutes and their obligations as full service providers where agreed by government;		
	g. Increased industry leveraging by establishing the Strategic Investment Fund for Workforce Development from redirection of existing traineeship funding and additional state funding, with the aim of increasing co-contribution from industry to address structural changes and skills shortages;		
	<ul> <li>Requiring industry co-contributions for access to programs funded by the proposed Strategic Investment Fund and for designated major projects and for rapid responses to skills shortages and structural change;</li> </ul>		
	<ul> <li>Ensuring individuals have access to information about their entitlements, what they are entitled to receive in terms of course quality outcomes and to inform provider choice, supported with the possible extension of the Training Ombudsman's role to cover major student complaints related to this information;</li> </ul>		
	<ul> <li>The capacity of the state to intervene in the market by not funding or capping specific qualifications in areas of oversupply or low priority;</li> </ul>		
	<ul> <li>Performance funding to achieve government policy objectives e.g. equity outcomes; and</li> </ul>		

		Strong quality assurance beyond minimum registration requirements for all providers accessing public funding.
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#### Chapter 7

# Need for a Comprehensive Policy Statement on Post-secondary Education and Training in Queensland

This report has identified a wide range of issues across the post-secondary education and training system in Queensland and the contribution of that system to the State's future.

The consultations for the Review and the analysis contained in this Report suggest that the Review is timely and appropriate. Following consideration of the Review there would be significant benefit in the State releasing a policy statement on postsecondary education in Queensland. That Statement should provide long term directions for the system, address specific areas where reform is required, highlight the role and contribution of post-secondary education in order to boost demand from individuals and encourage greater industry engagement.

The Statement should have regional as well as statewide dimensions and carefully calibrate the State Governments' role in the higher education and VET sectors and continue the reform process in upper secondary education.

There is also an important range of issues that need to be progressed nationally, particularly in relation to reform and renewal of VET generally and TAFE specifically. Queensland played a major role in the evolution of the national VET system and as the Skills Australia report suggests a range of national VET policy issues must be addressed and a more sustainable VET investment framework agreed between the State and Commonwealth Governments.

Overarching recommendation	That the Queensland Government develop and issue a policy statement on post- secondary (or tertiary) education based on the outcomes of consideration of the Queensland Post-secondary Education and Training Review with the following objectives:		
	<ul> <li>Building aspiration among younger cohorts to participate in post-secondary education and training;</li> </ul>		
	<ul> <li>Ensuring that the ageing labour force is able to be re-trained and thereby sustain growing participation rates for these age groups, especially amongst low-skilled workers;</li> </ul>		
	<ul> <li>Boosting participation and attainment levels in rural and regional Queensland and for Indigenous communities and individuals;</li> </ul>		
	<ul> <li>Ensuring that industry and the post-secondary system work together to provide workforce skills development and improve skills utilisation;</li> </ul>		
	<ul> <li>Increasing public and private sources of revenue through an appropriate investment framework to fund future participation in and improvements to the post-secondary education and training system; and</li> </ul>		
	f. A three-year transformation of TAFE Queensland based on the principle that TAFE's future lies in being the dominant and preferred provider in a growing training market with diverse revenue sources.		
	That the Queensland Government implements a performance measurement framework to measure progress against the policy statement.		

#### Appendix A

# Post-secondary education and training policy — current settings in Queensland

The Queensland Government of the past decade and more has embarked on a series of reforms and initiatives to diversify the Queensland economy, improve innovation and productivity, and to raise the levels of education attainment in the Queensland population.

This Appendix outlines the key policies and programs that are relevant to the Queensland post-secondary education and training sector.

# A.1 High level state and national reforms to post-secondary education and training

#### Toward Q2: Tomorrow's Queensland

In 2008, the Queensland government launched Toward Q2: Tomorrow's Queensland, a state plan that co-ordinates and integrates policy, programs and partnerships directed at five broad ambitions. Each ambition has two specific targets to be achieved by 2020.

One Q2 ambition is to deliver world-class education and training. The related 2020 targets are:

- All children will have access to a quality early childhood education so they are ready for school
- Three out of four Queenslanders will hold trade, training or tertiary qualifications.

The Review of Queensland Post-secondary Education and Training has a clear focus on the second of these targets.

The Q2 ambition of supporting safe and caring communities includes a 2020 target with implications for post-secondary education and training, given the potential for education and training to contribute to improvements in the workforce participation rate:

• Halve the proportion of Queensland children living in households without a working parent.

Other Q2 ambitions and 2020 targets rely on a high-performing post-secondary education and training sector to inculcate and extend knowledge and skills – know-how and know-why.

#### National reforms

The post-secondary education and training sector in Queensland will also be shaped by various national targets that seek to improve workforce participation rates, to improve productivity by widening and deepening knowledge and skills available to enterprises across the labour force, and to advance equity and social inclusion.

#### **COAG** Targets

Under the National Agreement for Skills and Workforce Development, COAG has agreed to a number of targets:

- by 2020, to halve the proportion of Australians aged 20-64 without qualifications at Certificate III or above
- by 2020, to double the number of diploma and advanced diploma completions.

Under the National Partnership Agreement on Youth Attainment and Transitions, COAG has agreed that, by 2015, Australia will achieve a national Year 12 or equivalent attainment rate of 90 per cent. The Partnership involves a Youth Compact which entitles those under age 25 to an education or training place (subject to course requirements and availability).

#### Bradley targets

The Australian government's response to the Bradley Review includes the following targets:

- by 2020, increase to 20 per cent the proportion of low SES background students enrolled in undergraduate degrees
- by 2025, 40 percent of all 25-34 year olds will have qualifications at bachelor level or above.

While these targets bring challenges and opportunities to the post-secondary sector as a whole, they focus particular attention on the role of the VET sector, and on the role of TAFE Institutes as public providers. The mission of TAFE Institutes in delivery of certificate and diploma level qualifications is emphasised anew, as is TAFE's longstanding social inclusion mission. But in addition, TAFE Institutes are now in a position to choose to extend their missions to embrace the delivery of qualifications traditionally the preserve of higher education providers.

#### A.2 Queensland Skills Plan

While the 2006 and 2008 versions of the Queensland Skills Plan predated the release of Q2, they are the platform from which skills-related Q2 ambitions and targets are pursued. The 2008 Skills Plan builds on its earlier 2006 version, which incorporated wide-ranging reforms and skills policy innovation. The 2006 Skills Plan was preceded, in 2002, with the Queensland government's release of *Education and Training Reforms for the Future: TAFE Queensland and Breaking the Unemployment Cycle Response*. Earlier initiatives included measures to strengthen TAFE Queensland through the injection of additional resources in 1998 and 1999.

The 2006 Queensland Skills Plan advanced a comprehensive policy agenda. Key elements of the Plan re-conceptualised the VET sector as a demand-driven provider of training services and products, rather than a supply-driven provider of qualifications. TAFE Queensland remains the provider for most of Queensland's training effort, but the 2006 Skills Plan recognised that a diverse provider network would be able to respond most effectively to pressing skills development needs in the Queensland workforce. This wider view is reflected in the granting to non-TAFE RTOs of third party access to TAFE facilities.

It is also reflected in the emphasis placed on VET workforce development, recognising that the quality of the VET workforce is fundamental to quality in training, assessment and industry engagement. The establishment of the Queensland VET Development Centre is part of this approach. The Centre has provided extensive professional learning opportunities throughout the state, and researched high priority areas for the VET workforce, such as the maintenance of industry currency for teachers. A further example of this wider view is the way in which the 2006 Plan made provisions for easier access to Recognition of Prior Learning through both TAFE and private providers.

Like the 2006 Plan, the 2008 Skills Plan is framed around, and has proceeded through, an approach to skills and knowledge formation reliant on the collaborative efforts of government, industry, the school sector and the post-secondary sectors. The 2008 Skills Plan identifies strategies to respond to skills shortages (including in the professions), improve workforce participation, advance social inclusion, upskill and reskill existing workers, support pathways and transitions, and build capacity within the VET workforce. Strategies to deal with skills shortages in the professions are notable because they explicitly draw Queensland's universities into the state's skills policy framework. The partnership model is also expressed in approaches such as regional skills formation strategies, industry skills alliances and the establishment of the three additional Centres of Excellence.

#### Apprenticeships

Reforms to the apprenticeship system were highlighted in both the 2006 and 2008 Skills Plans. With industry demand for tradespeople abating only briefly in 2008 and 2009, there has been continuing pressure to meet skills shortages. A series of initiatives have been implemented to lift recruitment, retention and completion rates for apprenticeships, including the Train to Retain Plan. The government will come close to meeting the target set in the 2006 Skills Plan of creating an extra 17,000 trade training places by 2010. Initiatives to front-load off-the-job training for apprentices, and to accelerate completion times based on demonstrated competence, have been pursued. Integrating delivery of apprenticeships and traineeships, and pre-vocational training, across schools, post-secondary providers and workplaces is now a feature of the Queensland training system.

More recently, the Queensland Government established the Trade Training Taskforce to develop a range of actions to help combat the impact of the global financial crisis on apprentices and trainees in Queensland. These actions — particularly those aimed at maintaining commencement levels, retaining apprentices and trainees in training and upskilling recently completed apprentices and trainees — will continue to be relevant beyond the aftershocks of the global financial crisis.

#### Skilling Solutions Queensland

Skilling Solutions Queensland is an exemplar of the innovative policy and programmatic responses which the 2008 Skills Plan sought to engender. Skilling Solutions offers individualised training information and career advice, and arranges recognition of prior learning assessments through RTOs. Skilling Solutions also supports secondary schools and their students to access online career information.

Under the Skills Plan, Skilling Solutions was significantly expanded from a pilot into a statewide network of shopfront and mobile services. Its success is evidenced by its reach (approximately 70,000 service users since 2005) and recognition through award schemes (most recently the 2009 Trans-Tasman International Customer Service Awards).

The network was recently extended with the addition of Energy Skills Solutions, an industry specific service which adds to its suite of services workforce development advice and enterprise skills assessments.

#### 10 percent Training Policy

The Ten per cent Training Policy requires ten per cent of all labour hours worked on an eligible project come from individuals engaged in structured training, culminating in an accredited qualification. The policy is designed to improve the levels of workforce development on major State Government funded building and construction projects. Through the QPET review consultation process, various stakeholders raised concerns around the application and effectiveness of the policy.

#### QCE and post-compulsory reforms

The relationships between the school sector and the post-compulsory sector are also now receiving heightened attention due to the COAG and higher education attainment targets.

Queensland recognised the importance of pathways between the school, VET and higher education sectors, and work, in the 2002 Education and Training Reforms for the Future initiative. A series of reforms since have been designed to improve pathways and school completion rates.

Queensland led Australia with its introduction of 'learning or earning' requirements for 15-17 year olds, who now must participate in education or training:

- for two years after they complete compulsory schooling, or
- until they turn 17 years, or
- until they complete the Queensland Certificate of Education (or Queensland Certificate of Individual Achievement), or a Certificate III or IV vocational qualification.

#### VET-in-Schools

Through focused policy attention under the Queensland Skills Plan, access to and availability of, VET in Schools has greatly expanded. Queensland now has the highest proportion of secondary school students in Australia studying VET. Queensland led the country in the implementation of School Based Apprenticeships and Traineeships (SATs) and had 8,700 SATs in 2009-10 — representing approximately 42 per cent of the national SAT base (NCVER 2008).

School-based Apprenticeships and Traineeships are strongly established in Queensland as the Training Ombudsman's review of the SAT system revealed. Their success in smoothing pathways to work and higher qualifications continues to be supported by targeted policy and programs. TAFE fees have been waived for secondary school students who undertake, as part of their senior studies, an initial Certificate III or higher qualification at a TAFE Institute. VET studies are now embedded in a range of Queensland Studies Authority subjects, meaning those studies are credited towards the Queensland Certificate of Education.

Since 2007, Queensland has opened three Academies for Years 10-12 students. The Academies have a particular role in preparing highly capable students for tertiary study, again emphasising the weight that policy accords to well-managed transitions and pathways.

#### A.3 Queensland TAFE and VET reforms

TAFE Queensland has undergone substantial changes in recent years as a direct reflection of the Queensland Government's renovation of skills policy objectives and programs. The pace of change for TAFE Queensland has quickened with the advent of COAG agreements targeting higher attainment levels of certificate and diploma qualifications, and the introduction of reforms to the tertiary sector prompted by the Bradley Review of Higher Education.

The 2006 Skills Plan accelerated the development of credit-bearing pathway programs linking TAFE and higher education study and qualifications. This policy focus has required Queensland TAFE to review its product development processes and paradigms, and to reorient its relationships with universities. There have been important outcomes from this reassessment of both practice and culture, for both TAFE and universities. There are now approximately 150 dual sector awards available, such as a three-year program offered through Southbank Institute and QUT which results in a combined Diploma of Information Technology (Networking) and Bachelor of Information Technology. As higher education enrolment caps are progressively lifted it is possible that more TAFE graduates will be able to pursue dual awards.

To promote access to training through flexible online and distance delivery and assessment, TAFE Open Learning has expanded since 2006. The integration of TAFE Open Learning and Learning Network Queensland has promoted improved close co-ordination of adult learning and preparatory/entry level training with TAFE's product and service suite.

New User Choice arrangements are not specifically TAFE reforms, but they do create a more competitive environment for the TAFE sector through increasing the quantum of public funds that is contestable. Under the new funding arrangements, public funds will be allocated on a priority basis, with the highest subsidy rates applying to apprenticeships and traineeships in occupations where skilled labour is in short supply.

#### A.4 Queensland TAFE governance reforms

#### Consolidation and establishment of SkillsTech Australia

TAFE governance in Queensland has also undergone period of change. In 2006, reorganisation of TAFE Institutes in south-east Queensland was undertaken with the objectives of enhancing operational efficiency and effectiveness. A number of metropolitan institutes were consolidated and SkillsTech Australia was established — incorporating the trade training areas from the other metropolitan institutes.

A Lead Institute model was introduced to facilitate interactions between industry and TAFE Queensland, and to focus TAFE expertise on customising training products for particular industry sectors. Southbank Institute of Technology was designated as the Lead Institute for technology training and education, for diploma and advanced diploma training, and for education in paraprofessional and professional areas. Similarly, SkillsTech Australia was established as a Lead Institute to ensure focused effort on addressing skills shortages in the trades and to improve industry linkages.

#### Introduction of the statutory authority model

Also in 2006, Southbank Institute of TAFE was re-branded as Southbank Institute of Technology and embarked on its journey to become, in 2008, the first Institute to achieve statutory status – a landmark governance reform. Gold Coast Institute of TAFE has since also secured statutory status.

The primary objective of the statutory authority model is to:

establish more flexible, cost effective and autonomous governance arrangements, to enhance the capacity of TAFE Queensland institutes to develop industry partnerships and grow the investment in training to provide more training opportunities for Queensland.

- TAFE Queensland Governance Model, Consultation Paper - Outcomes Report (2008)

However, the government has since put the transition of other institutes to statutory status on hold. In part, this was necessary to allow other governance arrangements to be considered in parallel. In the interim, TAFE institutes will continue to move towards greater independence and operational autonomy.

# *Appendix B* **Terms of reference**

#### B.1 Background

The Toward Q2: Tomorrow's Queensland Smart ambition to deliver a world-class education and training system will position the State as the premium place to live, work and learn in 2020. The Department of Education and Training is lead agency for the Toward Q2: target to have three in four Queenslanders aged 25 to 64 years with trade, training or tertiary qualifications.

As Queensland prepares for the next cycle of strong economic growth fuelled by the resources sector and emerging industries, it is essential that Queensland's postsecondary education and training system responds effectively to the needs of industry, students and regional/local communities. This includes the vocational education and training (VET) sector, higher education and the interface between VET and higher education in the context of the broader tertiary sector.

It has long been argued that the VET sector is supply-driven, resulting in slow responses to the emerging skills needs of existing and new industries. A national movement towards greater contestability in the VET sector has generated increased system responsiveness to training demands from employers and individuals as well as substantial growth in private Registered Training Organisations (RTOs).

While there have been increases in the Australian Qualification Framework (AQF) levels and qualifications delivered over recent years, overall investment is low and Queensland VET enrolments are static and are not keeping pace with population growth.

Queensland TAFE institutes will continue to have a central role to play in developing the skills and qualifications profile of Queenslanders in support of the State's wider economic development, productivity and workforce goals. To enable greater access and participation, they must also engage with current and emerging workforce development needs.

In June 2010, the Honourable the Premier and Minister for the Arts announced the creation of a Queensland skills commission (Skills Queensland). Skills Queensland aims to align Queensland's training system with the needs of employers and industry, to alleviate skills shortages and better position Queensland to address future skills needs.

In the context of ongoing national reforms for VET and higher education, and in preparation for the establishment of Skills Queensland, it is timely to: undertake a strategic review of Queensland's wider post-secondary education and training system; assess the future directions for both the system and the public provider, TAFE Queensland; and, plan for the next decade of service delivery in the context of the move toward a broader tertiary education sector.

#### B.2 Purpose of Review

The strategic review of Queensland's wider post-secondary education and training system will provide advice and make recommendations to the Minister for Education and Training on the current state and future direction of the post-secondary education and training system in Queensland. The review will address the capacity of the system to deliver on State and Council of Australian Governments (COAG) targets to lift workforce skills and qualification levels and, thereby, increase productivity and workforce participation.

With the establishment of the independent skills commission, Skills Queensland, and its development of a clearer articulation of training demand, it is critical that the post-secondary education and training system is positioned to respond effectively by delivering flexible and high quality tertiary education and training.

The review will set a new long-term consolidated vision and plan for further performance and outcome improvements in post-secondary education and training. It will include: an analysis of the needs of the economy and labour market; proposals for the future role and structure of the post-secondary education and training system and the public provider, including funding models; and, a report, with a business case, for the long-term direction of the post-secondary sector in Queensland.

The review will be conducted by an independent consultant and managed by the Department of Education and Training.

#### B.3 Review process

- Review and analyse performance data from the Queensland VET system and Queensland universities over the past five years and analyse trends in tertiary education performance.
- Review other material including evaluations and research in relation to the performance of post-secondary education and training in Queensland.
- Conduct a literature review drawing on best practice.
- Model impacts of potential enhancements.
- Confer regularly with the Minister's Trade Training Taskforce and Minister's Higher Education Forum.
- Undertake targeted stakeholder consultations as required.

#### B.4 Scope of Review

Matters to be considered include:

- 1. Comparative assessment of Queensland's post-secondary education and training sector with national and other jurisdictions with particular reference to investment, participation, qualifications and other outcomes.
- 2. Analysis of the impacts on current and future workforce participation rates, industry development and productivity levels, including upon Queensland's regions.

- 3. Assessment of the impacts of current and proposed national changes to VET and higher education and opportunities for Queensland, including improved student movement between the sectors.
- 4. Analysis of the operational effectiveness of Queensland TAFE institutes including factors impacting on responsiveness and flexibility, and strategies for improvement.
- 5. Identification of opportunities to enhance the role of Queensland Universities, Queensland TAFE and private Registered Training Organisations (RTOs) in any potential new direction for post-secondary education in Queensland.

#### B.5 Reference Group

The Reference Group will consist of representatives of key stakeholder groups and will be chaired by the Department of Education and Training. The Reference Group will meet at regular intervals sufficient to:

- provide stakeholder advice and input into the review on behalf of their sectors;
- · receive briefings from the consultant on the review's findings; and
- provide comment on the draft report which is due in September 2010.

#### B.6 Stakeholders

Targeted consultation will be undertaken with unions, employer organisations, TAFE Queensland, relevant government agencies, Queensland Universities, the Australian Council for Private Education and Training, and other relevant bodies.

# Appendix C QPET Review Consultations

Adult and Community Education Alliance - LLCQ, VQ, COTA and QCAL Australian Council on Private Education and Training (ACPET) **TAFE Indigenous Student Support Officers** Chamber of Commerce and Industry Qld (CCIQ) TAFE Queensland Regional Institute 'Transition Committee' Department of Employment, Economic Development and Innovation Training and Employment Recognition Council Department of Education and Training Training Ombudsman Department of Premier and Cabinet, Director-General Department of Treasury Higher Education Forum Hutchinson Builders Indigenous Registered Training Organisations (RTOs) Industry Engagement Partners / Skills Alliances Gold Coast Institute of TAFE Griffith University LMHU Office of Economic and Statistical Research Queensland Council of Unions (QCU) Queensland Public Sector Union (QPSU) Delegates Queensland Teachers Union (QTU) TAFE Executive Small and medium enterprises SkillsTech Australia SkillsTech Australia Board Queensland Skills Commission Chair TAFE Directors Queensland (TDQ) Individual TAFE Institutes, Directors and Senior Managers Barrier Reef Institute of TAFE • Brisbane North Institute of TAFE Central Queensland Institute of TAFE • Gold Coast Institute of TAFE • Metropolitan South Institute of TAFE • Mount Isa Institute of TAFE

- SkillsTech Australia
- Southbank Institute of Technology
- Southern Queensland Institute of TAFE
- Sunshine Coast Institute of TAFE
- The Bremer Institute of TAFE
- Tropical North Institute of TAFE
- Wide Bay Institute of TAFE

TAFE Queensland Regional Institute 'Transition Committee'

Training and Employment Recognition Council Training Ombudsman University Vice-Chancellors

- Bond University
- Central Queensland University
- Griffith University
- James Cook University
- Queensland University of Technology
- University of Queensland
- University of Southern Queensland
- University of the Sunshine Coast

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