Queensland Skills Plan

Formative evaluation report
Efficiency

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Background and methodology

Queensland’s labour market has fundamentally changed. Some changes are recent and may be linked to cyclical patterns while other changes have occurred over the last few decades and are more permanent in nature, reflecting likely trends in the labour market for decades to come.

This new work environment needs a fresh approach to skills development to meet the current and future needs of the labour market. Some of these needs are critical and require immediate action. Others are long-term issues requiring incremental shifts in training strategies and workforce culture.

To this end, the Queensland Skills Plan (QSP) was developed after extensive consultations with employers, registered training providers, peak industry groups, students and community stakeholders across Queensland*. The purpose of this consultation: to build a world class training system responsive to stakeholder needs while remaining in tune with the dominant and emerging economic and labour market trends.

In building this world class training system, a key focus of the QSP is to encourage greater industry participation and investment in, and ownership of, workforce skilling through a range of initiatives including industry engagement mechanisms. The QSP represents a shift from an older ‘industry advice’ model, where government simply consulted industry with a view to ascertaining skilling priorities, to a more encompassing ‘industry engagement’ model where government is increasingly looking to industry to lead workforce skilling solutions.

The QSP contains 24 separate actions grouped around four major themes:

- A training system that works for Queensland
- Training that works for industry and employers
- Training that works for the trades
- Training that works for individuals

Based on these themes and their underpinning actions, a series of short-, medium- and long-term outcomes was developed using a program logic model widely employed within DETA for major program evaluations. On 5 October 2007, Governance Strategy and Planning facilitated a workshop of senior DETA and DEIR staff to develop the QSP program logic model. The completed model was subsequently endorsed by the QSP Evaluation Sub-committee. This and the DETA QSP Evaluation proposal are included at Attachment 1.

* Readers of this evaluation will be aware that the 2008 Queensland Skills Plan (QSP 2008) has already been released. The QSP 2008 was developed as the strategies of the original QSP were being implemented. The data trends on which the current evaluation is based were also analysed as part of the development of QSP 2008. As a consequence, the recommendations and identified areas for improvement in this evaluation support the five key themes and underpinning actions of QSP 2008 which, in turn, support the Q2 priority of delivering world-class education and training to Queenslanders and it’s associated target of three out of four Queenslanders holding a qualification at the Certificate III level or higher by 2020. Furthermore, this evaluation is relevant to both versions of the QSP because the outcomes, identified in the program logic model, on which the evaluation is based are relevant to the first, second and any future iteration of the QSP.
Short-term outcomes from the model reflect initial changes in the knowledge, skills and attitudes of VET stakeholders, medium-term outcomes reflect subsequent behavioural changes and the long-term outcome reflects the ultimate purpose of the QSP: development of a highly skilled labour force to underpin sustained economic, employment and productivity growth.

As outlined in the DETA QSP Evaluation Proposal, the QSP will be evaluated in two stages: a formative evaluation to be completed by the end of 2008 and a final evaluation scheduled for completion by the end of 2010. The later timeframe set for the final evaluation will facilitate better capturing of outcome performance data associated with QSP actions requiring longer implementation lead times. Given these lead times, this formative evaluation focuses on the extent to which medium-term and supporting short-term outcomes have been achieved.

In July 2008, a workshop of internal stakeholders was convened to assess the range of data sources currently available to measure QSP outcome performance and to highlight data gaps that need to be filled if a comprehensive final evaluation is to occur. The objectives of the workshop included:

- challenging or ratifying data sources presented at the workshop as being the means by which the QSP is evaluated;
- identifying information gaps associated with evaluation of the QSP;
- identifying other sources and/or methods of collecting information that may ‘add power’ to existing information sources; and
- increasing ‘buy in’ across the training portfolio and DEIR to the evaluation.

The existing and potential data sources identified at this workshop are listed at Attachment 2.

This formative evaluation is a desktop exercise based on a range of quantitative and qualitative data derived from DETA and DEIR databases, and from internal reports and reviews. The multifarious nature of the QSP means that separate project reviews of specific QSP initiatives are occurring on an ongoing basis in different areas of the training portfolio. While this evaluation references some of these reviews, it has a more macro-level focus, evaluating the extent to which medium-term outcomes have been achieved. A table listing some of these reviews is included at Attachment 3.

This evaluation of the QSP centres on:

- determining whether, and to what extent, the short- and medium-term QSP outcomes have been achieved;
- assessing the efficacy of key processes, initiatives and strategies;
- providing an evidentiary basis to inform the future strategic direction of the Queensland VET system and the QSP, including development of future skilling initiatives; and
- assessing VET efficiency/productivity gains.

Recommendations in this evaluation are divided into two groups: those pertaining to maximising the effectiveness of existing QSP initiatives and those designed to inform the final evaluation. The latter group of recommendations more specifically relates to identification of information that will need to be collected to enhance the quality and effectiveness of the final evaluation.
Executive summary

This formative evaluation of the QSP examines the medium-term and supporting short-term outcomes the QSP was developed to achieve. The three medium term outcomes identified in relation to the QSP are:

- Improved system responsiveness to the market
- Increased participation and achievement by industry and individuals in vocational education and training and employment outcomes
- Increased sector and industry leadership and ownership in a greater array of skilling strategies

The performance data analysed in this evaluation indicates there has been a significant positive impact to date of the QSP on the training system in this state. This statement applies to the performance data associated with all medium-term and underpinning short-term outcomes.

Evidence that indicates the VET system has become more responsive includes:

- Graduates are slightly more satisfied with the training they undertook (87.8% of graduates were satisfied in 2005 compared to 89.3% of graduates in 2007)
- More graduates are achieving their main reason for study (87.1% of graduates reported achieving their main reason for study in 2005 compared to 89.2% in 2007)
- A greater percentage of employers are satisfied with the quality of training provided (68.2% of employers were satisfied with the overall quality of training in 2005 compared to 75.3% in 2007)
- Growth in the number of students accessing training outside the traditional classroom setting (college- and campus-based delivery fell by 6% over the three years to 2007-08 while other delivery methods increased by 43%)
- Growth in the number of competencies awarded to students through recognition of prior learning (competencies awarded through an RPL process increased by 300% over the three years to 2007-08)
- An increase in TAFE commercial revenue of 10.4% over the same period
- An increase in the number of apprenticeship completions in skill shortage areas including civil construction, engineering and automotive over the same period

Evidence that indicates increased participation and achievement by industry and individuals in vocational education and training and employment outcomes includes:

- An increase in the number of students successfully engaging with the training system – a substantially higher percentage of students are passing at least 95% of the competencies and modules they undertook in high priority skill shortage areas (88,129 students in 2007-08, an increase of 51% over the number of successful students in 2004-05) and there has been a 17% rise in the number of students gaining a high priority skill shortage qualification
- A significant increase in the number of apprentices completing their apprenticeship (10,280 apprentices completed their apprenticeship in 2007-08, 76% more than the number completing in 2004-05)
Over 60% of participants in the Skilling Queenslanders for Work initiative are in employment 12 months after the completion of the program

An increase in the number of separate national training package qualifications being accessed (up 5% over the same period)

Growth in the number of registered private training providers delivering training to apprentices and trainees which expanded by a third over the same period (in 2004-05 121 private providers were delivering User Choice training compared to 161 in 2007-08)

Evidence of increased sector and industry leadership and ownership in relation to skilling strategies suggests that the old ‘industry advice’ model which existed under the earlier Industry Training Advisory Bodies (ITABs), in which industry simply provided advice on training priorities, is transitioning to a more encompassing ‘industry engagement’ model in which industry is leading workforce skilling and development strategies. This transition is perhaps the single most significant change to the VET system in Queensland and is characterised by the establishment of new industry engagement mechanisms and the development of skills formation strategies (SFSs) for industries and communities across the state.

Evidence of increased sector and industry leadership and ownership in a greater array of skilling strategies includes:

- The introduction of new industry arrangements from July 2007 including three centres of excellence (in addition to the two that were operational before that date), five industry skills alliances, two industry-government skilling partnerships and six direct industry engagement arrangements
- The annual reports submitted under these new industry arrangements represent a more strategic analysis of the skilling needs in each industry and are expanded in scope in that these reports also include the full range of attraction, development and retention issues and strategies
- Clear examples of industry taking a lead role in the implementation of workforce resolution strategies (e.g., Construction Skills Queensland is implementing a comprehensive Apprentice Retention and Support Strategy to improve apprentice and trainee completion rates in the industry)
- Discussions with industry bodies that indicate most are linking with and capitalising on existing industry networks
- Evidence suggesting most industry bodies are forming partnerships with schools to provide school students and teachers with valuable industry experience and to promote careers within the industry (e.g., the Queensland Tourism Industry Council Skills Link has initiated a Salute to Excellence awards program which celebrates the achievements of secondary school students engaged in tourism and hospitality training in Queensland)
- The formation of partnerships with key industry organisations such as the National Retail Association, Australian Industry Group and the Local Government Association of Queensland under the Experience Pays Awareness Strategy
- Growth in the number of SFSs including growth in the number of these strategies of which industry and other stakeholders are now taking ownership

In conjunction with these measures, performance data shows that the VET system has become more efficient at delivering training over recent years. Government recurrent expenditure per weighted publicly funded annual hour curriculum fell from $15.22 in 2004 to $14.24 in 2007 in real terms. Other techniques for measuring efficiency have shown similar gains.

The strong labour market conditions that have prevailed in recent years have impacted negatively on some VET indicators but have underpinned the successful performance of others. Nevertheless, strategies such as the Apprentice Retention and Completion Strategy seem to be having a positive impact on the strength and outcomes of the VET system.
The evaluation highlights that the Queensland VET system has become more responsive, more flexible and more efficient in its delivery of training. It generates more positive training outcomes for individuals and has more successfully engaged key stakeholders in taking leadership roles in relation to workforce development strategies. However, the evaluation has also identified a number of issues that need to be addressed to assist in the full achievement of the QSP objectives. These issues include:

- lower student and business client satisfaction levels in relation to SkillsTech Australia compared to the TAFE network as a whole;
- a slower than expected take-up of Certificate IV-and-above training places;
- the need for a formalised contract management process, more clarity regarding contract deliverables and reporting requirements, and other issues in relation to the new industry engagement strategies;
- efficiency concerns with some of the larger TAFE institutes; and
- the need to promulgate a management framework that links the policy drivers, subsequent actions and desired outcomes to all levels within DETA.

It was not possible, as part of this formative analysis, to undertake an in-depth examination of the factors underpinning these issues for the purpose of refining current strategies. Timelines precluded the inclusion of such an examination here. This evaluation merely identifies these issues so that subsequent examination can inform refinement of existing strategies prior to the final evaluation scheduled for the end of 2010.
Recommendations

Enhancing Queensland Skills Plan program effectiveness

Recommendation 1

Fully implement the continuous improvement strategies identified in the recent internal review conducted on industry engagement strategies and monitor the effectiveness of these improvement strategies in relation to driving greater industry leadership in the development of workforce attraction and retention strategies (refer to Attachment 6).

Recommendation 2

Monitor the effectiveness of higher-level student marketing campaigns currently being implemented by TAFE institutes with a view to ascertaining the effectiveness of these strategies, sharing best practice models and increasing the overall take up of higher-level training places (refer to page 28).

Recommendation 3

Determine the extent to which industry and community stakeholders are identifying strategies other than training to resolve skill shortages and subsequently seek feedback from these stakeholders on the effectiveness of these strategies (refer to pages 39 and 45).

Recommendation 4

Monitor the extent to which centres of excellence, skills alliances and other industry engagement strategies have become largely self-funded and, in cases where industry funds are lacking, determine the reasons for this and implement appropriate resolution strategies (refer to Attachment 6).

Recommendation 5

Locate the Logical Framework mapping on which this formative evaluation is based on a separate QSP website within the training portfolio. Advise staff of its existence so they have a clearer understanding of where individual QSP activities fit into the overall scheme of things, know what outcomes they are working to achieve and feel a greater sense of ownership of their activities (refer to page 54).

Recommendation 6

Instigate strategies to improve the utility and efficiency of the new larger institutes including Southbank Institute of Technology, Metropolitan South Institute of TAFE, Brisbane North Institute of TAFE and SkillsTech Australia (refer to pages 52 and 53).
Recommendation 7

Conduct research to ascertain student and employer attitudes toward the operations of SkillsTech Australia for the purpose of enhancing the responsiveness of this centre of excellence to the needs of its two key client groups: students and employers (refer to pages 19 and 20).

Recommendation 8

Monitor learner performance and develop and implement any further strategies to ensure the improved level of student success observed over the last few years continues or is enhanced, including the use of exit interviews to determine the reasons underpinning non-completion of qualifications (refer to page 30).

Recommendation 9

Monitor, and facilitate any necessary adjustments to, government intervention strategies in the apprenticeship market to facilitate a continuation of the positive trends that have been observed in recent years – for example, in relation to cancellations (refer to page 32).

Improving the ongoing Queensland Skills Plan evaluation and monitoring process

Recommendation 1

In the lead up to the final evaluation in 2010, teams responsible for implementing individual initiatives to list the performance indicators they will use to monitor progress towards achieving relevant outcomes in the Logical Framework and these indicators to also be centrally located within the training portfolio (refer to page 54).

Recommendation 2

Conduct research to ascertain potential barriers to private providers who may be wishing to access under utilised TAFE infrastructure (refer to page 34).

Recommendation 3

Continue to monitor the number of skills formation strategies that transition to industry and community stakeholders as a means of gauging the level of financial commitment to these strategies from external clients (refer to page 46).

Recommendation 4

Monitor the effectiveness of the new Experience Pays Awareness Strategy by canvassing employer views in relation to mature age workers so that the program becomes more effective at modifying employer attitudes towards retaining mature aged workers and adopting more flexible work practices (refer to page 34).
Report structure

The main body of this evaluation is broken into three sections. Each section covers one of the three medium-term outcomes:

- Improved system responsiveness to the market
- Increased participation and achievement by industry and individuals in vocational education and training and employment outcomes
- Increased sector and industry leadership and ownership in a greater array of skilling strategies

Each section will open with an explanation of the relevant outcome: what are we hoping to achieve through the initiatives in the QSP? Following this will be the outcome performance measures, as detailed in the program logic model for evaluating the effectiveness of the QSP, that relate to the medium-term outcome which is being evaluated. The measures will be listed in a table that also includes the data sources that have been identified to measure performance.

Once each of these data sources has been presented and analysed, the section will move onto the short-term outcomes supporting the medium-term outcome. These and the associated outcome performance measures and data sources used in the evaluation will also be listed in a table and each data source separately analysed.

Finally, each section will close with a summary of the performance data presented and seek to provide an overall assessment of the medium-term outcome based on amalgamating the separate performance assessments into a single evaluation of the extent to which the medium-term outcome has been achieved.

The QSP was developed at a time when the VET portfolio fell under the auspices of the Department of Employment and Training. As a consequence, evaluation of the QSP encompasses an assessment of data obtained from the Department of Employment and Industrial Relations in connection with Action 21: Maximising our workforce through the Skilling Queenslanders for Work (SQW) initiative. Analysis of SQW data is included under a separate heading in each of the sections covering the medium-term outcomes.

As a means of explaining the reasons why a particular data source is observed to be moving in a certain direction, other underpinning data sources may also be presented in the evaluation. Some of these data sources will be quantitative while others will relate to examples of initiatives that have been undertaken. These additional and/or secondary data sources form case studies that help to explain the trends being analysed.

The three sections devoted to assessing performance against the medium-term outcomes will be followed by two more sections. The first of these will examine the extent to which implementation of the QSP has helped to drive efficiencies in the VET system. The second will summarise the major issues and learnings that have surfaced since inception of the QSP. These issues and learnings will help to guide refinement of existing initiatives and development of future strategies in the QSP.
The evaluation report is prefaced with an overview of the economic and labour market conditions that have prevailed during implementation of the QSP. Given the link between the labour and VET markets, knowledge of these conditions will help inform the evaluation process.

Unless otherwise indicated, the data sources used in this analysis apply to the publicly funded VET system, i.e., to government-funded and fee-for-service training delivered by TAFE institutes and the Australian Agricultural College Corporation and government-funded training delivered private training providers. All performance indicators presented in this report are based on Queensland data.
In 2005 the then Department of Employment and Training released a green paper entitled Queensland’s proposed responses to the challenges of skills for jobs and growth. The proposed package of reforms contained in this discussion paper and the stakeholder feedback that these proposals generated would ultimately shape the QSP. The green paper reforms were built around six identified priorities:

- Tackling the urgent shortage of trade skills
- Strengthening Queensland’s skills base for the future
- Developing a more and responsive and flexible VET system
- Initiating new engagement arrangements with employers to tackle skill shortages
- Developing a workforce and skills response to the ageing population
- Increasing labour force participation through new skilling strategies for the under-skilled

In large part, these priorities reflected the economic and labour market trends at the time the green paper was being developed. Some of these trends were often international in nature – for example, the ageing workforce and rapid growth in ICT. In the time since the new millennium there has been strong jobs growth in professional and associate professional occupations and employment growth, while more modest in the trades, has picked up considerably in recent years. Needless to say, continued strong jobs growth has led to tight labour market conditions where unemployment has fallen to its lowest level in thirty years in spite of higher than usual labour force participation (the percentage of the working age civilian population that is either employed or actively seeking work). As Figure 1 shows, the drop in the unemployment rate has been more significant in Queensland compared to the country as a whole. In July 2004 the Queensland unemployment rate fell below the national average and has remained below it ever since.

**Figure 1: Unemployment rate, Queensland versus Australia**

![Unemployment rate graph](image-url)
While jobs growth is a desirable outcome of government, and in particular those who work in the VET system, long-term jobs growth brings with it its own problem, in the form of skill shortages which can cause inflationary pressures through wage rises sparked by increased demand for skills. If the pool of available labour becomes too small, skill shortages can become labour shortages. It was within these labour market dynamics that the QSP was developed and implemented.

This combination of structural and cyclical changes has caused governments to increasingly focus on improving the productive capacity of the economy. The QSP has a significant role in this regard. Broadly speaking, productivity gains can be achieved by:

- working smarter, including the application of new technologies to improve and increase outputs;
- upskilling workers through further training and/or RPL; and
- placing more people, including those outside the labour force, into employment.

However, just as outputs from the VET system impact on the skills profile of the labour market, the labour market also impacts on the dynamics and outcomes of the VET system. Understanding the relationship between the two is integral to understanding the performance of the VET system.

In 2003-04 VET enrolments were observed to be falling. Closer examination revealed that this fall was occurring across jurisdictions. Indeed, subsequent investigations revealed that the drop in enrolments was not unique to the VET sector: it was also occurring in the higher education sector. What at first appeared to be a failure of the VET system to attract adequate numbers of people into training programs proved to be directly associated with strong jobs growth. In a labour market with historically high job opportunities, people were choosing to earn rather than learn. Previously, some of these people may have chosen to undertake a VET program to increase their chance of entering the workforce or securing a better and more highly paid job. The increase in available jobs combined with declining unemployment meant that undertaking a VET program for these purposes was not as essential.

This is just one example of the connection between the dynamics of the labour market and performance of the VET system. More examples could have been chosen, including apprenticeship commencements which, in contrast, tend to follow, rather than be inversely proportional to, the economic and labour market cycles. At this stage it is important to simply underline the relationship between the two markets.
### What does this outcome mean for the VET system?

The Queensland labour market is changing. While some changes in the labour market are cyclical, others are not. These more fundamental changes relate to factors including technological development; the globalisation of marketplaces; the transition to a low carbon economy; the changing nature of work which, in many cases is related to changes in the cultural fabric such as the desire to balance work with personal and/or family commitments; growth in the demand for more highly skilled labour; growth in an economy based on the exchange of knowledge; an ageing workforce; changing consumer expectations and more. On top of all this, prolonged economic and employment growth has caused widespread skill shortages. The VET system needs to respond to these challenges if it is going to equip industry with the skills needed to underpin a competitive economy well into the 21st Century. But it’s not just about responding to the needs of industry. Industry represents one market, individuals another. And when it comes to responding to the needs of individuals, government has social and community obligations. Its human development charter in relation to skills acquisition is based on helping individuals achieve their full potential; all individuals, including the more disadvantaged among us.

### Performance measures and data sources for this outcome

<table>
<thead>
<tr>
<th>Medium-term outcome</th>
<th>Outcome performance measure(s)</th>
<th>Available data source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved system responsiveness to the market</td>
<td>Improved client satisfaction</td>
<td>• NCVER¹ Student Outcomes Survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• NCVER Survey of Employer Use and Views of the VET System</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• TAFE Queensland Student Satisfaction Survey</td>
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<tr>
<td></td>
<td></td>
<td>• TAFE Queensland Business Client Survey</td>
</tr>
<tr>
<td></td>
<td>Improved equity group representation in the student population</td>
<td>• DEIR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• STAC²</td>
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<td></td>
<td></td>
<td>• DELTA³</td>
</tr>
</tbody>
</table>

1. National Centre for Vocational Education Research  
2. State Training Agency Clearinghouse  
3. Direct Entry-level Training Administration
Improved client satisfaction

Client satisfaction can be measured in a number of ways. The key markets serviced by the VET system are the students and industry. Satisfying these two groups is critical as a measure of the responsiveness of the system. Figure 2 is based on the national Student Outcomes Survey† conducted annually by NCVER and plots satisfaction with the overall quality of training for i) all Queensland graduates and ii) Queensland graduates who undertook training for employment-related reasons. The graph shows that both groups were increasingly satisfied over the two years to 2007.

These results are particularly encouraging as research has shown that graduates tend to have better labour market outcomes than module completers (students who, in many cases, choose to undertake selected competencies rather than a full qualification).

Figure 2: Graduate satisfaction levels

Figure 3: Percentage of graduates who achieved main reason for study

† Results from the Student Outcomes Survey are grouped into the years in which students completed or ceased their studies. For example, 2007 data refers to students who finished training in that year and who were surveyed in the first half of 2008.
Figure 3 also derives from the Student Outcomes Survey and shows an increase in the proportion of Queensland graduates achieving their main reason for study. The same was true for Queensland graduates seeking an employment-related outcome. Desirable as these outcomes are for the Queensland VET system, the buoyant state of the labour market is likely to have contributed to the strong employment-related result.

Satisfaction data collected through a DETA annual survey of Queensland TAFE institutes tells a similar story. Overall satisfaction levels remained consistently above 80% in each of the years from 2004 to 2008 (refer to Table 1).

**Table 1: TAFE student satisfaction (%)**

<table>
<thead>
<tr>
<th>Group</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall satisfaction</td>
<td>84</td>
<td>83</td>
<td>84</td>
<td>83</td>
<td>82</td>
</tr>
<tr>
<td>Likely to recommend training</td>
<td>82</td>
<td>84</td>
<td>84</td>
<td>82</td>
<td>81</td>
</tr>
<tr>
<td>Expectations met</td>
<td>73</td>
<td>74</td>
<td>75</td>
<td>73</td>
<td>75</td>
</tr>
<tr>
<td>Future consideration given to training</td>
<td>82</td>
<td>82</td>
<td>81</td>
<td>79</td>
<td>79</td>
</tr>
</tbody>
</table>

Data capture from the survey for SkillsTech Australia students only commenced in 2007. Survey results for 2007 reveal the overall level of student satisfaction is lower for SkillsTech (73% of students were satisfied compared to 83% of all TAFE Queensland students). This percentage dropped to 71% in 2008. The TAFE business client survey recorded a more pronounced difference. Three out of four business clients (74%) were satisfied with the TAFE system in overall terms in 2008 while only one in two business clients (52%) were satisfied with SkillsTech in that year. It is likely the lower student and business client satisfaction results are connected to issues associated with the establishment of a new organisation charged with developing a more responsive approach to technical training.

Findings from the TAFE student and business client satisfaction surveys have been presented to institute directors. The SkillsTech report identifies customer service, administration and course content as the highest priority business improvement areas based on a combination of low satisfaction ratings and the fact that these areas have a high impact on driving satisfaction. The report also identifies communication, problem resolution, accessibility, information and equipment and resources as other areas requiring attention. It is expected SkillsTech management will incorporate these findings into its strategic planning and continuous improvement processes.

SkillsTech management have commented that the various timelines and milestones associated with the establishment of this large training facility were overly optimistic. For example, team building requires more effort than simply bringing teaching staff from different institutes together in the one place and the sort of cultural change associated with new business practices and teaching paradigms does not occur overnight. In spite of these and other issues, the TAFE network is unlikely to have coped with the large increases in apprenticeships in recent years without SkillsTech. It is expected that employer and student satisfaction levels will increase as the new training culture, structures and business practices become fully embedded.

Figure 4 shows Queensland results from the NCVER Survey of Employer Use and Views of the VET system. The graph breaks overall employer satisfaction into three categories – ‘Satisfied’, ‘Neither fully satisfied or dissatisfied’, and ‘Dissatisfied’ – and shows that a growing proportion of employers are satisfied with their experience of the VET system.
A comparison of 2007 and 2008 results from the TAFE Queensland Business Client Survey reveals a similar trend. Survey results show improvements in client satisfaction in relation to TAFE equipment and resources and the perceived usefulness of training. Business client satisfaction in relation to teaching and training remained fairly static (refer to Figure 5). Given the changes the VET sector has undergone since implementation of the QSP, these results are particularly encouraging. These changes are ongoing, including new TAFE governance arrangements that support greater market responsiveness and flexibility. For an explanation of these arrangements refer to Attachment 4.
**Skilling Queenslanders for Work**

Skilling Queenslanders for Work (SQW) introduced much greater flexibility to service delivery through the use of customised assistance tools including:

- paid work placements;
- job preparation assistance including non-accredited training;
- work experience;
- accredited vocational education and training;
- formal recognition of skills through RPL; and
- contributions towards transport and childcare costs for eligible parents and carers.

Greater use of assistance measures tailored to the needs of individuals became more imperative as sustained jobs growth drew more people into the workforce, reducing unemployment to a smaller but more disadvantaged group of jobseekers.

As the Queensland unemployment rate fell to record lows, SQW re-focused its efforts towards employment participation. In addition to targeting the long-term unemployed, SQW engages those people who are underutilised or outside the labour market.

In 2007-08 overall SQW targets were exceeded. In that year 18,292 people were assisted under the program, nearly 2,200 above target. An assessment conducted by DEIR of individual projects under the initiative has indicated the most likely reason for this is the customised assistance, an approach that has been more effective and allowed organisations to assist more participants than anticipated.

In addition, DEIR commissioned an external client satisfaction survey. Results from this survey were published in a report that was released in May of this year. The survey found that 94% of SQW clients were either very satisfied or satisfied with the services provided by DEIR under the program.

**Improved equity group representation in the student population**

The best method for ascertaining whether clients from an equity group are accessing the VET system to the same extent as the general civilian population relies on comparing the group’s share of the student population with the group’s share of the civilian population. If these shares are similar then the equity group is not underrepresented in the student population. However, while the concept is simple enough, obtaining accurate and up-to-date data is problematic. Accurate civilian population data for some equity groups is only collected through the Australian Bureau of Statistics Census of Population and Housing which is only conducted every five years. Furthermore, details on whether a student belongs to one or more of the equity groups are captured at the point of enrolment. Sometimes people do not provide these personal details, leading to underreporting of equity groups in the VET student population.

Given these limitations a better, and arguably more pertinent, way of measuring whether the VET system is supporting disadvantaged clients is to focus on outcomes. Participating in the VET system is important, but successfully participating is even more important. Figure 6 shows the percentage of disabled, indigenous and non-English-speaking-background students who successfully completed at least 95% of the training they undertook. From 2004-05 to 2007-08 all three equity groups recorded improved learner performance, although learner performance dropped slightly for disabled students over the year to 2006-07. As the graph shows, a higher proportion of these students are accessing the VET system and leaving with the skills and knowledge that will allow them to competently perform in Queensland workplaces.
Skilling Queenslanders for Work

SQW and its predecessor, Breaking the Unemployment Cycle, are programs that assist the most disadvantaged jobseekers to fully participate in the paid workforce and share in the state’s prosperity. As a consequence, the majority of SQW clients fall into one or more of the equity groups. To maintain Queensland’s strong economic growth, increased productivity and workforce participation are required. Jobs growth in recent years provides an opportunity for those traditionally unable to access the labour market – such as indigenous Queenslanders who are significantly under-represented in the labour market – to obtain employment.

Short-term outcomes, performance measures and data sources supporting this medium-term outcome

<table>
<thead>
<tr>
<th>Short-term outcome</th>
<th>Outcome performance measure(s)</th>
<th>Available data source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance by staff of market signals as a driver for improved service delivery</td>
<td>Increase in alternative delivery</td>
<td>• STAC</td>
</tr>
<tr>
<td>Improved confidence of industry in service delivery</td>
<td>Increase in TAFE commercial activity</td>
<td>• STAC</td>
</tr>
<tr>
<td></td>
<td>Employer satisfaction</td>
<td>• TAFE Queensland Business Client Survey</td>
</tr>
<tr>
<td></td>
<td>Employment rate of graduates</td>
<td>• NCVER Survey of Employer Use and Views of the VET System</td>
</tr>
<tr>
<td>Increased skilling opportunities in occupations in demand</td>
<td>Trends in student enrolments and completions in skill shortage occupations</td>
<td>• DELTA, • STAC</td>
</tr>
</tbody>
</table>

Figure 6: Percentage of highly successful learners - learners that identify with Disability, Indigenous and Non-English Speaking Background target groups
Increase in alternative delivery

Another measure of the responsiveness of the VET system to its primary markets (employers and students) is delivery method. Historically, the VET sector has employed a similar delivery method to the education sector in that most training was delivered in a classroom or institutional setting. However, this is changing as more employers signal their preference for other delivery methods including on-the-job and online. Figure 7 plots TAFE students by delivery method and shows that while college-based training is still the dominant delivery method, fewer students are choosing to attend their local TAFE campus. In contrast, there has been a significant rise in the number of TAFE students choosing alternative delivery methods to undertake vocational education and training.

Figure 7: TAFE delivery by learner numbers

In addition to this trend there has been a marked increase in the level of RPL activity. In 2004-05 a total of 35,988 competencies were awarded to students through the RPL process. By 2007-08 this figure had increased to 146,074, an increase of over 300%. RPL is an important aspect of the training system, allowing people who have acquired their skills through informal means to have these skills formally recognised. However, during the consultation phase of the QSP stakeholders expressed concerns about the RPL process, describing it as “complicated, convoluted and often requiring more effort on the part of the client than enrolling in and undertaking the training in question”. In response, Skills First was introduced, an initiative designed to streamline the skills assessment process. This initiative, combined with the associated referral support and subsidies available to clients accessing Skilling Solutions Queensland, have underpinned the dramatic increase in the level of RPL activity.

Increase in TAFE commercial activity

As Figure 8 shows, TAFE commercial activity (the revenue from international students has also been included) decreased over the year to 2005-06 before increasing over the following two years (a rise of 33% from 2004-05 to 2007-08). International student revenue increased by 75% over this period. It is noteworthy that the initial drop in TAFE commercial revenue occurred at a time when the labour market slowed. While the Queensland unemployment rate fell fairly consistently from early 2001 to the middle of 2007, it hovered around 4.8% from the beginning of 2005 to the first half of 2006.
Another important feature of the graph is the omission of commercial revenue data for Southbank in 2007-08. As a newly constituted statutory authority, Southbank no longer supplies this data to DETA. In 2006-07 (the last year Southbank provided commercial revenue data) the institute collected $7.8 million in commercial revenue. If a similar figure were added to plotted 2007-08 TAFE commercial revenue, total commercial revenue would be nearly $60 million for that year, an even more substantial increase over the last three years.

**Employer satisfaction**

Employer satisfaction was covered earlier in this section (see Improved client satisfaction).

**Employment rate of graduates**

The main foundation on which any VET system is built is the teaching of skills and underpinning knowledge to equip people for the world of work. Many people undertake vocational education and training for employment-related reasons: for example, to enter or re-enter the workforce, to improve their employment situation or because technological change necessitates the acquisition of new skills. For this reason, looking at the employment outcomes of students is an important indicator in relation to measuring VET system performance. One such indicator is the percentage of graduates not employed prior to the commencement of training who were able to secure a job after graduating. Using the NCVER Student Outcomes Survey, Figure 9 presents Queensland data for this cohort and shows their employment outcomes have improved over the two years to 2007.
If the VET system is to be responsive to the needs of employers it will provide training opportunities in areas where there is a demand for skills. Students, particularly young students, may wish to train in vocations perceived to be ‘trendy’, but if there is little demand for persons with these skills it doesn’t make good labour market sense to offer training places to people who, at the end of their training, stand little chance of ever utilising the skills and knowledge they acquired during their vocational program.

Figure 10 plots apprenticeship completions in skill shortage areas from 2004-05 to 2007-08. The large number of infrastructure projects around Queensland has caused a high demand for skilled tradespeople in the construction and engineering industries, two areas in the graph showing strong growth in apprenticeship completions. Other industries to show strong growth include electro-technology and automotive. It is important to consider the time taken to complete an apprenticeship – in most cases, a few years. If the uptake of apprentices...
is occurring in areas of skill shortage, today’s completions reflect an earlier labour market. Indeed, apprenticeship commencements are growing strongly across a wide range of industry sectors.

Another important indicator in relation to enrolments and completions in occupational demand areas is Certificate IV-and-above training. The need to develop higher-level skills to support growth in the knowledge economy was recognised in the QSP.

To this end, a target of achieving an additional 14,000 training places per annum (compared to 2004-05 activity) by 2010 in courses at the Certificate IV level or higher was established. In 2007-08, an additional 2,558 students were undertaking higher-level training.

The small increase in higher-level training places has been eclipsed by a more significant increase in the number of Certificate IV-and-above students either gaining a qualification or successfully engaging in training. The number of those students who were successful in at least 95% of their studies has increased by 7,579 (22%) from 2004-05 to 2007-08. Similarly, the number of successful students receiving an award increased by 5,877 (40%) over the same period.

In terms of student training outcomes, the publicly funded VET system has already matched the outcomes implicit in the 74,000 (59,600 baseline plus 14,000 additional) higher-level qualification student training place target set for 2010-11.

Table 2 shows that in 2004-05 about 59% of higher-level qualification students were successful and some 25% received an award. Applying these inherent 2004-05 ‘success rates’ to the ultimate student target (74,000), it was expected in 2010-11 that the system will be generating 43,000 successful higher-level qualification students (currently 42,500) and 18,000 awarded higher-level qualification students (currently 20,000). Furthermore, more higher-level students are studying in vocationally relevant areas.

Table 2: Higher-level student performance (Certificate IV-and-above students)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total students</td>
<td>59 628</td>
<td>60 933</td>
<td>62 836</td>
<td>62 186</td>
</tr>
<tr>
<td>Successful students</td>
<td>34 886</td>
<td>36 937</td>
<td>40 815</td>
<td>42 465</td>
</tr>
<tr>
<td>Awarded students</td>
<td>14 628</td>
<td>14 508</td>
<td>15 871</td>
<td>20 505</td>
</tr>
<tr>
<td>Successful students as percentage of total higher-level students</td>
<td>59%</td>
<td>61%</td>
<td>65%</td>
<td>68%</td>
</tr>
<tr>
<td>Awarded students as a percentage of total higher-level students</td>
<td>25%</td>
<td>24%</td>
<td>25%</td>
<td>33%</td>
</tr>
</tbody>
</table>

Independent market research has been conducted to understand the drivers of, and barriers to, undertaking higher-level qualifications for the purpose of developing appropriate marketing strategies. The research results suggest that the targeting of potential higher-level students may need to incorporate job-readiness and employment-related messages while also appealing to desires for personal development and challenge.

TAFE institutes are subsequently utilising this research and emerging Customer Relationship Management (CRM) systems to identify prospective higher-level qualification clients, target marketing campaigns and optimise the successful outcomes of their training.
Summary

When the performance indicators for this medium-term outcome and its supporting short-term outcomes are aggregated, the composite picture is positive. Responsiveness, as measured by satisfaction levels, is enhanced. Graduates, those students likely to enjoy better employment outcomes, are, broadly speaking, more satisfied than before. Employers, the other key client group of the VET system, are, based on available data, more satisfied with the training programs being offered. SQW clients are very satisfied with the services they have received under the program. On top of all this, clients are increasingly taking advantage of the alternative delivery strategies on offer, industry investment in training (as measured by TAFE commercial activity) is up and apprenticeship commencements in skill shortage areas are on the rise.

However, there are two areas of concern. These are: lower student and business client satisfaction levels associated with SkillsTech Australia and lower than expected take up of higher-level training places. It is not surprising to see a lower level of satisfaction with SkillsTech, a new centre that is still expanding and bedding down business, teaching and other practices. The centre is aware of these issues and is implementing resolution strategies.
Increased participation and achievement by industry and individuals in vocational education and training and employment outcomes

What does this outcome mean for the VET system?

The QSP is a wide-ranging policy document. It involves numerous initiatives developed around 24 separate actions grouped under four main themes:

- A training system that works for Queensland
- Training that works for industry and employers
- Training that works for the trades
- Training that works for individuals

The QSP initiatives are designed to engage industry and individuals in a much more responsive and dynamic training system. The QSP is based on the premise that if industry is more proactively involved in the identification, design and delivery of training programs and individuals become more highly skilled our economy will remain competitive in a world increasingly dominated by the exchange of information and global marketplaces. An increase in the skill profile of the labour force translates into increased productivity, something which will become increasingly important as our population ages and the proportion of retirees grows.

In the end, however, the success of the QSP will be dependant upon industry, individuals and other stakeholders being willing to commit to, and actively participate in, the VET reform process.

Performance measures and data sources for this outcome

<table>
<thead>
<tr>
<th>Medium-term outcome</th>
<th>Outcome performance measure(s)</th>
<th>Available data source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased participation and achievement by industry and individuals in vocational education and training and employment outcomes</td>
<td>Increased number and representation of students in training, retention and completion</td>
<td>• DELTA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• STAC</td>
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<tr>
<td></td>
<td></td>
<td>• DEIR</td>
</tr>
</tbody>
</table>

**Increased number and representation of students in training, retention and completion**

Table 3 shows that there has been slight growth (4%) in the overall Queensland VET student population over the three years to 2007-08. This result is not surprising given that overall student numbers tend to be negatively impacted by strong jobs growth. Nonetheless, the most important statistics in the table relate to growth in the number of students successfully participating in the VET system. Success of the system can be measured by student learning...
performance, by the extent to which the training system effectively imparts skills and knowledge to its students. Two fundamental values that strike at the heart of why we train are:

- We want people to be successful in training and in their post-training working life
- We want people to be training in areas of greatest demand

While the overall student population grew only slightly over the three years to 2007-08, there was a substantial rise in the number of students gaining a high priority or skill shortage qualification (up 17%) and an even more substantial rise in the number of students, also studying in skill shortage areas, being assessed as competent in at least 95% of the competencies they undertook (up 51%).

Table 3: Publicly funded VET students1 by achievement and priority level, 2004–05 and 2007–08

<table>
<thead>
<tr>
<th>Year</th>
<th>Priority2</th>
<th>Some or almost no success</th>
<th>Highly successful</th>
<th>Awarded</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>High Priority</td>
<td>43,258</td>
<td>58,286</td>
<td>40,506</td>
<td>142,050</td>
</tr>
<tr>
<td></td>
<td>Low Priority</td>
<td>24,787</td>
<td>55,984</td>
<td>43,907</td>
<td>124,678</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>68,045</td>
<td>14,270</td>
<td>84,413</td>
<td>266,728</td>
</tr>
<tr>
<td>2007-08</td>
<td>High Priority</td>
<td>38,835</td>
<td>88,129</td>
<td>47,416</td>
<td>174,380</td>
</tr>
<tr>
<td></td>
<td>Low Priority</td>
<td>25,562</td>
<td>37,543</td>
<td>39,851</td>
<td>102,956</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>64,397</td>
<td>125,672</td>
<td>87,267</td>
<td>277,336</td>
</tr>
<tr>
<td>Change</td>
<td>High Priority</td>
<td>4,423</td>
<td>29,843</td>
<td>6,910</td>
<td>32,330</td>
</tr>
<tr>
<td></td>
<td>Low Priority</td>
<td>775</td>
<td>18,441</td>
<td>4,056</td>
<td>21,722</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5,198</td>
<td>48,284</td>
<td>10,966</td>
<td>54,448</td>
</tr>
<tr>
<td>Change (%)</td>
<td>High Priority</td>
<td>-10%</td>
<td>51%</td>
<td>17%</td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td>Low Priority</td>
<td>3%</td>
<td>-33%</td>
<td>-9%</td>
<td>-17%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>-5%</td>
<td>10%</td>
<td>3%</td>
<td>4%</td>
</tr>
</tbody>
</table>

1 International students not included
2 High priority students are those studying in skill shortage areas

Many of the skill shortages in this state are in trade occupations. The following three graphs tell a story about Queensland apprenticeships. Figure 11 shows that growth in the number of people commencing an apprenticeship has been considerable in recent years. This growth is partially attributable to the strong performance of the Queensland economy but is also likely to be associated with government intervention strategies such as the development of new brokerage arrangements to link apprentices and employers, the apprentice hotline, the apprentice wage review and a host of marketing campaigns.
The strong growth in apprenticeship commencements has been matched by solid growth in the number of apprentices completing their training (Figure 12). While completions fell slightly in the two years to 2004-05, the number of apprentices completing their trade program increased significantly from that year onwards.

Retention is also an important issue when it comes to apprenticeships. Skills and money are lost when an apprentice leaves before completing their apprenticeship. Research has shown that most cancellations occur in the first year of the program. If an apprentice makes it through the first year there is a strong likelihood the apprentice will complete the apprenticeship. Figure 13 shows that the percentage of apprentices that cancelled in their first year has increased in the years to 2004-05, but has decreased after that. (Cancellations take many months to stabilise and for this reason 2007-08 data is not yet available.)
The rise in the percentage of first year apprentice cancellations is not surprising given recent economic and labour market growth. Success in the labour market tends to be reflected in success in the uptake of apprentices but, conversely, it can also be reflected in a higher number of cancellations as apprentices discard their training wage in favour of a full-time wage. Given this relationship and the continued strength of the Queensland labour market, the fall in the first-year apprentice cancellation rate from 2004-05 onward is particularly noteworthy. This fall may well be attributable to successful government intervention.

**Case study: Apprentice Retention and Completion Strategy**

The Apprentice Retention and Completion Strategy was implemented in response to the Queensland Skills Plan Action 15: Making apprenticeships work better for apprentices and employers.

The strategy aims specifically to improve the retention and completion rates of apprentices in Queensland - with a specific focus on those trade areas that are vital to the continued economic growth of the state’s regions.

Under the strategy the department’s network of regional field officers across Queensland have implemented a program of structured, targeted workplace visits to employers and apprentices to identify and address barriers to the successful completion of apprenticeships. A key focus has been on targeting i) the early stage of apprenticeships where the risks of cancellation are higher and ii) new employers of apprentices. Some 11,700 visits were undertaken during the first full year of the strategy in 2007-08.

The strategy included an overhaul of apprenticeship information technology systems and business processes to enable better data capture, analysis, reporting and evaluation of the performance of the state’s apprenticeship system. Importantly, the analysis has been used to help improve the performance of key partners in the state’s apprenticeship system.

The strategy has been underpinned by a comprehensive staff development framework that has a strong emphasis on the cultural change necessary in moving from what was a strong regulatory focus to one based on brokering solutions and building the capacity of stakeholders.
Skilling Queenslanders for Work

In recognition of the fact that individuals and families at risk of social exclusion often face multiple disadvantages, and to target particularly disadvantaged jobseekers, the Participate in Prosperity (PiP) strategy was implemented in 2007-08 under SQW. PiP aims to assist people facing multiple barriers to employment and focuses on areas where social exclusion is an issue.

PiP projects build the skills and employability of people in, or at risk of, persistent poverty. A key feature of PiP projects is individual case management involving cross-agency collaboration so that clients can access assistance in relation to their other needs. PiP projects are now operating in Logan and the western corridor to Ipswich, the Deception Bay and Caboolture area, and in Townsville and Cairns as part of a whole-of-government indigenous mobility project.

The Indigenous Employment Strategy under SQW focuses strongly on developing the skills needed for work and providing access to jobs for indigenous Queenslanders. The flow-on effects of this assistance include personal and social benefits for individuals and communities.

In addition, Indigenous Employment and Training Support Officers (IETSOs) have been engaged to provide mentoring and support to increase retention and completion rates for indigenous apprentices and trainees. In smaller communities IETSOs are also able to support other indigenous vocational students and indigenous job seekers. Outcomes resulting from the work of IETSOs are now being included in SQW destination surveys conducted by the Office of Economic and Statistical Research (OESR) within Queensland Treasury. Data available for 2006-07 shows that 81.9% of apprentices, trainees and jobseekers assisted by an IESTO were in employment, and 84.2% were in either training and/or employment, 12 months after being assisted.

The success of the customised approach under SQW can also be seen in the results of long-term destination studies conducted by OESR. This research shows that over 60% of participants are in employment 12 months after completion of the program. Given the longitudinal nature of this research, the most recent data available is based on the 2006-07 financial year. Survey results for that year show that the overall percentage of participants in either training and/or employment after 12 months is 71% while the percentage of participants in employment only is 63%.

A recent survey of employers in relation to the Experience Pays Awareness Strategy has shown that while there is awareness of the ageing population and the benefits of older workers, this awareness has not changed the attitudes or recruitment practices of many employers in relation to mature aged people. As a means of breaking down employer preconceptions, employer focus groups have been convened and discussions from these groups have informed the development of a new hard-hitting message for the next iteration of this strategy, centring on labour supply shortages.
Short-term outcomes, performance measures and data sources supporting this medium-term outcome

<table>
<thead>
<tr>
<th>Short-term outcome</th>
<th>Outcome performance measure(s)</th>
<th>Available data source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased access by providers to government resources</td>
<td>Increased access by providers to TAFE facilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased product utilisation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase in number of private providers tendering for and delivering publicly-funded training</td>
<td>VARS, STAC</td>
</tr>
</tbody>
</table>

**Increased access by providers to TAFE facilities**

This outcome sits under Action 1 of the QSP: Growing the Queensland VET sector. It is important to bear in mind that the outcome is designed to provide greater access to under-utilised TAFE facilities and infrastructure as a means of improving asset utilisation in the public VET sector and expanding the opportunities of the private market to deliver training. Where TAFE infrastructure is fully utilised, granting third party access is not possible. For this reason, a fall in third party access is not necessarily a bad outcome. It may actually reflect growth in the capacity of TAFE to more fully utilise its own infrastructure. Figure 14 plots revenue generated from the hire of TAFE facilities in each year from 2004-05 to 2007-08. In 2004-05, facility hire revenue totalled $2.2 million. In 2007-08 this figure reached $2.6 million, an increase of 19% over three years.

![Figure 14: TAFE facility hire revenue](image-url)
Increased product utilisation

Figure 15 plots the number of unique training programs that were accessed by students in each financial year from 2004-05 to 2007-08. The graph shows that in aggregate terms the total number of accessed training programs fell by 11% over the three years to 2007-08. Further investigation reveals that the fall was entirely in accredited courses (down by 34%). The total number of training package qualifications accessed by students actually increased by 5% over this period. The replacement of accredited courses by training package qualifications sometimes results in a number of shorter accredited courses being replaced by a single, lengthier and more comprehensive qualification.

![Figure 15: Total number of training programs accessed](image)

Increase in the number of private providers tendering for and delivering publicly funded training

One indicator of increased access by providers to government resources is through the increase in number of private providers delivering publicly funded training. As Figure 16 shows, the number of non-TAFE providers (almost all of which are private providers) delivering training to apprentices and trainees has grown from 121 providers in 2004-05 to 161 in 2007-08, a rise of 33% in three years.
As Figure 17 demonstrates, this growth in private providers delivering apprenticeship and traineeship training is widespread, having occurred in all regions across the state.

Increases in the number of private providers delivering apprentice and traineeship training are also reflected in increases in the number private providers delivering training in priority industry areas. There were 58 private providers delivering priority industry training in 2004-05. In 2007-08 this figure had increased to 92 (representing growth of nearly 60% over three years).
Summary

Performance indicators associated with increased participation and achievement are largely positive. While overall student numbers may have only increased slightly during the life of the QSP, more Queensland VET students are successfully engaging in the VET system: that is to say, a higher percentage of the Queensland VET student population is successfully completing competencies and qualifications. Apprenticeship commencements and completions are on the rise, TAFE facility hire revenue is up, the majority of SQW clients are in employment and/or training after 12 months and there are a growing number of private training providers delivering User Choice training in Queensland, particularly in areas of identified high industry demand.

These signs point to a VET system in which students and industry are more successfully engaging in the business of training. Some of this success is attributable to the strength of jobs growth in this state (e.g., apprenticeship commencements roughly follow the economic cycle) and some of it is associated with government intervention strategies. A future test of the effectiveness of the QSP reforms will be just what the statistics are telling us in spite of the level of economic activity. Hopefully the QSP reforms have laid a foundation that facilitates better performance of the VET sector regardless of the prevailing economic and labour market environment.
Increased sector and industry leadership and ownership in a greater array of skilling strategies

What does this outcome mean for the VET system?

Creating the skilled workforce that Queensland employers need is a shared responsibility. Training more people often does not solve skill shortages – indeed, government alone cannot fund all the necessary training. Sometimes skills deficits are caused by factors other than an inadequate supply of trained people. Sometimes the solution to the lack of skills lies elsewhere. The causes of skill shortages are many and varied. Consequently, resolution strategies are many and varied. One size does not fit all. The most effective method for addressing skill shortages relies on co-operation between industry and government, where these and other key stakeholders work together to develop tailored workforce attraction, retention and development strategies.

Performance measures and data sources for this outcome

<table>
<thead>
<tr>
<th>Medium-term outcome</th>
<th>Outcome performance measure(s)</th>
<th>Available data source(s)</th>
</tr>
</thead>
</table>
| Increased sector and industry leadership and ownership in a greater array of skilling strategies | Increased industry investment in workforce development | • Industry development  
• DEIR |

Increased industry investment in workforce development

Industry engagement strategies

Prior to January 2007, industry training advisory bodies (ITABs) were funded by DETA to provide advice to the department in relation to industry skill needs.

ITABs were originally jointly funded by the Commonwealth and state governments. However, in 2002-03 the Commonwealth reduced its funding by 70% and ceased it altogether the following year. The Queensland Government maintained its level of funding until the end of 2006.

Based on feedback from employers about the existing ITAB ‘industry advice’ model – for example, employers expressed concerns about a lack of knowledge and/or presence about their ITAB – the QSP outlined a series of strategies based on a broader ‘industry engagement’ model. Industry was no longer simply there to be consulted regarding skill needs. It was to be involved in providing skilling solutions.

The new industry engagement arrangements were progressively introduced from 1 July 2007. They include three centres of excellence, five industry skills alliances, two industry-government skilling partnerships and six direct industry engagement arrangements. In addition, another two centres of excellence have been operational prior to the QSP. Each of these arrangements is explained in Attachment 6.
Provision of strategic industry advice

A review of the industry intelligence provided under these new arrangements suggests that the additional requirements are driving positive change. Like the previous Industry Training Plans submitted by the ITABs, the new industry engagement entities submit annual reports to DETA containing information relating to skills in demand. The reports submitted to date represent a more strategic analysis of the skilling needs in each industry. The reports are expanded in scope and include the full range of attraction, development and retention issues and strategies for each industry.

Case study: Queensland Automotive Skills Alliance

In their 200–2010 Industry Skills Plan, the Queensland Automotive Skills Alliance outlined a broad range of issues impacting on the current and future skill needs of the automotive industry. In response to these issues, the alliance formulated targeted strategies designed to attract and skill new entrants as well as develop and retain existing workers within the automotive industry. Initiatives included:

- a comprehensive marketing campaign to promote the automotive industry as a career destination;
- working in partnership with employers to foster a strong training culture and best practice career path strategies;
- improving access to RPL;
- increasing higher-level technical skills development;
- expanding the school to industry links programs to further develop school to work transitions; and
- targeting key priority population groups to increase workforce participation of those currently under-represented including women, migrants, indigenous, the mature aged and people with a disability.

Taking a lead role

Industry is also instigating a number of targeted initiatives to address some of the more complex issues, either in collaboration with key industry stakeholders or in partnership with government. Overall, the new arrangements appear to be driving stronger industry ownership of the skills agenda and a renewed willingness on the part of industry to explore and lead the implementation of a range of resolution strategies.

Case study: Construction Skills Queensland

Construction Skills Queensland, the centre of excellence for the building and construction industry, is implementing a comprehensive Apprentice Retention and Support Strategy pilot to improve completion rates of apprentices and trainees in the industry.

The proposed pilot, which is separate to the Apprentice Retention and Completion Strategy, is being implemented in partnership with DETA and includes the engagement of Apprentice/Trainee Support Officers to work with all construction employers, apprentices and trainees in a defined pilot area to address the issues that lead to employment separation.

The support officers will provide direct brokerage advice and assistance regarding training delivery and support to employers, apprentices and trainees in the workplace. They will also establish networks with local service providers that provide community-based support for people in need of counselling services.

The centre has also implemented a range of strategies to develop entry-level skills for jobseekers and to assist in the job-matching process. The establishment of industry-relevant pre-employment programs and employability initiatives and the development of a one-stop shop for companies seeking advice on workforce planning and development is addressing the challenge for industry to attract and retain workers.
Regional networks

The development of regional networks is a key requirement of the new industry engagement arrangements. Discussions with the contracted industry bodies indicate most are linking with and capitalising on existing industry networks while others are still in the process of formalising these linkages. Given that one of the major criticisms of the previous ITAB model was the lack of a regional presence, the strength and utilisation of these networks will be critical to the success of the new arrangements.

### Case study: Manufacturing Skills Queensland

The centre of excellence for manufacturing and engineering, Manufacturing Skills Queensland, is establishing comprehensive regional networks comprising nine regional skills groups that meet quarterly. The groups are based in Cairns, Townsville, Mt Isa, Mackay, Rockhampton, Gladstone, Wide Bay-Burnett, South West Queensland and South East Queensland. Manufacturing Skills Queensland will link with existing regional networks that are already in place such as the Gladstone Engineering Alliance and Mackay Area Industry Network which include members from industry, government, registered training organisations, group training organisations, industry associations and schools. The regional sector networks will assist Manufacturing Skills Queensland in addressing the skills formation and skills development needs of the respective regions.

Additionally, Manufacturing Skills Queensland is developing Industry Consultative Groups for each of the sectors that make up manufacturing including engineering; machinery and equipment; light metals; electronics equipment; marine; textiles, clothing and footwear; process manufacturing; furnishing; and food processing.

Sector representatives meet quarterly and come from across the state. The role of these Industry Consultative Groups is to influence future skill and training needs; develop strategic directions for industry training and skills development within their sector; facilitate the implementation of strategies through existing groups, networks or activities; and encourage stakeholders to work together in relation to identifying long-term solutions to workplace planning issues.

Linkages with schools

Strengthening linkages with schools also features as a new requirement in the new contracts. Evidence indicates that most industries are embracing this and developing stronger school linkages in efforts designed to increase their intake of new workers. Given the ageing workforce and the skill and labour shortages being experienced across many industries, there is a growing realisation amongst industry that it must target school leavers to boost workforce numbers. These linkages have the potential to significantly improve school to work transitions and provide more choice to school students so their interests and abilities can be better matched with the wide range of options available.
Case study: Salute to Excellence awards program

The Queensland Tourism Industry Council Skills Link (QTIC Skills Link), the skills alliance for the tourism and hospitality industry, is driving significant partnerships between schools and employers to provide school students and teachers with valuable industry experience and to promote careers within the industry. One initiative is their annual Salute to Excellence awards program. The program recognises and celebrates the achievements of secondary school students engaged in tourism and hospitality training within Queensland, whether through secondary schools, stand-alone VET or school-based apprenticeships and traineeships delivered in partnership with industry. Salute to Excellence also enables students and teachers to establish industry/employer partnerships, gain assistance with career aspirations and hear success stories from industry professionals in hospitality and tourism.

Apprentices and trainees in training

In addition to adopting a leadership role in relation to skilling strategies, industry is also heavily investing in apprenticeships and traineeships. Figure 18 plots the numbers of apprentices and trainees in training in the five years to 2008. What is evident from the time series is that both groups have grown over this period. Apprenticeship in-training numbers grew more substantially, increasing from 32,172 in 2004 to 51,658 in 2008, an increase of 61% over the period. This strong growth coincides with implementation of the QSP. Apprenticeship commencements tell a similar story, more than doubling in the six years to 2007-08, from 12,351 annual commencements to 27,475. While it is fair to say, contrary to most other training, apprenticeship commencements tend to directly correlate with the level of economic activity, it is also true initiatives such as the Apprentice Retention and Completion Strategy and apprentice hotline are helping to boost the number of apprentices.

Figure 18: Apprentices and trainees in training as at 30 June in each calendar year

Evidence of industry investment is also apparent in the growth in leveraged arrangements. Leveraged arrangements cover training where a combination of government funding and non-government funding are used to fund the training delivered. As Figure 19 shows, leveraged students have grown in each of the years since 2004-05, the most significant growth occurring in the last financial year.
Skilling Queenslanders for Work

Under the Experience Pays Awareness Strategy partnerships have been formed with key industry organisations (including the National Retail Association, Australian Industry Group and the Local Government Association of Queensland) and union groups for the purpose of delivering the strategy face to face. Under the strategy, eight Industry Liaison Officers are located within these organisations and are developing partnerships with businesses, referring businesses and individuals to SSQ to access RPL, working closely with skills formation strategy project managers, and referring businesses who want to up-skill workers to training organisations or SSQ.

Research and reports have shown that many businesses are now investing time, money and effort to attract and retain the right workers. For example, businesses in retail, transport and manufacturing have already employed, or are in the process of employing, HR specialists to specifically develop policies on attracting, retraining and retaining older workers in spite of the widespread employer preconceptions that need to be altered in relation to this cohort.

Case study: MacMahons Holdings Ltd

MacMahons Holdings Ltd, a large Australian contractor operating in the civil construction and mining sectors, has been contracted to construct water storage facilities at the proposed Wyralong Dam near Beaudesert, south of Brisbane. One of the dozen regionally- or remotely-based Indigenous Employment and Training Managers (IETMs) employed under the SQW program is working with MacMahons and the Mununjali people to maximise employment opportunities for local indigenous people in relation to this project.

In September 2007 MacMahons Holdings recruited eight indigenous trainees in their first intake. Of these, six completed their traineeship after only seven months, gaining a Certificate II in Civil Construction, and are still employed at MacMahons while completing a Certificate III in Plant Operations. MacMahons have committed to employing a further nine indigenous trainees during the next stage of the project.

The success of the project has stimulated the interest of other indigenous groups to participate in employment and training.

Figure 19: Certificate 1-and-above leveraged students (international students not included)
IETMs identify and create sustainable employment and training opportunities for local indigenous people in specific regions and assist in implementing the Government’s Indigenous Employment Policy for Queensland Government Building and Civil Construction Projects (20% Policy). IETMs co-ordinate and implement regional employment and training plans by working closely with IETSOs; Aboriginal and Torres Strait Islander communities and organisations; local, state and Commonwealth government agencies; registered training organisations; and industry.

The Queensland Government has a memorandum of understanding with the Queensland Resource Council (QRC) to increase indigenous employment and enterprise development in the mining sector. The QRC has agreed to collaborate on a joint initiative for these purposes in North West Queensland. A scoping report identifying potential projects has been circulated to all participating agencies, industry and community organisations.

**Case study: CivSkills**

The SEQ Infrastructure Plan identifies significant infrastructure projects in the southeast corner over the next 20 years. These projects will result in strong employment demand in the civil construction industry. In addition, the Ipswich-Logan corridor has pockets of social exclusion where people are unemployed or unattached to the labour market.

To meet labour shortages and the demand for skills while simultaneously addressing social exclusion, DEIR has developed an innovative project to assist disadvantaged young people to gain construction jobs. The project is called CivSkills and represents a partnership involving DEIR, Boys Town, TAFE and Construction Skills Queensland. Under the project, DEIR has provided $150,000 and leveraged a further $495,000 from partner organisations to assist 100 young people dispersed across several intakes over the year.

Under the project, highly disadvantaged young people - from Ipswich and Logan - who are disengaged from school, training and/or work, will undertake an initial assessment and be involved in development of their individual case management plan. Participants will complete a construction industry Blue Card (delivered through TAFE) and the Certificate I in Resource and Infrastructure Operations along with competencies from the Certificate II in Civil Construction. Program participants will also undertake workplace visits, work experience and plant operation simulator training through the Construction Training Centre, and attend guest industry presentations. The aim of the project is to equip participants with the necessary skills to obtain entry-level positions within the construction industry, with possible progression to an apprenticeship or traineeship. All young people undertaking the program will receive post-participation support for up to six months to monitor their progress. Participants who do not obtain sustainable employment upon completion of the project will continue to receive additional job search and other support as required.
Short-term outcomes, performance measures and data sources supporting this medium-term outcome

<table>
<thead>
<tr>
<th>Short-term outcome</th>
<th>Outcome performance measure(s)</th>
<th>Available data source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved willingness and capacity to promote and collaborate with stakeholders</td>
<td>Increase in industry partnerships and engagement</td>
<td>• Industry Development</td>
</tr>
<tr>
<td>Increased recognition by industry of the need for it to lead and own workforce</td>
<td>Demand for skills formation strategies</td>
<td>• Industry Development</td>
</tr>
<tr>
<td>Increased confidence in the new industry engagement and reform strategies</td>
<td>Amount of industry investment in the new strategies</td>
<td>• Industry Development</td>
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*Increase in industry partnerships and engagement*

This performance measure was covered earlier in this section (see increased industry investment in workforce development).

*Demand for skills formation strategies*

SFSs were adopted by DETA in response to skill shortages and the high demand these were placing on the training system. The SFS concept is based on international research and recognises that skill shortages are not necessarily due to insufficient training but often relate to workforce attraction, retention and development issues. The SFS approach revolves around industry, community and other relevant VET stakeholders co-operating to identify workforce issues and subsequently develop strategies to address these for the purpose of nurturing a skills ecosystem.

Since introduction of the SFS initiative as a pilot under SmartVET (the major Queensland VET policy prior to the QSP), interest from industries and other departments has continued to grow. Growth in the demand for SFSs is evidenced by:

- implementation of a further 26 SFSs under the QSP;
- requests by industry and agencies for four SFSs over and above those identified in the QSP;
- financial support contributed by the Department of Tourism, Regional Development and Industry to nine strategies;
- financial support provided by the Department of Child Safety to the Child Protection SFS;
- financial support provided by the Department of Communities for the Childcare SFS;
- financial support provided by Queensland Health for the Health SFS; and
- adoption of the SFS framework by the Department of Primary Industries and Fisheries and by Construction Skills Queensland to roll out the strategy across the state in their respective industries.

In addition to growing industry support, the SFS concept is recognised across government and by the Auditor-General as an important strategy in supporting industry to tackle skill shortages in Queensland.
**Case study: Condamine Electric**

The last time Dalby firm Condamine Electric advertised in the local paper for tradespeople they did not receive a single application. But recently the firm received 16 applications – one from as far away as Melbourne – without even having to advertise. This amazing turnaround did not happen by chance.

Instead of lamenting the lack of applications in relation to their previous advertisement Condamine Electric, in conjunction with a variety of other local businesses, became involved with the Western Downs Skills Formation Strategy which is making a real difference to the way the local community tackles the unique challenges faced by rural Queensland businesses.

Condamine Electric Managing Director, Gavin Walton, attributes the company’s recent recruitment success directly to the collaborative work local businesses are undertaking to attract and retain people to the region under the skills formation strategy.

“The strategy is great because it raises awareness and brings like businesses together to talk about issues”, Mr Walton said.

“The local business community has realised that working together and raising our collective profile within our community is the first step in retaining skilled labour in the area and getting local students interested in local trade.”

**Amount of industry investment in the new industry engagement and reform strategies**

In comparison to previous ITAB contracts, the new engagement agreements incorporate considerably more deliverables, particularly in terms of industry taking greater responsibility for meeting its own skilling needs. For this reason, comparisons of government investment in the two models for the purpose of showing efficiency gains are difficult. Furthermore, the newness of the industry engagement arrangements means that, in relation to the centres of excellence, industry contributions that will allow these arrangements to continue with minimal government assistance have yet to be secured. Nonetheless, the centre of excellence contracts with DETA require submission of a three-year business plan that stipulates:

- industry contributions and fee-for-service targets;
- that the centre of excellence must ensure financial contributions are received from industry participants in line with budget forecasts identified in the business plan; and
- that the centre of excellence must achieve a sustainable range of commercial services based on the provision of activities identified in the business plan.

These matters are discussed at meetings of the centre of excellence boards and committees on which the department is represented. Progress toward meeting these financial requirements will be formally evaluated as part of the final QSP evaluation.

Further to the demand for SFSs, another means of measuring the extent to which SFSs have successfully engaged stakeholders to manage their own workforce attraction and retention strategies is the preparedness of stakeholders to assume responsibility for the ongoing implementation of the strategy. Obviously, if the relevant stakeholders to a strategy are fully responsible for its ongoing implementation these stakeholders are also funding the strategy. The table below lists SFSs and shows which ones have already transitioned to the care of industry and/or community stakeholders.
### Table 4: Skills formation strategies

<table>
<thead>
<tr>
<th>QSP SFSs</th>
<th>Transitioned QSP SFSs</th>
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<tbody>
<tr>
<td>Film, TV and Digital Content</td>
<td>Civil Construction and Infrastructure</td>
</tr>
<tr>
<td>Food Processing</td>
<td>Tourism (State-wide)</td>
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<tr>
<td>Information and Communications Technology</td>
<td>Advanced Manufacturing – Western Corridor</td>
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<tr>
<td>Local Government</td>
<td>Horticulture – Bundaberg Region</td>
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<tr>
<td>Biotechnology</td>
<td>Transport – Moving People</td>
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<tr>
<td>Tourism Regional – Sunshine Coast</td>
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<tr>
<td>Health</td>
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<td>Aviation</td>
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<td>Agriculture – Inland Burnett</td>
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<td>Transport – Road</td>
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<td>Mining – Bowen Basin</td>
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<td>Emerald Community</td>
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<td>Sport and Recreation</td>
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<tr>
<td>Aged Care – Toowoomba</td>
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<td>Atherton Tablelands</td>
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<tr>
<td>Manufacturing (Brisbane South) – Machinery, Equipment and Metal Products</td>
<td>SmartVET SFSs</td>
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<tr>
<td>Heavy Vehicle Repairs</td>
<td>Transitioned SmartVET SFSs</td>
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<tr>
<td>Child Protection</td>
<td>Tourism Regional – Whitsunday</td>
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<tr>
<td>Fibre Composites</td>
<td>Mining – North West</td>
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<tr>
<td>Rail Manufacturing</td>
<td>Marine Tourism – Whitsunday</td>
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<tr>
<td>Tourism – Fraser Coast</td>
<td>Agriculture – Lockyer Valley</td>
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<td></td>
<td>Lower Golf Community</td>
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<td></td>
<td>Boat Building – Gold Coast</td>
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<td></td>
<td>Pharmaceuticals and Nutraceuticals</td>
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<td>Health – Northlakes</td>
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<td></td>
<td>Aged Care</td>
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<td></td>
<td>Marine Tourism – Cairns</td>
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<td></td>
<td>Tourism Regional – Mackay</td>
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<tr>
<td></td>
<td>Western Downs Community</td>
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<tr>
<td></td>
<td>Construction, Engineering, Mineral Processing – Townsville Region</td>
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<td></td>
<td>Childcare</td>
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<td>Tourism Regional – Bundaberg</td>
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<td>Electrotechnology</td>
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Summary

There is a mounting body of evidence suggesting that the old industry advice model that operated under the previous ITAB structure is transitioning to a more comprehensive and vibrant industry engagement model. Industry engagement mechanisms seem to be effective in terms of industry taking greater ownership of, and a lead role in, the development of workforce attraction, development and retention strategies. Industry is utilising existing networks to gather labour market and training intelligence. It is then reporting this information under new arrangements that represent a more strategic analysis of the workforce issues and training requirements in each industry. Having identified these workforce issues, industry is subsequently instigating targeted resolution strategies and is partnering with schools to strengthen the transition from education to work. In conjunction with these new industry engagement strategies, skills formation strategies are expanding throughout the state and a growing number of industries and communities are signalling their endorsement of these strategies by assuming administrative and financial management responsibilities.

Encouraging as these signs are, an internal review of the industry engagement strategies has identified improvement initiatives that are either underway or planned for implementation (see Attachment 5). These areas of improvement cover greater clarity around contractual and reporting arrangements, increasing industry contributions in relation to some industry bodies, identifying perceived conflicts of interest and other issues.
Efficiency

The QSP is developing training structures and fostering organisational cultures that facilitate an industry responsive VET system and improved student training and post-training outcomes.

This success has been influenced by the QSP actions that have required additional funding or internal redirection of existing funding.

It can be shown that in training outcome terms, the successes facilitated by the QSP have been made in an environment of improved productivity.

There is no single measure that can adequately gauge improved VET productivity by synthesising multiple system outputs and outcomes.

In this analysis, a triangulation of three methods will be used to gauge productivity. These three methods make the best use of available data and range from a relatively simple cost per input (annual hour curriculum) to a more advanced methodology that scores the efficiency of using financial resources to produce two or three ‘groups’ of outputs. While the efficiency measures used are not exhaustive, it is believed that they are most suitable given the constraints of available performance data.

Adjusted cost per annual hour curriculum

The first method relies upon adjusted cost per annual hour curriculum. Figure 20 is based upon the latest nationally reported calendar year data (from NCVER) and demonstrates that the relative cost (in real dollar terms) per annual hour curriculum has fallen 6.7%, from $15.22 in 2004 to $14.24 in 2007. Note that the unit cost actually increased 7.9% from what was recorded in 2006 ($13.20).

Figure 20: Adjusted government recurrent expenditure per publicly funded annual hour curriculum
Comparison of expenditure per unit of competency studied with a notional budget per unit of competency studied.

This second measure recognises that the simple unit cost measure used above does not adequately reflect the fundamental shifts in the quality and intensity of training that have occurred under the QSP. The training envelope has shifted. More students are undertaking high-cost units of competency. To demonstrate this, the recently formulated VET Pricing Model has been applied to all units of competency delivered by the publicly funded VET system in each of the years covered by the QSP. The graph below shows that while the numbers of low-cost units of competency delivered have remained steady (just over 900,000 units per annum over the QSP period), the number of high-cost units of competency undertaken has increased from 790,000 in 2004-05 to 900,000 in 2007-08.

Figure 21: Number of units of competency delivered by VET Pricing Model category

In addition to students undertaking more costly units of competency, students are less likely to withdraw from training and increasingly likely to achieve competence or an award. As a consequence, more students are staying in class to successfully complete their units of competency, a situation which has ultimately led to the consumption of more direct and indirect teaching resources.

In addition to measuring cost variances between competencies, the VET Pricing Model is sensitive to the impact on resources caused by higher attendance patterns. Applying the model to training actually delivered from 2004-05 to 2007-08 allows a notional unit price to fund that training to be constructed. Similarly the expenditure per competency can be calculated from expenditure data (adjusted for inflation). Given that the notional unit price relies upon a pricing model developed for only one part of VET operation, comparison between notional price per competency and expenditure per competency is made possible by indexing values to ‘1’ in the 2004-05 period (see Figure 22).
This exercise demonstrates that since 2004-05 the notional unit price index has exceeded the adjusted expenditure index, indicating that the system has become more efficient at delivering training compared to the VET system that existed in 2004-05. However, the efficiency gain has decreased, a trend supported by other analyses in this section.

Data Envelopment Analysis

The Data Envelopment Analysis (DEA) technique is included as the previous methods do not adequately reflect the outputs of the system. The method, which relies upon linear programming techniques, was chosen as it is designed to score the relative efficiency of similar units having multiple outputs.

DEA techniques work best in studies where there are relatively large numbers of productive units to rank. Given that there is only four years of data covered by the QSP and that a major thrust is to improve the positioning and services provided by TAFE, a modified version of DEA techniques have been applied in this evaluation. The approach used here relies on ranking the performance of each institute in each financial year in terms of the suite and quantum of training outputs achieved for expenditure. The resultant institute scores (weighted for the institute's relative size of operation) are summed for each financial year and compared. Improving aggregate scores reflect improvements in efficiency.

The DEA technique is undertaken in three ‘modes’:

- A Constant Return to Scale (CRS) mode that assumes that a set of productive units will demonstrate a ‘fixed’ relationship between increasing inputs and increasing outputs. This test is a ‘hard marker’ and assumes that all productive units have the capability and freedom of action to expand to achieve long-run economies of scale.
- A Variable Return to Scale (VRS) mode that reflects increasing size of operation as having a changing effect on outputs due to factors experienced by large public enterprises such as inefficiencies that occur through political requirements to operate in thin markets.
- A Scale Efficiency mode that identifies the degree to which productive units have achieved the best level of scale efficiency that is exhibited among the productive units studied.
- The graphs below demonstrate the results of the analysis at a two-output level (including successful students who did not receive an award and awarded students (up to AQF Certificate 2 level), and awarded students (Certificate 3 and above)) and at a three-output...
level (including successful students who did not receive an award, awarded students (up to AQF Certificate 2 level), and awarded students (Certificate 3 and above)).

Both levels of analysis demonstrate similar trends in that:

- The CRS test indicates that while the collective efficiency score of TAFE institutes is improving over the 2004-05 to 2007-08 period, efficiency primarily peaked in 2005-06, fell back in 2006-07 and improved again in 2007-08.
- The VRS test suggests that efficiency is markedly improving in terms of an evaluation paradigm that accepts increasing returns to scale up until an optimum size of operation and decreasing returns to scale after that point.
- The scale efficiency test indicates that an institute's efficiency in terms of the size of its operations was highest in 2005-06 and declined in the 2006-07 and 2007-08.
This pattern supports the notion that while system efficiency has improved over the period of the QSP, it has done so initially through utilisation of spare capacity. With the formation of large specialist institutes and their associated teething issues, the system increasingly reflects one dominated by large production units exhibiting ‘diseconomies’ of scale.

The challenge now is to build upon previous efficiency gains by deriving greater utility and efficiency from a TAFE network comprised of larger specialised and amalgamated institutes.
Business improvements

The areas for improvement identified in this formative stage of the evaluation process have been gauged from external and internal reviews that were conducted over several actions, and interviews with various action officers and other stakeholders.

In general, while the separate reviews of actions present a range of specific business improvement opportunities, a comparison of the overall themes of these reviews suggests that at a holistic level there are a number of business improvement opportunities specific to organisational change management that could influence the ongoing success of the QSP and similar departmental initiatives. While some of these business improvement opportunities reflect contemporary organisation change management theory already being practiced within parts of the training portfolio, it is worthwhile to highlight them here.

1. **Management framework**  While the QSP and its overall aims have been publicised and described in various documents, a management framework that links the policy drivers, subsequent actions and desired outcomes is not well promulgated within the training portfolio. The Logical Framework mapping used in this evaluation (and that resulted from a consensus of executives) is a useful representation of the intent of the QSP. It should be distributed widely to operatives charged with implementing actions to promote clarity of role, reduce uncertainty and foster greater ownership of their part of the initiative.

2. **Where the best ‘wins’ seem to be occurring**  Considerable success seems to be occurring where specific actions are being carried out by small task-oriented groups operating under their own banner in an ‘off line’ or ‘near off line’ capacity. These groups have a greater ability to synergise with other actions, some of which are not being conducted as formal projects. The organic nature of some of these projects should be recognised and encouraged through celebration of successes, best practice sharing, movement of staff and other mechanisms. Future QSP actions should recognise the creation of these task-specific and appropriately staffed groups.

3. **Many small wins**  A full inventory of what has occurred directly or indirectly as part of the QSP would show that the successes are being created by many small wins rather than a few large-scale achievements. These small wins may not be directly linked to changes in outputs and outcomes but collectively reflect incremental changes in attitudes and behaviours. In addition, the culmination of the small wins represents the development of structures that will support continued successes into the future. These small wins need to be recognised, fostered and celebrated.

4. **Change management issues**  These issues exist where attitudes, behaviours and cultures have been institutionalised in large pre-existing organisational structures. While there is evidence of small-scale success stories, permanent macro-level cultural change to the VET system may take longer than the timeframe of the QSP 2006. In light of this, overall expectations of what is possible should be adjusted accordingly.

5. **Uncertainty**  Due to the innovative nature of the QSP actions, many staff are not comfortable with the uncertainties that occur when dealing with unstructured problems where the immediate desired outcomes are not clearly defined. This situation, if not addressed, often leads to staff doing just enough to meet their QSP-related performance criteria and the system missing out on the gains that would occur through innovation. To address these uncertainties, the training portfolio needs to celebrate managed risk taking
and genuine attempts at improvement (even if these fail) as an essential step prior to bedding down new processes during a period of major structural change.

6. **Monitoring and Evaluation Process** The monitoring process for the QSP is well established and resourced and provides a good gauge of the progress towards milestones. This is complemented by the more specific action-level evaluation and review processes that are undertaken externally or internally. It is found that, given the experimental nature of the actions, the reviews provide an excellent breakpoint for reflection and focussing on any needed change of direction. These reviews outline the organisational issues affecting the QSP and are a useful means to place those issues before the attention of management. The value of these reviews as part of the process should be recognised.