

TRADE TRAINING CENTRES IN SCHOOLS PROGRAM

INDEPENDENT REVIEW 2014

The Hon Sussan Ley MP
Assistant Minister for Education
Parliament House
CANBERRA
ACT 2600

Dear Minister

Independent Review of the Trade Training Centres in Schools Program

I am pleased to provide to you the report of the Independent Review of the Trade Training Centres in Schools Program.

While the project description for this review suggested it would principally be a desk-top review, concerns about the paucity of data and the need to engage with employer and industry groups, principals, head teachers and students led me to follow a different approach.

This 30 day review examined the utilisation and performance of TTCs, including whether they have met expectations. It focuses on the outcomes of the 217 centres operational in 2012 and identifies the strengths and weaknesses of the program. It reports on best practices and makes suggestions about how to maximise the value of the program over the stipulated reporting period of the next 10 years (noting that the scope for change is limited given the stage the program has reached and that funding agreements have already been signed or are in the process of being finalised).

I have been impressed by the willingness of a wide range of stakeholders to engage on this review and to provide their frank assessment of the issues, including:

- 126 schools that participated in the Review survey
- employer and industry groups who willingly gave their time to provide their assessment of the performance of trade training centres
- education authorities, principals and head teachers who were unfailingly patient in the interviews on outcomes and areas for improvement.

Departmental staff answered over 100 detailed information requests and provided secretariat support for the school visits and other consultations. Helen McLaren, Deb Barton and Louise Dooley bore the weight of my requests for evidence.

The conclusions reached in this report are mine.

I am pleased to submit my report for your consideration.

Yours sincerely



Patricia Scott
Independent Reviewer

17 October 2014

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Executive Summary

Introduction

Background on Trade Training Centres in Schools Program

Commonwealth expenditure on the Trade Training Centres in Schools Program (TTCs Program) is expected to be \$1.4b (2008-2017). This will fund 511 TTCs.

The program has closed for new applications. Successful applicants for Round 5 Phase 1 (the last Round) have been announced; the Department has settled 128 funding agreements and is settling a further eight funding agreements. The Department will disperse the funds in accordance with the terms and conditions of the relevant funding agreements.

The TTC initiative operates as a partnership program. The partnership is between the Commonwealth Government and state and territory education departments or state based education authorities representing the Catholic and independent schools sectors. The Commonwealth has signed overarching funding agreements with state and territory governments, and Block Grant Authorities (which are the conduits for both the Catholic and independent sectors managing the TTC funding.)

Essentially, the Commonwealth Government provided funding for:

1. new or refurbished buildings
2. trades equipment for the centres
3. a small amount for administration costs for the school authorities to assist with their administration of the TTC Program.

Capital funding from the Commonwealth is sometimes supplemented by capital funding from the school or the owning school authority or in some cases a third party (e.g. TAFE).

The Commonwealth Government funding for the TTCs explicitly did not cover recurrent funding requirements. There are precedents for this. Recurrent costs under the program (teachers' salaries, utility costs, consumables, transport costs, insurance and so on) are to be met by the school or the school authority (state or territory government, or Catholic Education Office).

Of the approximately 391,000 VET in Schools enrolments, 5.5 per cent are through a TTC.

Just over 1200 indoor workshops and classrooms have been built or refurbished to date. Thirty nine per cent of the funding by project in value terms went to new buildings only; approximately 50 per cent a mix of new buildings and refurbishments; and 12 per cent to refurbishments only.

Refurbishments were principally in the state sector; 81 per cent of all refurbishments were in the Government sector with NSW accounting for about two-thirds of the share.

Chapter 1 provides a Snapshot of TTCs and Appendix 1 a short history of the program.

Scope of Review

This 30 day independent Review examined the utilisation and performance of TTCs, including whether they have met expectations. It focuses on the 217 centres operational in 2012 and identifies the strengths and weaknesses of the program¹. This report identifies best practices and makes suggestions about how to maximise the value of the program over the stipulated reporting period of the next 10 years (noting that the scope for change is limited given the stage the program has reached and that funding agreements have already been signed or are in the process of being finalised). Chapter 2 details the scope of Review.

Early key changes to the TTC Initiative

The terms of reference for the review include an examination of performance against expectations. There were two early changes to the TTC initiative that involved shifting expectations.

1. Not every school would get a TTC. Some schools would get a TTC in their own right, but others could form a cluster for a TTC. Additional funding to the original budget allocation of \$2.5b would have been required for all eligible schools to have a TTC based on the cost of establishing the required training infrastructure over the early years of the program.
2. The early focus of the government on Certificate III qualifications was not appropriate for most TTCs.

Clusters

It was quickly recognised by the incoming Labor Government that while its election commitment was to have a TTC in all schools, this was not sensible – some schools are too small, others were not interested and there are economies of scale in concentrating capital funds in larger schools.

As a result, the former government rolled out the program allowing both individual schools and school clusters to apply for funding.

- Of the total 511 TTCs funded, 263 (51.5 per cent) go to individual schools in their own right (standalone TTCs) and 248 (48.5 per cent) are in clusters.
- Of the 217 TTCs operational in 2012, 86 (39.6 per cent) are stand alone and 131 (60.4 per cent) are in clusters.

It is worth noting that some standalone TTCs do enrol students from other schools in courses even though they are not a cluster school (and some cluster schools extend their enrolments in the TTC to students beyond the cluster schools).

¹ There are an additional two schools that are non-conforming TTCs and are under investigation.

An early shift away from Certificate III qualifications

The initial expectation of the program under the former government was that students would undertake courses up to and including Certificate III. However, the general consensus of principals, head teachers, education authorities and employer groups is that the completion of Certificate III courses outside an Australian School-based Apprenticeship (ASbA) is impractical for most schools because of the substantial requirements for structured workplace learning and need for students to make up for missed school classes in their own time.

The great bulk of students undertaking approved courses in TTCs are studying for Certificate I and II (93 per cent based on 2012 enrolments). Funding agreements were varied to support this change to the training delivery. However, there are some schools that offer units in Certificate III competencies outside ASbAs.

Performance against the program's objectives

The objectives of the program are to help:

- support the achievement of a national Year 12 or equivalent attainment rate of 90 per cent by 2015
- address skills shortages in traditional trades and other eligible occupations by:
 - improving student access to trade training facilities that meet industry standards
 - improving the quality of schooling offered to secondary students undertaking trade related pathways
 - assisting young people to make a successful transition from school to work or to further education and training, and
 - supporting COAG's goal to halve the gap between Aboriginal and Torres Strait Islander and other students in Year 12 or equivalent attainment rates by 2020.

The Commonwealth Department of Education has encountered difficulties in converting these broad objectives into meaningful Key Performance Indicators (KPIs). There is a substantial mismatch between the stated program objectives and the availability of data to assess performance against those objectives.

The KPI problem was compounded by the overwhelming initial focus of the Department on speedy and effective delivery of program funding reflecting the focus of the previous government. This has resulted in the Department treating this program largely as an infrastructure rather than a training initiative.

There is some objective data on enrolments, school and course retention rates, and completion rates, but less data on the destination of students following school, and the data on post-school outcomes is only available with a considerable lag (see Chapter 3). Directly attributing any improvement or deterioration in these variables to the establishment of a TTC (or TTCs more broadly) through the use of aggregate econometric analysis is impractical as there are simply too few observation points to filter out all the other factors at play (changes in minimum school leaving age, improving or deteriorating labour markets, etc.). The absence of a unique student identifier for school students means that the data that might reveal the effects of the program are not available.

While an econometric analysis is not feasible, the state and territory education departments, the Catholic Education Commissions, the Independent Schools Association, the principals interviewed, the Annual Activity Reports of TTCs and respondents to the school surveys conducted as part of this review, all reported improvements against one or more of the available indicators: enrolments, retentions, completions, post-school training and employment pathways.

In summary, the survey of schools shows around two-thirds of TTCs operational in 2012 reported that the TTCs had a positive impact on enrolments, retentions, completions, post-school training and employment pathways.

Inconclusive material on the extent of the impact

Schools surveyed were usually only able to provide anecdotal material on the extent of the impact because many factors are at play. The body of the report (Chapter 3) provides some broad measures of performance but again it is not possible to attribute specific results to TTCs with any confidence.

Academic Studies

Australian academic studies and consultant reports have examined the impact of VET in Schools rather than TTCs specifically. The table below provides a brief summary of what a selection of recent reports find in relation to the impact of VET in Schools on Year 12 completion and engagement in post school study and employment. For more information, see Chapter 3.

Table: Selected recent Australian research on the impact of VET in Schools on Year 12 completion and engagement in post school study and employment

	<i>School completion</i>	<i>Transition to further study and employment</i>
Polidano and Tabasso 2013	VET in School has a large positive impact, particularly if it includes workplace learning	VET in School has a significant positive impact on transitions to further study in VET and employment but a significant negative impact on further study in higher education
Gemici and Curtis 2012	VET in Schools with workplace learning has a positive impact	VET in Schools with workplace learning has positive initial impact on post school engagement in study and employment
Deloitte Access Economics 2012	N/A	Early school leavers who study VET in School are more likely to experience good transitions into further study and work than early school leavers who did not study VET in School
Clarke & Volkoff 2012	Notes some studies have shown a positive impact of VET in Schools on school retention	Presents a wide variety of stakeholder views to the question: Why is VET in Schools not providing strong employment and further study outcomes for student?

In very broad terms, the impression I have gained from a range of international studies suggests some VET in schools is better than none at all, simulated work settings have a small positive impact and real life work placements have the largest positive effect (see Kuczera 2011, Kang and Bishop 1989, Bishop and Maine 2004, Meer 2006, Meer 2007 and OECD Learning for Jobs 2010 for commentary on country case studies). For example, Bishop and Maine's analysis of 12 years of longitudinal data found that those who devoted one-sixth of their time in high school to occupation specific vocational courses earned at least 12 per cent extra one year after graduating and 8 per cent extra seven years later (holding attitude, ability, family background and college attendance constant).

Indigenous students

The level of Indigenous enrolments suggests that TTCs have been successful in attracting the participation of Indigenous students.

Clusters are both real and faux

Clusters provide opportunities and challenges, and are certainly not for the feint-hearted. They have: lowered average costs per student, as costs are shared over a larger number of students; there are economies of scale with wider course offerings; and greater opportunity to innovate. But clusters make the TTC exercise more complex (e.g. problems in timetabling, alignment of school approaches, differing expectations, need for agreement about shared costs, concerns about poaching students, and difficulty of travel to and from cluster schools).

There are varied configurations and outcomes with clusters – some are successful and others operate in name only.

The survey results of TTCs operational in 2012 suggest that access within a TTC cluster is an issue for most schools in clusters.

Given the large geographic area that some TTCs are meant to cover, it is not surprising that access is an issue. Cluster schools from Gascoyne Trade Training Centre in WA, for example, are at distances of 365 km, 329 km and 400 km from their lead school in Carnarvon.

Video conferencing in remote settings makes a difference, but given the hands-on nature of so many courses, distance is a serious challenge. The survey comments included schools considering boarding school arrangements, while others have given up, or see the only realistic option being relocating their students to the school with the TTC facilities.

Cluster issues are discussed in Chapter 4.

Utilisation

The figures reported by schools suggest there is not a major problem with schools meeting their school utilisation requirements. Utilisation rates do not look high but are broadly comparable with other specialist facilities in schools. The breadth of student curriculum choices, the size of the school population and whether schools are in clusters are three factors identified as affecting measured utilisation.

There is a real risk that facilities will be used less over time (with a change in school leadership, shifting educational focus, etc.). Certainly, this risk is increased if there is a switch towards taster

programs and less technically demanding VET courses as less use would be made of the advanced equipment in TTCs. This is explored further in Chapter 4.

If utilisation emerges as a serious issue, compliance and remedial actions are available.

Schools have adopted very different approaches to opening up TTCs to wider use including by other registered training organisations (RTOs) and community groups. Some employer groups and RTOs interviewed suggested that many schools are missing opportunities for greater utilisation of their TTCs. Departmental data shows that on average relatively little use is made of facilities by community groups and industry.

Have TTCs met local skill shortages?

Data on meeting local skill shortages is not available. The Department's analysis finds that the fields of study undertaken by students through TTCs in Schools broadly align with the occupations listed on the National Skills Shortage list for 2013-14. In particular, these include: food, personal and health services; construction trades; and a range of automotive, engineering and electro-technology trades.

There are very significant numbers of students undertaking hospitality courses (see the Snapshot) and it is unclear if this will meet or exceed labour market demand. Queensland expects hospitality demand to be strong over the next five years – particularly for bakers, chefs, cooks and middle and senior management. Hospitality has been on the skills shortage list for over a decade. Schools as part of this review reported that students undertake hospitality for many reasons including the ability to access part-time employment while studying and other non-vocational interests.

Very diverse approaches by both jurisdictions and schools

Not only is there considerable variation in the ways individual schools approach the purpose and focus of their TTCs, the states and territories have very different approaches to VET in Schools, which influences the focus of TTCs. For example:

- Queensland and South Australia strongly focus their VET funding for school students in areas of skills need
- NSW mandates structured workplace learning while other jurisdictions provide structured workplace learning when required by the training package
- Victoria has a specific Senior Secondary School Certificate option for VET in Schools students – the Victorian Certificate of Applied Learning
- the Northern Territory has determined it is important for its VET in Schools courses to commence earlier and target Year 9 students in particular to access VET, including those students in remote areas
- recently announced reforms in Western Australia include a Qualifications Register which provides parents, students and schools with industry guidance about the suitability of qualifications for delivery in a VET in Schools context.

Furthermore, TTCs have followed diverse approaches reflecting:

- their leadership and teacher capabilities,
- parental expectations and student attitudes, and

- to varying degrees, their surrounding labour market.

Some TTCs operate with particular entrepreneurial flair and some TTCs have become promising and innovative examples of VET in Schools (see Chapter 6).

Multiple objectives

Generally speaking, TTCs and VET in Schools courses are being directed at multiple objectives:

- trades education for those committed to a trades career
- a trade certificate or certificates as part of a Year 12 or equivalent qualification
- completion of units of competency-based training
- taster education exposing students to a variety of trade pathways
- 2nd chance education
- life and work skills in a simulated workplace learning environment
- engaging students now required to stay to school to 17 years.

The multiple objectives and variation in expectations makes achieving success very challenging (“they are all things to all people”). It is very difficult to achieve many objectives with one instrument.

It also makes the assessment of overall performance problematic.

Employer and industry groups call for a further shift in TTCs focus

More recently, reflecting concerns from employer groups that schools have over-reached in their course offerings, and that students with some Certificate II qualifications may in fact be at a disadvantage in the labour market because of competency-based pay, there has been a push from a number of employer groups for schools to only offer certain courses up to either the Certificate I or II level. A number of states are likely to go in this direction.

Some employer and industry groups have concerns about the value proposition for employers, while schools report that employers value their students.

- For TTCs to be effective as employment pathways, employers and industry must see value. Some industry groups have questioned the value proposition of students completing Certificate II and units of Certificate III without effective real workplace learning. They went further and stated that some schools and school systems are disadvantaging students in this regard.
- This is especially the case given the industrial relations system requires employers to pay students on the basis of their qualifications (competencies) rather than the employer’s perception of their value. Some employer groups questioned the employment value of students with Certificate II qualifications who have had limited practice with accredited competencies, and who did not have real life work experience.

- The Australian Industry Group (Ai Group) was more nuanced in its response, considering that this was an issue for particular industries and highlighting the need for a very carefully and well-informed approach to course selection by schools.
- Employer groups reiterated the importance they place on real life work experience; something that a TTC, even with industry-standard equipment, cannot provide. One industry group interviewed noted that employers would value a second year apprentice who spends four days on the job and one day with their RTO more than a student from the TTC who spends four days at school (and with only part of that time in the TTC) and one day at work.
- That said, successful TTCs do produce students valued by employers (including some TTCs that offer units of Certificate III for capable students).
- Many TTCs in their annual activity reports and survey responses reported successful transitions of their trade students to work, being approached by employers to identify students for employment and willingly losing students to full-time employment after work placements. These messages were reinforced in my meetings with principals, head teachers and some employers.

At the same time some schools and education authorities are expressing concerns that the pendulum may swing from 'over reach' to 'under reach'. Some pre-vocational courses are unlikely to provide sufficient challenges for Year 11 and Year 12 students (see Chapter 5).

TTCs operate in a fast moving and complex environment

TTCs are operating in complex settings with frequent changes in government policies and course content. Employers, head teachers and principals remarked on the rapidity of change. Some employer groups expressed concern that schools are disadvantaging their students by not keeping up with new course content and training packages.

Branding is about the school rather than a TTC or a particular course

- The many objectives schools are attempting to meet means that the purposes of a TTC and the TTC brand are far from clear. Government descriptions of TTCs as state of the art, industry standard, trades education with a strong component of structured workplace learning, simulated workplace learning, and life skills education means that even interested stakeholders get a mixed message as to their key purpose.
- Inconsistent quality and frequent course changes mean that many employers rely on the reputation of the school and the trades teacher as a proxy for the quality of a particular course. Some employers clearly use work placements as a means to identify promising workers.
- Some TTCs have specialised – focussing on trades education with strong components of work placements (see the case study on Loyola College at Mt Druitt). The top performing TTCs have an unambiguous focus on competencies within national accredited courses, the completion of certificates to a high standard, and real work placements. They have also engaged very experienced and well-regarded tradespeople with strong industry connections.
- Other TTCs provide a broader offering to students who have very diverse levels of long-term interest in trade training. In some schools, classes are streamed by whether students are studying for academic results (HSC, VCE, ACT Year 12 Certificate, SACE, WACE, QTE, TCE) or are

following a VET focused pathway. In smaller schools – such as Boorowa Central School – training is very individualised with a strong component of structured work placement.

- Two employer groups interviewed suggested that some schools have structured course offerings to the skill sets of the existing teacher workforce, and that a home economics teacher, even after undertaking a short course, is unlikely to have the same credibility as a chef from industry with extensive industry contacts. That disadvantage is compounded if the students do not experience quality structured workplace learning.

Taster courses

Taster courses are offered by many TTCs. These short courses are designed to give students some knowledge and experience of vocational areas to help inform any decision to undertake a full-time vocational program.

- Taster courses may be useful but they should not constitute the main use of a TTC.

Red tape and school performance

Information on TTCs' outcomes are presently inadequate (KPIs have not been put in place despite earlier audit recommendations). The Annual Activity Report does glean some useful information. While it will be tempting for the Commonwealth Government to abolish the Annual Activity Report process in the quest to cut red tape, consideration needs to be given to how parents, students and taxpayers can be assured about the performance of TTCs. One option is to leave it to the market; information will filter back to parents if students with TTC qualifications from particular schools don't get jobs. The alternative is to provide some assurance to parents that there is effective monitoring of outcomes. The eventual introduction of a unique student identifier for school students at some time in the future would provide an opportunity to better track the destination of school students into further training or employment (but this is not imminent). The Commonwealth Department of Education is presently exploring alternative data sources. It would be sensible if the Commonwealth had a means to know the successes or failure of TTCs before abolishing one of the few points of information it has. Information available about TTCs should be published regularly – including the individual performance of schools.

Continuity

While the Education Authorities were very complimentary of Commonwealth departmental staff, a concern for a number of agencies dealing with the Department on a regular basis was the frequency of staff movements. This reduced efficiency. Frequent staff movements also reduce substantially the opportunities for policy and program managers to learn the successes and failures of program design and implementation. The frequent movement of staff reduces individual but not departmental accountability.

Key points arising from the Review

The two critical success factors of TTCs are strong school leadership (the principal and the head teacher) and local employer engagement. Strong leadership *and* employer engagement are required to make the capital provided by the Commonwealth Government work effectively for students, parents, prospective employers and taxpayers.

Opportunities for improvement

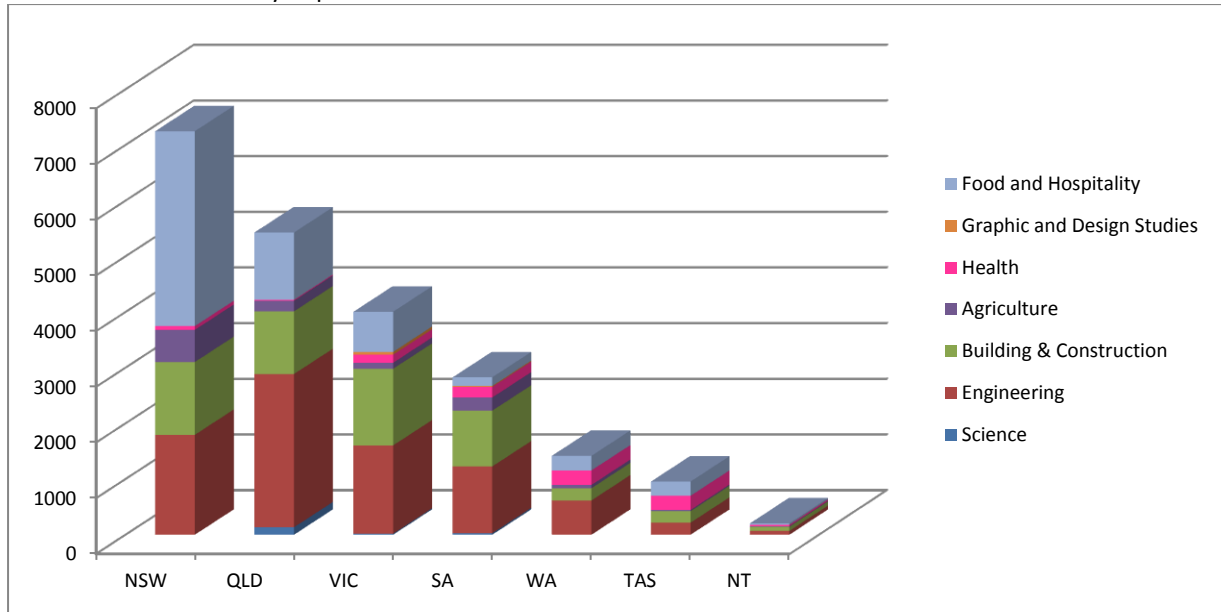
- It is important that governments clarify the role of VET in Schools. This process is underway. At present, TTCs suffer from trying to be all things to all people. The overwhelming focus should be on trade training and ensuring the employability of students.
- Urgent consideration needs to be given to the standards of approved courses.
- Work placements are critical to achieving strong outcomes (ideally, states and territories would mandate these although there are implications for funding).
- As part of the industrial relations inquiry or another inquiry, the issue of training wages should be examined to see if they are acting as an unreasonable impediment to training and employment. It would be a retrograde step to reduce students' ability to undertake Certificate II courses because of inflexibilities in the industrial relations system.
- Schools want to learn from each other, and at present there are few opportunities to do so. The Commonwealth should provide clear information on best practice to schools on its websites and highlight the availability of this information to all TTCs. This information would include:
 - the unambiguous focus of successful TTCs on relevant work experience
 - how principals successfully recruited trades teachers with strong industry experience
 - schools demanding high standards of students
 - work placements as an effective means to not only provide practical hands-on experience for students but also as a means to build a strong reputation with local employers
 - how schools have successfully worked with local employers, suppliers and sponsors to build up the TTC
 - the innovative use of TTCs by other registered training organisations, community groups and clubs. There would be benefit in governments highlighting for schools the practical options available to increase community and industry usage and how schools have successfully addressed concerns about non-school use.
- The Commonwealth should encourage the states and employer groups to hold regional meetings of TTCs to share experiences.
- The Commonwealth should highlight employer, industry and school TTC champions.
- The Commonwealth over the coming years should, as part of its contractual oversight, allow appropriate rationalisation and specialisation of courses by TTCs within a region.
- The Commonwealth Government could encourage the Education Authorities in each state to have regional cross-sectoral consultations between TTCs and interested local RTOs and providers of adult education regarding the use of TTC facilities.
- It would be worthwhile for the Department to finalise its deliberations of KPIs and its search for alternative data sources to assess TTC performance, even if this means accepting that some of the program objectives cannot be meaningfully assessed at this time.
- In the event that the Commonwealth was ever to roll out a similar program again it would benefit from a few salutary lessons from this program:

- the expectations gap between public statements and reality
- the unnecessary haste associated with the first stage of programs involving buildings and complex ongoing agreements often comes at a cost in terms of effective consultation, policy design and program delivery
- the overwhelming focus by program managers looking after this program to see it as an infrastructure project rather than a training program. If governments want to have programs with training and employment objectives they need to ensure a focus and KPIs to match.
- better buildings result when each school has a genuine say in the building design process (see Chapters 6 and 7)
- the need to have some continuity in program management say for the first 5 years of a program.

1 Trade Training Centres Snapshot

Figure 1: Enrolments in TTCs by Fields of Study by Jurisdiction (2012)

Source: 2012 TTC Activity Report.



Note: Science enrolments relate to the broad field of natural and physical sciences and include courses in Carbon Management and Laboratory Technician.

TTC course selection by gender

Source: 2012 TTC Activity Report.

Figure 2: Female Enrolments by Field of Study

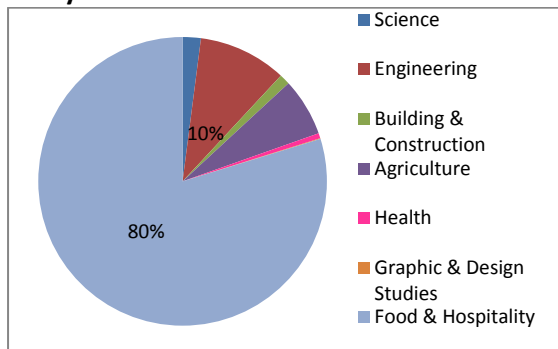
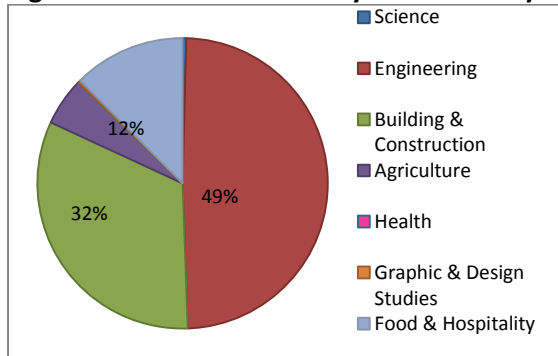


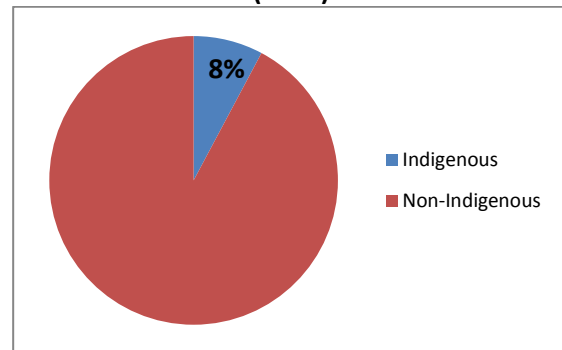
Figure 3: Male Enrolments by Field of Study



TTCs are attracting Indigenous enrolments

Source: 2012 TTC Activity Report.

Figure 4: Proportion of Indigenous Enrolments in TTCs (2012)



TTC information by qualification level

Source: 2012 TTC Activity Report.

Figure 5: 2012 Enrolments by Qualification Level

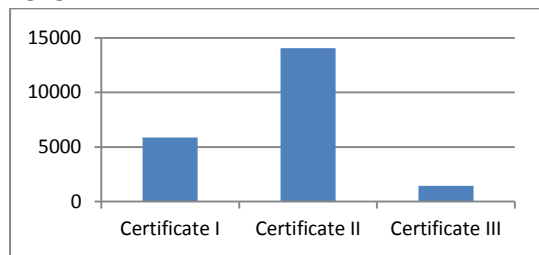


Figure 6: 2012 Qualifications Completed by Level

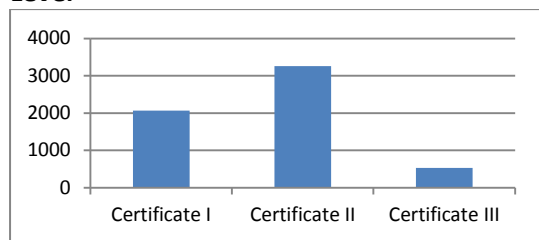
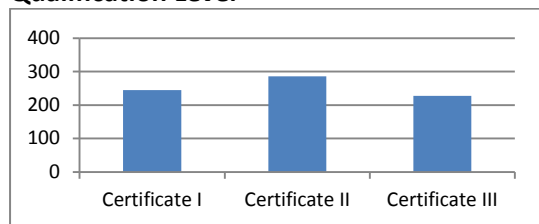


Figure 7: Australian School based Apprenticeships in TTCs (2012) by Qualification Level



Type of Construction 2012

Source: Departmental records.

Figure 8: Allocation of Funding by Project Type 2012

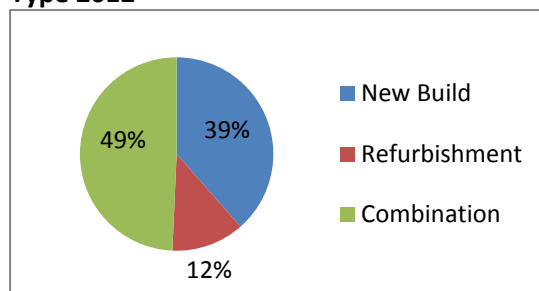
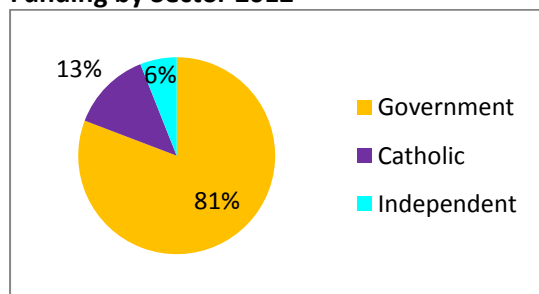


Figure 9: Allocation of Refurbishment Funding by Sector 2012



TTC Review survey information

Source: Independent Review survey of operational TTCs in 2012 (55 responses received, giving a 25 per cent response rate).

Approximately two thirds of schools reported TTCs had positive impacts on school enrolment numbers, student retention rates and Year 12 completion rates.

Figure 10: TTC Impact on Enrolments

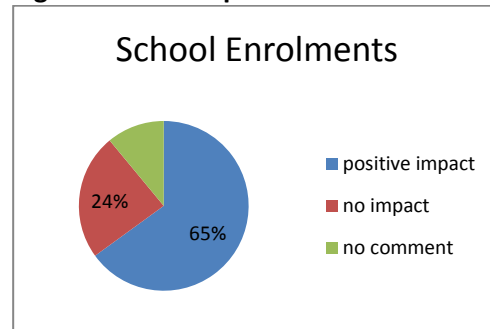


Figure 11: TTC Impact on Retention

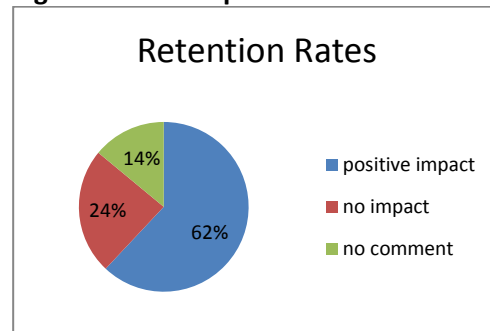
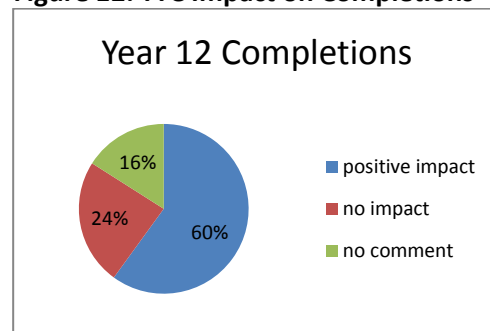


Figure 12: TTC Impact on Completions



2 Scope and Conduct of the Review

Scope of Review

This 30 day review was commissioned by the Assistant Minister for Education, the Hon Sussan Ley MP. The key elements of the terms of reference involve examining:

1. The current utilisation of training facilities to identify opportunities for increased or improved utilisation.
2. The training provided, particularly in terms of industry and employer engagement. This will involve an examination of the current role of industry and employers in training delivery models to identify:
 - a. models of best practice
 - b. options for strengthening industry and employer links
 - c. opportunities for enhanced involvement leading to better training outcomes.
3. Training outcomes and whether they are meeting industry and employer needs. This will involve an assessment of the current training outcomes under the program against:
 - a. program objectives
 - b. original funding proposal expectations
 - c. contractual obligations
 - d. industry and employer expectations.

Conduct of the Independent Review

While the review brief suggested it would principally be a desk-top review, concerns about the quality of data and the need to engage with employer and industry groups, principals, head teachers and students resulted in the following approach:

- review of annual Activity Reports from schools
- extensive interviews with Commonwealth Department of Education managers of the program (present and past)
- interview with a former manager of the Australian Technical Schools program and internal audit staff
- review of key documents including the internal compliance report, the internal review of the Australian Technical College program, the performance audit of the TTC program by the Australian National Audit Office (ANAO), the draft internal review of the program's performance 2013-2014
- review of key recent research papers, both domestic and international, on the outcomes of VET in schools
- review of other data sets
- review of a sample of student and employer feedback forms following work placements

- discussions with education authorities from all states and territories i.e. the state education departments, the Catholic education office in each jurisdiction and the independent school association in each jurisdiction
- visits to 7 per cent of TTCs that were operational in 2012. Visits typically involved interviews with the principal and the head teacher but also other staff, discussions with the relevant education authority, agencies arranging the structured work placements, consultants to the schools on VET in Schools or their external RTO, and of course, discussions with students. The range of schools included a small central school in a rural area, regional and metropolitan high schools, stand-alone and cluster schools, a TTC attached to a TAFE, a community school seeking to serve second chance learners, small, medium and large schools and a school with a significant enrolment of indigenous students. Government, Catholic and independent schools were visited. Appendix B provides more detail
- video conferencing with three remote schools in a cluster
- a survey of TTCs: 126 schools responded with a particular focus on those TTCs operational in 2012 (the sample is 25% of TTCs operational in 2012)
- discussions with individual employers and industry and employer groups including ACCI, Ai Group, Victorian Automotive Chamber of Commerce, the Hospitality Training Network NSW and Construction Skills Queensland
- discussions with RTOs including the CEO of Industry Link and the Culinary School of Excellence Tasmania
- review of the summaries from the Minister's roundtable discussions on the Framework for VET in School
- discussions with Commonwealth Department of Industry on the broader VET reform agenda.

3 Performance Indicators

Performance against the program's objectives

The objectives of the program are to help:

- support the achievement of a national Year 12 or equivalent attainment rate of 90 per cent by 2015
- address skills shortages in traditional trades and other eligible occupations by:
 - improving student access to trade training facilities that meet industry standards
 - improving the quality of schooling offered to secondary students undertaking trade related pathways
 - assisting young people to make a successful transition from school to work or to further education and training, and
 - supporting the "Closing the Gap" initiative to halve the gap between Aboriginal and Torres Strait Islander and other students in Year 12 or equivalent attainment rates by 2020.

The Commonwealth Department of Education has encountered difficulties in converting these broad objectives into meaningful Key Performance Indicators (KPIs).

In 2013-14, an internal performance audit of the TTC program was conducted. It noted that:

"In 2008/09, Internal Audit conducted a performance audit of the program and recommended the development of program key performance indicators (KPIs) that were able to be appropriately assessed, measured, monitored and reported in order to strengthen program management. Similarly, in 2010/11, the Australian National Audit Office (ANAO) conducted an audit of the Department's administration of the program and also recommended strengthening the program's performance information framework via the Portfolio Budget Statements and other publicly available reporting. The Department agreed with both the Internal Audit and ANAO recommendations regarding the program's performance framework. In 2012, the ANAO reviewed the implementation of the recommendations contained in the 2010/11 report and found that the implementation of the recommendations relating to the program's performance framework was only partially implemented."

"The Audit found additional performance indicators exist for the program; however, these indicators are not recorded in the Portfolio Budget Statements or the Department's Annual Reports. The additional indicators more closely correlate to the objectives of the program" (paras 4.3.28 and 4.3.29 2013-14 Performance Audit Trade Training Centres in Schools Program draft report).

Extensive discussions with the Commonwealth Department of Education show that limited progress has been made to finalise KPIs. In large part, this reflects the gap between the program's objectives and the data available (a disconnect that was also apparent in this Review). The quality of data available is poor and where good data exists there are a very limited number of observations (TTCs operations have been too recent to give sufficient information to allow analysis of trends).

The Department did report publicly on things it could measure while continuing to explore alternative measures.

In the Portfolio Budget Statements (PBS), the Department recorded the number of schools funded and the number of projects funded as program deliverables (later PBS recorded the total announced projects cumulative, new projects announced and the number of schools benefiting). Reflecting the focus on fast delivery under the previous Government, the Department primarily treated the program as an infrastructure project rather than a training program.

The Department has provided the following information on the performance of the program, noting that it is difficult to demonstrate a direct correlation to the achievement of the broad program objectives. Commentary is provided on a range of these initiatives.

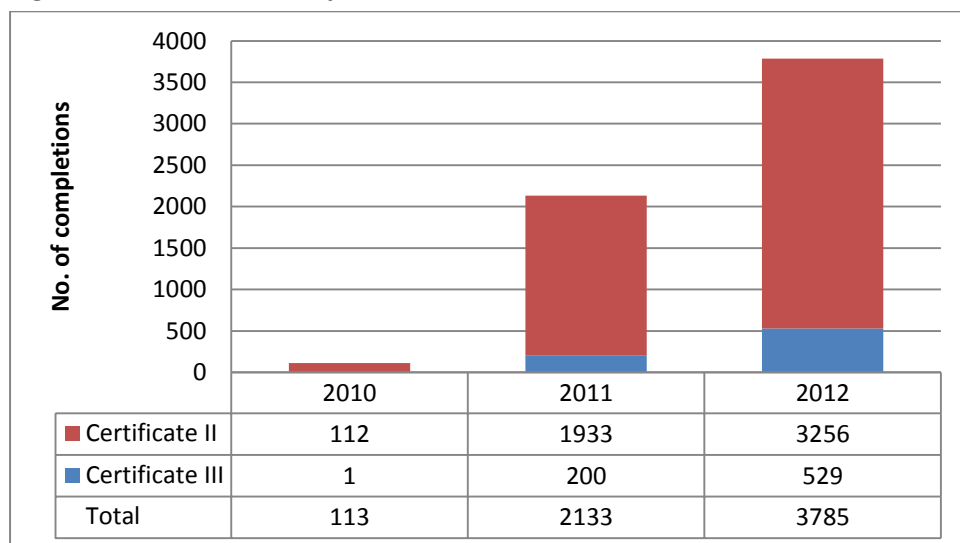
1. What is the direct contribution of TTCs to the COAG Year 12 or equivalent target?

1.1. Completion of Certificate II or above qualifications

One of the key objectives for the TTC program is to support the achievement of a national Year 12 or equivalent attainment rate of 90 per cent by 2015.

Since the TTC program began in 2010 until the end of 2012, a total of 6,031 students had completed an approved TTC qualification at the Certificate II level or above. As shown in Figure 13, the number of Certificate II or above completions has steadily increased from 113 in 2010, when 48 TTCs reported activity, to 3,785 in 2012, when 208² TTCs reported activity.

Figure 13: Number of completions at Certificate II level or above, 2010-2012



Source: TTC Activity Reports, 2010-2012

It is difficult to estimate the overall impact of TTCs on the 2015 target, as the target is measured by the attainment rates of 20-24 year olds in the total population³ and the program has only been in operation since 2008. Furthermore, many factors would influence the attainment rate. However, the

² By December 2012, 217 projects had commenced operations but completed activity reports were received from 208 of these.

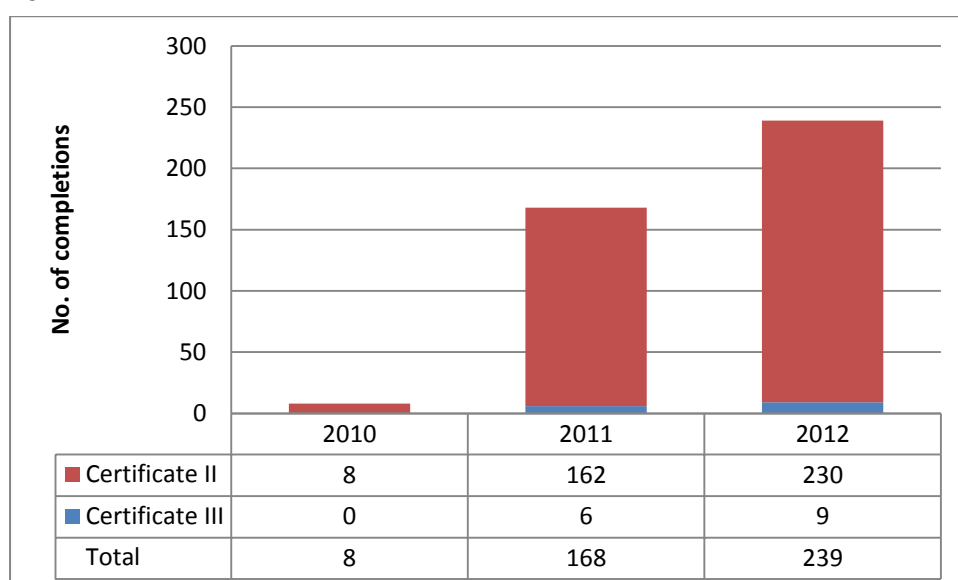
³ The agreed measure for the COAG target is the “proportion of 20-24 [year olds] that have attained a Year 12 or equivalent or a Certificate II or above qualification”.

3,785 completions in 2012 represent about 1.2 per cent of all school leavers in 2012⁴. When all 511 TTCs are operational, this proportion could be expected to more than double, assuming the completion rate remains constant.

Another key objective of the TTC program is to support COAG’s ‘Closing the Gap’ initiative to halve the gap between Aboriginal and Torres Strait Islander and other students in Year 12 or equivalent attainment rates by 2020. Since the first TTC became operational in 2010 until the end of 2012, a total of 415 Indigenous students have completed an approved TTC qualification at the Certificate II level or above. This represents 6.9 per cent of all qualification completions at a Certificate II or above at TTCs⁵.

As shown in the snapshot (Section 1), TTCs have a higher representation of Indigenous students than in the overall student population.

Figure 14: Number of completions at Certificate II level or above by Indigenous students, 2010-2012



Source: TTC Activity Reports, 2010-2012

⁴ According to the ABS 2013 Survey of Education and Work, there were approximately 319,800 school leavers in 2012.

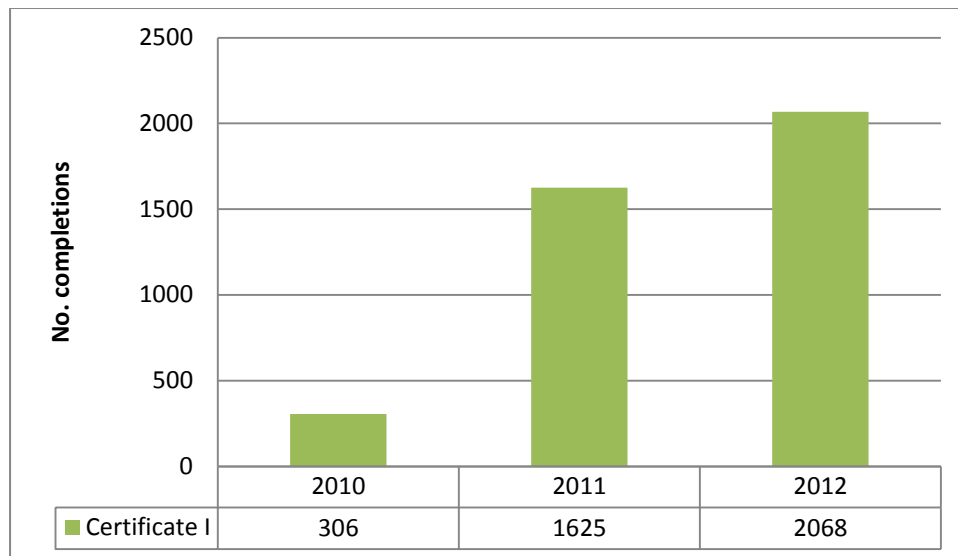
⁵ By comparison, Indigenous students represent 4.1 per cent of all school enrolments in Years 9 to 12 (ABS Schools, Australia, 2012).

2. What is the possible future contribution of the TTCs to the COAG Year 12 or equivalent target?

2.1. Completion of Certificate I qualifications

Completion of lower level certificates can often be a pathway to enrolment in, and completion of, higher level certificates. Since the first TTC became operational in 2010 until the end of 2012, almost 4,000 students have completed an approved TTC qualification at the Certificate level I.

Figure 15: Number of completions at Certificate I level at TTCs, 2010-2012



Source: TTC Activity Reports, 2010-2012

2.2. Completion of units of competency as part of Certificate II or above qualification

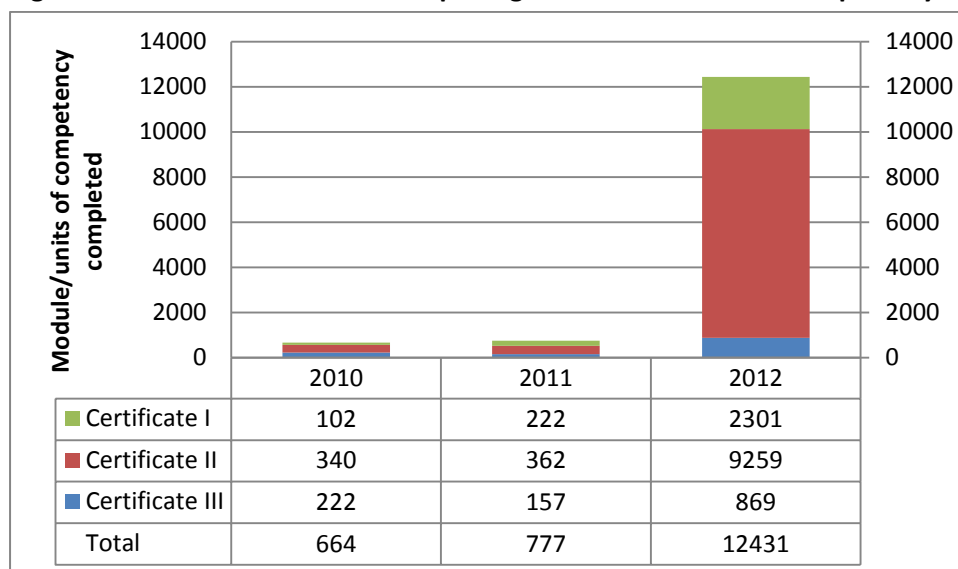
Acknowledging that it can be difficult to complete a whole qualification while at school, the attainment of one or more units of competency at the Certificate II level or above is a recognised indicator for VET in Schools and can also often be a pathway to completion of higher level certificates⁶.

In 2012, 12,431 students successfully completed one or more units of competency at a TTC⁷, of which 10,128 were part of a Certificate level II or above qualification. The Department is of the view that data from earlier years is significantly underreported by schools due to a misunderstanding about the definition of this item and should be treated with caution.

⁶ The report *School-aged youth in vocational education and training* published by the NCVET and the *National Report on Schooling in Australia* published by ACARA include data on the number of 15–19 year old students who have successfully completed at least one unit of competency/module as part of VET qualifications at AQF Certificate II or above as key program measures for VET.

⁷ Referred to as having received a “Statement of Attainment” in the TTC annual Activity Report

Figure 16: Number of students completing one or more units of competency at a TTC, 2010-2012



Source: TTC Activity Reports, 2010-2012

2.3. Australian School-based Apprenticeships

Australian School-based Apprenticeships (ASbAs) are part of the national Australian Apprenticeships system. Australian Apprenticeships (including ASbAs) combine practical work on-the-job, with structured off-the-job training to achieve a nationally recognised qualification.

ASbAs involve paid employment and training and also provide valuable experience to students, increasing their industry specific knowledge and employability skills. Students undertaking an ASbA are supported by their school/college to enrol in a range of courses that meet their individual needs and timetables, as well as to timetable their program to allow for work, training and regular schooling.

ASbA is a term that covers both apprenticeships and traineeships that are school based.

The program objectives and priorities for TTCs make no mention of ASbAs and no targets were set for projects or participating schools.

Of the 24,753 students enrolled in ASbAs during 2012, around 23 per cent were studying at schools which accessed a TTC (My School data).

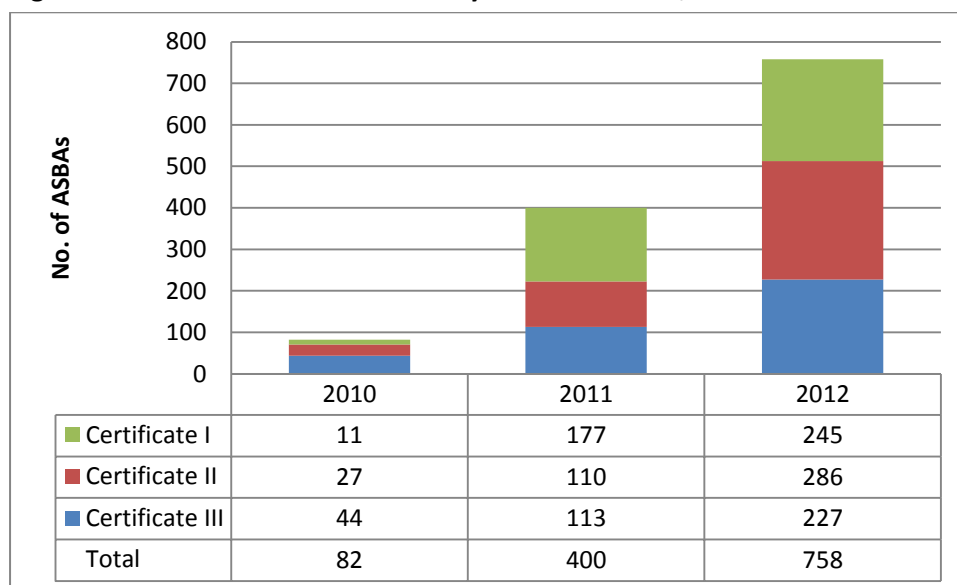
A total of 758 students were enrolled in an ASbA for an approved course at a TTC facility during 2012. This figure represents around 14 per cent⁸ of all ASbAs undertaken in traditional trades nationwide.

Although the data is imperfect, it is possible that this proportion may be on the low side. This likely reflects the relative focus on the broader school curriculum vis a vis a focus on work settings. Certainly a number of schools in the Review survey reported the difficulty of students undertaking ASbAs given school timetables and the demands of work placements.

⁸ Source: VET in Schools students by major course characteristics, 2012 - For more information see: www.ncver.edu.au/publications/2698.html

Over time, if TTCs are successful in generating stronger interest, the TTCs share of ASbAs in these fields would be expected to increase.

Figure 17: Number of ASbAs at TTCs by Certificate level, 2010-2012



Source: TTC Activity Reports, 2010-2012

3. Are completion levels at TTCs better than completion levels in VET in Schools more broadly?

3.1. Comparison of TTC's share of Vet in Schools students with TTC's share of Vet in Schools qualification completions

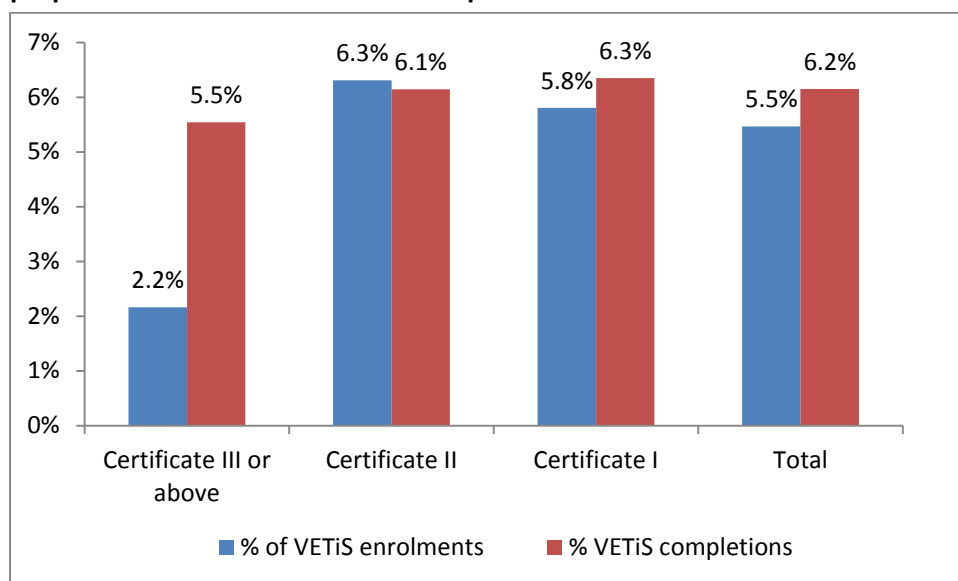
The following figure compares TTC's share of total VET in School enrolments with TTC's share of the total VET in School completions. To the extent that TTCs have a larger share of total Vet in Schools students completing a qualification in VET than they have as share of Vet in Schools students, it may indicate that TTCs are more effective in getting students to complete qualifications.

The blue column in Figure 18 indicates that Vet in Schools students in TTCs represent 5.5 per cent of all enrolments in Vet in Schools at a Certificate I level or above and the red columns show that TTCs represent 6.2 per cent of all Vet in Schools qualification completions at Certificate I level or above.

Comparing the blue and red columns, the data suggest that TTC students are completing Certificate I and III level qualifications at a higher rate than one would expect given their share of enrolments. However, it also suggests that TTC students are completing Certificate II level qualifications at a lower rate than one would expect given their share of enrolments at that level.

A potential limitation of this analysis is that certificates are often not the same in terms of length or requirements.

Figure 18: Proportion of total VET in School enrolments that are at a TTC compared with the proportion of total VET in School completions at a TTC



Source: TTC Activity Report, 2012; National VET in School Collection

Note: Vet in Schools completion data is for 2011, which is the latest year of course completion data available; TTC data is for 2012, which is the most complete data set available.

3.2. Comparison of TTC's share of Vet in Schools enrolments with TTC's share of Vet in Schools module completions at Certificate II or above

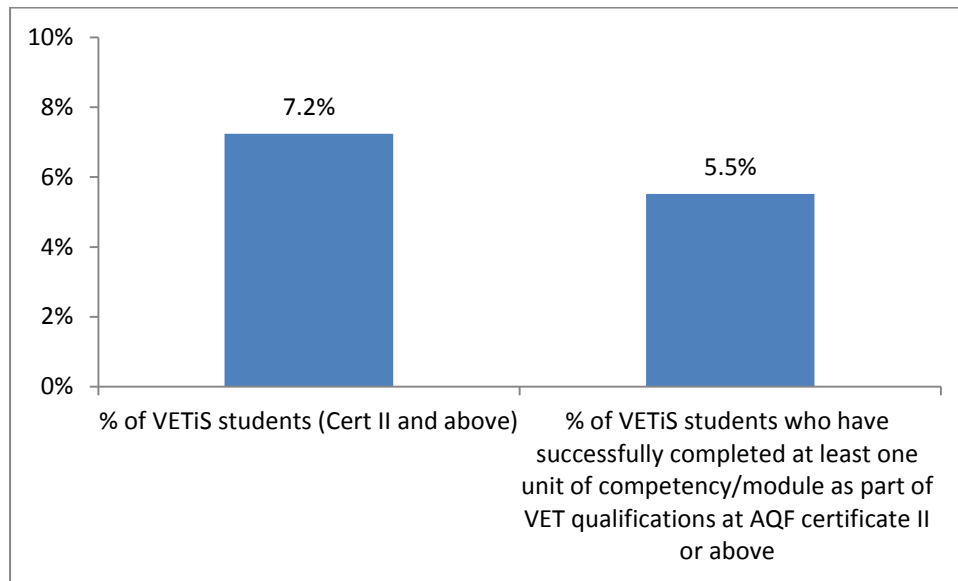
As noted above, it can be difficult to complete a whole qualification while at school, therefore the attainment of one or more units of competency at the Certificate II level or above is a recognised indicator for Vet in Schools and it can often be a pathway to completion of higher level certificates.

The following chart compares TTC's share of total VET in School enrolments with TTC's share of Vet in Schools module completions at Certificate II or above. To the extent that TTCs have a larger share of students completing one or more units of competency at Certificate II level or above, it may indicate that they are more effective in getting students to complete units of competency.

Figure 20 indicates, however, that students at TTCs only represent 5.5 per cent of module completions at Certificate II or above in Vet in Schools, which is lower than their share of students at Certificate II or above (7.2 per cent).

Care should be taken in drawing any conclusions from this data given the concerns about data integrity raised in Section 2.2.

Figure 19: Proportion of total Vet in Schools students at Certificate II or above that are at a TTC compared with the proportion of total Vet in Schools students who have completed at least one unit of competency/module at a TTC



Source: TTC Activity Report, 2012; NCVET School-aged youth in vocational education and training, 2012

Education Authorities

Broadly speaking, all Education Authorities were supportive of the program and considered that it was making a positive impact. However, they noted that robust attribution is not possible given the paucity of the data and the stage of the program.

For example, the recent Review of TTC conducted for the Victorian Government has concluded that:

“At this stage, we have not identified any change in outcomes attributable (emphasis added) to TTCs. Applying statistical testing and programming, we compared TTC lead schools, cluster schools and the Control Group but were unable to determine:

- Any change in enrolments, either at the schools level, for Vet in Schools or VET unit enrolments;
- Any difference in VCE or VCAL completions; and
- Any difference in post-school outcomes.

It should be noted though that this Review has occurred mid-way through roll-out of the TTC program. Many TTCs were still under construction or had been operating for only a short period (12 months or less). If these tests were applied in future years, differences may become apparent.”

(Source: Phillips KPA Review of Trade Training Centres in Schools Program: Outcomes and Viability for the Victorian Department of Education and Early Childhood Development, June 2014 p 5)

Employer and industry group attitudes about the performance of TTCs and the responses of employers

This is covered at length in Chapter 5.

Survey results

As shown in the snapshot at Section 1 of this report, the survey responses from 55 TTCs operational in 2012 suggested that the school leadership consider their TTCs have had a positive impact on school enrolments, student retention rates and Year 12 completion rates. The same survey shows similar positive results for post-school training and employment outcomes.

Schools surveyed were only able to provide anecdotal material on the extent of the impact because many factors (once again) are at play.

Academic studies

Australian academic studies or consultant reports available have examined the impact of VET in schools rather than TTCs specifically. While earlier research, particularly by Anlezark et al. (2006), suggests that VET in School has a slightly negative effect on Year 12 retention, more recent research suggests participation in VET in Schools can have significant positive impacts on school completion and engagement in post school work or study, particularly if the course involves workplace learning. A summary of selected recent research is presented below.

Black D, Polidano C & Tabasso D (Melbourne Institute of Applied Economic and Social Research, 2011, 2012 and 2013) – using LSAY data, the authors found participation in VET in schools has a significant large positive impact on school completion (14 per cent) and that this result is consistent across different models of VET in schools and across different LSAY cohorts. In terms of post-school outcomes, participating in VET in schools is estimated to have positive labour market outcomes i.e. transiting to a full time career job and increased wages in the first and third year after school. Overall, VET in schools is estimated to improve the chances of finding employment, especially full-time employment, increase weekly wages and improve the chances that youth will find a job they like as a career. The benefits are greater for those whose VET in schools course included a sizeable workplace learning component e.g. an average of more than 20 days per year. The most notable impact observed in the research is that school VET programs shifted the choice of post-school education in the first three years out of school away from higher education toward further VET study.

Gemici S & Curtis D (2012) – Like Black, Polidano and Tabasso, Gemici & Curtis conclude that structured workplace learning (as opposed to general work experience) undertaken as part of VET studies in Year 11 contributes to higher levels of Year 12 completion and greater post-school engagement. They found that participation in work placements during Year 11 is associated with a 5.2 per cent increase in Year 12 completion and a 3.8 per cent increase in full-time engagement in work or study one year after leaving school.

Deloitte Access Economics (2012) – using LSAY data, the report shows that having undertaken some part-time work while at school appears to help transitions for both early leavers and Year 12 completers, while VET in Schools shows a small positive association with good transition outcomes for early leavers. Year 12 completers who do not participate in VET while at school experience better transitions than those who do. This reflects the more academic inclination of the former group, many of whom go on to full-time tertiary study and a good post-school transition - they are less likely to participate in vocationally-oriented VET courses while at school.

Clarke, K & Volkoff, V (NCVER 2012) – This is a working paper that draws on NCVER data and post-school destination surveys from Queensland and Victoria. The paper identifies that there are significant numbers of young people opting to leave school early and undertake VET outside senior secondary certificates. This raises questions about the effectiveness of current approaches to VET in Schools in retaining students within the structure of the senior secondary certificate, particularly in relation to pathways to work or further study. The paper notes a higher take-up of VET in School programs by low-socioeconomic status and low-achieving students, and consequently the need to develop strong, high quality occupational pathways to employment and further education. It also notes a move by jurisdictions to support higher level qualifications through VET in Schools programs and the different approaches taken to recognise VET within both senior secondary certificates and for university entrance. The paper observes that while VET in Schools has helped to increase retention and to engage disadvantaged and disengaged young people, it needs a delivery context and school culture that link tangibly with labour market, occupational and/or further study pathways as weak relationships with occupations will undermine its effectiveness.

In very broad terms, the impression I have gained from a range of international studies suggests some VET in schools is better than none at all, simulated work settings have a small positive impact and real life work placements have the largest positive effect (see Kuczera 2011, Kang and Bishop 1989, Bishop and Maine 2004, Meer 2006, Meer 2007 and OECD Learning for Jobs 2010 for commentary on country case studies). For example, Bishop and Maine’s analysis of 12 years of longitudinal data found that those who devoted one-sixth of their time in high school to occupation specific vocational courses earned at least 12 per cent extra one year after graduating and 8 per cent extra seven years later (holding attitude, ability, family background and college attendance constant).

Rates of return on the TTC program: insufficient time and inadequate data to tell at this stage

It was not practical to estimate the return on investment at this stage as we simply don’t have sufficient data. We cannot separately identify individual students undertaking courses through TTCs (there isn’t a unique student identifier), and as noted before, there are many factors at play. A number of schools that had TTCs operational in 2012 noted they were now only in their second year of operation and that they were still establishing their brand in the labour market. A number of principals made the comparison to a small business: it would take four or five years for the school to have a TTC operating optimally and that employers, parents and students need to see runs on the board before feeling convinced.

It would be worthwhile for the Department to finalise its deliberations of KPIs and its search for alternative data sources to assess TTC performance, even if this means accepting that some of the program objectives cannot be meaningfully assessed at this time.

4 Utilisation

Background

The present and the previous governments have been concerned about the longer term utilisation of the TTCs. Through the five rounds of agreements, there have been various clauses about expected utilisation, with provisions for rectification and, where necessary, redress, and reporting requirements for the first ten years of the agreement.⁹

Given the considerable time and effort school principals and head teachers put into developing successful applications for funding, and the responsibilities schools have taken on, it is reasonable to assume that school principals are highly motivated to ensure optimal use of the facilities. In effect, there should be a natural alignment between the desires of the Commonwealth Government, the education authorities and the school leadership to see optimal use of the TTC.

This scenario is more challenging in a cluster situation where there needs to be continual alignment of the leadership of more than one school about the importance and use of the TTC.

Principals and education authorities noted the impact that changing school leadership can have on the operations of the TTCs. One school visited reported that there had been three changes in school principal since the TTC application was originally made. As a result, the TTC was “inherited” by a new principal who did not necessarily share the same vision on the role and importance of the TTCs. Another principal remarked that, while he had inherited the TTC, he was very cognisant of the school’s agreement with the Commonwealth and of the positive contribution the TCC was making, and could continue to make, to the school.

Changing leadership within clusters was highlighted in discussions with education authorities as a risk for utilisation, as informal understandings between former principals became less certain over time.

For cluster schools with small class sizes and considerable distances to travel, setting aside one day for common classes can mean that measured utilisation in hours per week for trade courses is relatively low (although the number of students using the facility as a result of students coming in from other schools may have increased). Some schools overcome the timetabling problems by altering the length of lessons and extending the school day for TTC students (e.g. start later and extend TTC time into the evening).

Blocks of structured workplace learning will reduce TTC utilisation (unless it is made up by other temporary arrangements) but having students in real work places is to be encouraged. Schools appeared keen to use TTCs freed up by structured workplace learning as an opportunity to have Years 7 to 9 see and use the facilities (as a means to attract students to trade courses).

⁹ The ten year Training Obligation Period starts from the date the TTC commences operation and requires an annual report on the previous year’s training activity. The Designated Use Period extends for 20 years from the date the TTC commences operation and requires the continued use of the facilities for TTC delivery. In Round 1 to 4, the requirement is for the school to use the TTC “principally for the purposes approved by the Commonwealth”. Round 5 stipulates hours and courses and, for year one, the student numbers.

For all schools, student interest and enrolment in TTC courses can fluctuate over time, heightening the challenges in managing the utilisation. Over time some rationalisation and specialisation can be expected and the Commonwealth’s contractual oversight should reasonably facilitate this.

Data on TTC utilisation

Specialist facilities in schools will not necessarily be used every hour of the school day. TTCs are predominantly made up of specialist facilities with welding bays, car hoists, commercial kitchen facilities, etc as well as more standard classrooms (sometimes within the TTC shed or above the workshop floor).

To ascertain what might be a reasonable benchmark for the use of TTCs, I asked the Department to look at the utilisation rate of non-TTCs, but still specialist school facilities.

Table 1 contains data on the average hourly usage per week of various teaching spaces, compiled from a sample of 10 classrooms, 5 science laboratories and a design and technology complex consisting of 4 workshops, an art room and a computer/CAD room.

The workshop usage has been split between classes for students in Year 9 through to Year 12 (VET) and students below Year 9 (Other), as the comparative data from TTCs relates to approved usage for students in Year 9 through to Year 12 and other student usage (non-approved courses).

Table 1: Teaching Space Utilisation for Timetabled Classes – Non TTC School

<i>General Classroom</i>	<i>Science Lab</i>	<i>CAD/PC Room</i>	<i>Art Room</i>	<i>Metal / Wood Workshop</i>	
				<i>VET</i>	<i>Other</i>
22.2	21.7	21.5	9.3	9.9	6.9

Figures are average hourly usage per week

TTC workshop utilisation information

According to the Department (2012) the program built or refurbished a total of 1232 indoor teaching spaces (not including covered outdoor work areas) at sites which reported activity during 2012.

Table 2 is TTC specific and divides the hours of utilisation by the number of teaching spaces to arrive at an average hourly usage for a teaching space funded through the program. Of note, the data did not allow for differentiation between workshops, general teaching spaces (classrooms) or CAD/PC rooms.

Table 2: Funded Teaching Space Utilisation by Activity Type – TTCs 2012

<i>Approved Courses Use</i>	<i>Other Student Use</i>	<i>Staff Use</i>	<i>Community/Industry Use</i>
8.5	4.9	0.8	0.7

Figures are average hourly usage per week

Based on the data available, generally:

- hourly student usage for TTC approved courses is in the vicinity of 8-9 hours a week compared to 9-10 hours a week for a non-TTC specialist workshop school facility
- TTC utilisation for approved courses is 57 per cent (8.5 of 14.9 hours per week) of the total utilisation of the teaching space – which compares to 59 per cent (9.9 of 16.8 hours per week) for the non-TTC school
- total TTC utilisation for approved courses and other student use (e.g. taster courses for Year 7 and 9 students) is 60 per cent of available standard school time (assuming a 25 hour week) – which compares to 67 per cent of available time for a non-TTC school
- relatively little use on average is made of TTC facilities by community groups and industry.

While these figures suggest that, on average, student utilisation meets the utilisation requirement under Rounds 1 to 4, and usage is in the ball park for other specialist school facilities, intuitively, the total time on average a school is utilising its TTC facilities may still seem concerning. A constraint to lifting utilisation of TTCs is the time spent by students at school on non-TTC subjects. If, in the main, students are studying a broad curriculum where TTC courses are a minor element of their school timetable, then unless there are large student cohorts in each year (allowing for multiple classes in each year throughout the day), utilisation rates will never reach high figures.

Some schools visited have a particularly strong focus on VET in school and are of sufficient size that utilisation rates are high. Facilities at St Edmunds College in Ipswich are in such demand that they reported a waiting list for students to enrol in TTC courses. The Principal suggested the TTC was utilised 75 per cent of a school week. The college's TTC centre is used by 784 students from a school population of 942. In years 9 and 10, there are 164 students in various classes studying woodwork, and 72 students in various classes in Year 11 and 12 studying construction. The auto workshop is used by 56 students studying Auto (AUR10112) in Years 11 and 12 and 95 students studying automotive in years 9 and 10.

Cluster schools

Clusters present both an opportunity and a challenge to optimising utilisation. Education authorities, principals and head teachers indicated there are many challenges associated with cluster arrangements.

As one education authority noted:

“Common class timetabling between cluster schools and travel times to TTC sites are big issues for cluster projects. Some clusters choose to set aside a common day to get around these issues.”

The Department advised that there are a few cluster schools in rural areas where TTC facilities are effectively only used for approved courses one whole day a week. For example, the cluster members in one rural area reached agreement early on that there would be less disruption for students if training were held on a designated week day. This allows for coordinated travel and schools have ensured that timetabling is structured in a way that VET students do not miss out on core subjects when they attend trade training on the designated day. However, it means low measured utilisation rates.

The responses to the cluster question in the survey of TTCs that were operational in 2012 suggest access was not an issue for 18 per cent of respondents. The remainder said that access was an issue and a range of strategies were identified to address the problem. A few schools noted that they were unable, for a variety of reasons, to access the TTC.

A sample of school survey comments on access to cluster schools

“Students at our school have never had access to the TTC that was built on another high school's site using our funding allocation. The school was initially involved in the building discussions but has not been able to secure access to the completed facility for student training. Travel to the site and the coordination of timetables between two schools makes this impractical.”

“We are a cluster partner model

- *Our students have access to the TTC on the same basis as other cluster students*
- *we have not yet experienced any difficulty in our own students missing out on accessing the program”*

“Two local high schools have come to the college to share in the use of the equipment especially for the design stages. Students and teachers from the local schools have received training alongside our staff from experts in industry and a link through the local council (almost 20 teachers training during the school holidays). In time I see the valley working well to support training through our TTC. We just need more time to develop a better image and safer environment for the inclusion of other students during the day.”

“There are some barriers to cluster student participation which include transport, aligning timetables across schools, the need to multiple enrol a student and where the FTE [falls] between the 2 schools which has an impact on full school budgeting. Having said this, we have had 5 students from a school outside the cluster enrol in our D2C course and have hosted students from numerous schools for Try A Trade Days and Step Out Programs.”

“An organised bus shuttle service enables students from [cluster] schools to access the TTC on training days.”

“Our schools have been working together in an Alliance for around 15 years. Whilst the focus has evolved, a large part is around shared delivery of Vet in Schools for quality assurance and increased opportunity in as economically viable way as possible. Consequently, we have agreements in place whereby the schools and RTOs under an MOU with us, deliver training on Tuesdays and Thursdays. This enables other core curriculum to be timetabled on the remaining days. It also allows flexibility for SWP day opportunities. All schools in the Alliance and TTC offer some form of training to each other. Places in the courses are agreed to by formula, ensuring equitable access. Processes such as interview are used if courses are oversubscribed and extra courses cannot be negotiated (though this latter occurrence is rare).”

“My school has had limited access due to distance from the TTC. We are a 4 hour drive away from Umuwa. An accommodation facility has now been handed over to the TTC and that has facilitated access in 2014. We have had to increase site budget commitment to cover the additional costs of this access. Our school's access could be improved by greater alignment of courses to real employment in

the community and subsidising the cost of courses. We also need a fairer system of access between the 8 schools.” [remote SA school]

“As the lead school in our cluster, we have just signed a lease on a house in town so that we can offer accommodation to staff and students from our partner schools, if needed. We intend to also provide a mobile service to other schools and kit them out with basic equipment.” [school in remote SA]

“In 2012, Year 11 students came from over 50 different Year 10 feeder schools. Access to the TTC is open to all interested students.”

“Our TTC has 7 schools involved and students have access to different VET options depending on what school they are at. We also now have some students moving from one school to another to access a particular VET program. This is only just starting to happen successfully and is difficult to negotiate due to school timetables. The students that are moving through report that it is working well and they are very pleased to have access to something that is not offered in their school.”

“There appears to be a lack of willingness to block times for our students and at this stage it appears to be only on a Wednesday that block offerings are being made. It appears that the rest of the times available are timetabled classes and this does not suit [us] as we are not able to transport our students to the TTC for double periods, etc.”

“Students feel that it is extremely difficult to access [the] TTC while remaining members of other secondary schools. It is an access and equity issue not only for SJC students but for all the schools in the cluster.”

“We are in a cluster of three schools, but each has an identical building. It was anticipated early in the application that there would be difficulty transporting students between campuses.”

Examples of wider use of the TTCs

Examples from the 2012 Annual Activity Reports showed TTCs being used for additional purposes beyond the delivery of approved qualifications:

Trade Training Centre	State/ Territory	Additional Use	Average hours per week
Sapphire Community TTC	NSW	Special program for disengaged Aboriginal youth	30
Northern Adelaide Regional TTC	SA	<i>Girls in Construction</i> taster course	16
Kutjungka TTC	WA	Aboriginal Teaching Assistant Training	20
Fabric and Construction TTC	NT	Practical based construction and engineering projects	38
Cradle Coast TTC	TAS	Certificate II Hospitality - <i>Kick Start</i> Program for adult learners run by Polytechnic	25
Brisbane North West TTC	QLD	<i>Get Set For Work</i> (Disengaged students)	30

Non-school use

Under the guidelines, schools are encouraged to make TTCs available for other uses. The clause in the Round 5 guidelines reads as follows, but similar clauses were in the guidelines for all earlier rounds.

“5.2.2 Capacity for the school and broader community to benefit

Schools are required to demonstrate in their application the benefit trade training will have on the school and the wider community. When demonstrating capacity to benefit in their application, schools should demonstrate or provide information on:

- the extent to which the facilities will be used by the broader community, for example through availability for adult training after school hours.”

During the school visits, I witnessed St George’s School’s TTC being utilised by an international cooking school with international students. Other schools visited reported the non-school use of their TTCs:

- by a local car club on Saturdays (with reciprocal support through the donation of equipment and learning opportunities for TTC automotive students)
- by school students from a school for children with special needs
- for industry seminars, trade displays and exhibitions
- by Mothers’ clubs on cultural days
- for community learning.

The education authorities in interviews were able to give examples of the wider impact and use of TTCs.

A clear message from the discussion with the NT education authorities was that the TTCs are providing invaluable infrastructure to remote communities where there are very few facilities, and the TTCs are being used extensively to build capacity through adult education.

The Tasmanian authorities pointed to the use of TTCs for automotive trade days, master classes and hospitality trade days where ten of Australia’s top chefs conducted cooking demonstrations at a TTC.

Queensland education authorities noted that there had been an expectation at the beginning of the program that schools would generate income from third party use of the facilities outside of school hours and that industry would provide some level of investment. This had not occurred to the extent anticipated.

WA authorities noted that the cost of delivering some training in schools, particularly at the higher certificate levels (III and IV), can be prohibitive. Developing agreements with partnering and other RTOs to share use of facilities is critical for sustainability. An emerging trend in WA is that VET providers and RTOs are approaching TTCs to develop partnerships and agreements to gain out-of-hours access to the TTC facilities in return for the provision of training or services. This will enable RTOs to access quality trade training facilities in smaller regional areas that may not have other

facilities. The WA Department of Education is looking at opportunities for the greater use of TTCs for training, workforce development and community access in school down-time.

Employer and industry groups considered schools could do more

Employer groups and RTOs interviewed suggested that many schools are missing opportunities for greater utilisation of their TTCs.

White elephants?

No one would embark on the onerous process of applying for a TTC grant to build a white elephant, but because of changes in personnel, or poor credibility of the teaching staff, or a significant deterioration in local industry or a suite of other changes, a TTC could seriously underperform, and either gradually or suddenly fall into disuse.

The Department has identified three TTCs that were not functioning: two are under investigation and the third is expected to be operational this year after the matter was pursued by the Department. The latter involves Commonwealth expenditure of \$0.2m on a refurbishment and fit out of an existing workshop. The school reported the TTC was not operating because of lack of student demand.

Not surprisingly, no school surveyed self-reported that it had become a white elephant.

Education authorities noted the real risk that TTCs could become white elephants. The annual activity review reports process reinforces the message from the Commonwealth about the need to adhere to agreed courses and use. A number of education authorities noted that due to changes in principals, the commitment to particular TTCs had waned and that remedial action by the relevant education authority had been taken.

There appeared to be considerable awareness by the education authorities of their responsibilities and/or the schools' responsibilities under the agreements, and a number of school principals in my school visits drew my attention to the requirements that they face associated with delivery.

That said, a small number of principals raised or acknowledged the possibility that some TTCs could become white elephants (not at their school but elsewhere). None felt comfortable identifying a school with a white elephant TTC or at risk of having one.

As this is not a full audit, it is not possible to identify and numerate poor performers and white elephants. The risk of non-usage and poor usage is real – already there are examples. The risk factors include:

- change in school leadership with the new leaders unfamiliar or not in agreement with the original principal's rationale for committing to have a TTC
- poor quality teaching or lack of availability of teaching staff
- poor standing of the TTC with local employers
- a mismatch between courses delivered and the requirements of local industry

Not a white elephant but suboptimal use

Schools can be utilising a TTC but in sub-optimal ways that are inconsistent with their contractual obligations. A drastic shift to using the facilities for non VET courses could see a TTC with its *industry standard* kitchen and equipment, in effect, become an over-capitalised home economics room.

One school visited engaging second chance learners from disadvantaged backgrounds was providing training for three students in a facility with a capital cost of \$1.08 m (GST inc). This TTC also offered junior secondary students the opportunity to visit the facility and is running taster courses for the year 8 and 9 students.

One student had completed a Certificate III course and yet, until very recently, that student had experienced significant trouble finding an apprenticeship. The school Principal attributed this difficulty to the time it takes for the school to build a reputation in the marketplace. He considered it would take five years.

The completion of a Certificate III is a significant achievement, especially so for a second chance learner with significant disadvantages. It is also the case that establishing brand credibility in the labour market takes time if strong industry contacts do not already exist. That said, there is a downside for the student completing a Certificate III, the TTC and taxpayers in having students complete courses with low prospects of employment. An expensive facility with very few ongoing students raises issues of sub-optimal use. This reinforces the importance of establishing industry engagement and credibility as soon as possible.

Remedies

Should the Commonwealth Government become concerned about the performance of a particular TTC, it could investigate the matter and engage with the relevant education authority to seek rectification if there is evidence of a problem (or with the school itself if that became necessary). Agreements in relation to the provision of capital funding for TTCs contain provisions that specify that the TTC must be used for the defined "Designated Use" in the "Designated Use Period" and there are also "Designated Asset Use" provisions in relation to assets for the purposes of the agreements. These clauses generally contain a formula to assist in the calculation of the amount of funding that must be repaid to the Commonwealth in the event that the building and/or assets are not used for the Designated Use/Designated Asset Use within the Designated Use Period. An example of such provisions may be found at clauses 15.5 and 15.6 of the *Trade Training in Schools Program Overarching Funding Agreement* with state/territory governments. Round 5 agreements also contain clauses relating to the hours of usage and the number of students expected to use the facility.

Of course, taking such a step would be a significant move on the part of a government and would need to be well-founded legally and taken after other remedies had been tried.

Conclusion

The figures reported by schools suggest there is a not major problem with meeting their school utilisation requirements. Utilisation rates do not look high but are broadly comparable with other specialist facilities in schools. The breadth of student curriculum choices, the size of the school population and whether schools are clusters are three factors affecting utilisation.

There is a real risk that facilities over time will be used less (with a change in school leadership, shifting educational focus etc.). Certainly this risk is increased if there is a switch towards taster programs and towards less technically demanding VET courses as less use would be made of the advanced equipment in TTCs.

If utilisation emerges as a concern, compliance and remedial actions are available to governments.

Schools have adopted very different approaches to opening up TTCs to wider use including by other registered training organisations (RTOs) and community groups.

On the basis of the departmental data, community and industry use on average is very small (less than an hour a week). There would be benefit in governments highlighting for schools the practical options available to increase community and industry usage and how some schools have successfully addressed concerns about non-school use.

The Commonwealth Government could encourage the education authorities in each state to have regional cross-sectoral consultations between TTCs and interested local RTOs and providers of adult education regarding the use of TTC facilities.

5 Expectations, Employer Views and Shifting Goal Posts

While the initial expectation of the program under the former government was that students would undertake courses at the Certificate III level, this was later softened to 'up to and including Certificate III'. This reflected the general consensus that the completion of Certificate III is impractical in a school environment. ASbAs are an exception and some TTCs offer competencies from Certificate III and Certificate IV courses rather than a full certificate.

Only around 7 per cent of students in TTCs are undertaking Certificate III courses with the majority, around 66 per cent, studying Certificate IIs. The remainder, around 27 per cent, are undertaking Certificate I courses.

More recently there has been a push from a number of employer groups that schools should offer courses up to Certificate II or only pre-vocational courses. This reflects concerns from employer groups that schools have over-reached in their course offerings, and that students with some Certificate IIs may in fact be at a disadvantage in the labour market because of competency-based pay and the value proposition they offer employers relative to others in the labour market. A number of states are likely to go in this direction.

Structure of this chapter

This chapter looks at the initial shift in contractual obligations as schools headed away from Certificate III.

It also discusses employer and industry group views about the past performance of TTCs and where they should head now.

It looks at two recent changes arising from deliberations of industry skills councils – one from the perspective of the Catholic Education Commission of NSW.

Some school principals and head teachers surveyed and interviewed pointed to the frequently changing goal posts in a complex system. While change in courses can be expected (for example as technology changes) some employers, principals and head teachers interviewed are concerned that the pendulum could swing too far in the direction of 'under reach' and that Certificate II courses could be 'dumbed down'.

Shifting school expectations and altered contractual obligations: the initial changes

As the program rolled out, schools were able to make a reasonably quick assessment about whether there needed to be a change to their course offerings and Commonwealth approved-TTC courses. The following presents two examples.

Our Lady of the Sacred Heart Thamarrur Mechanical, Technical and Hospitality Trade Training Centre (TTC) is located at a Catholic school in a remote Indigenous community in the Northern Territory. In 2008 the TTC was contracted to deliver a range of qualifications at Certificate I, II and III levels in construction, engineering, rural operations, hospitality and hairdressing.

Due to a number of contributing factors, the TTC has withdrawn the majority of qualifications it was originally contracted to deliver. The TTC experienced low student demand for the qualifications offered and some students lacked basic skills to undertake Certificate III qualifications. The TTC has had difficulty attracting and keeping suitably qualified VET educators.

The TTC is now offering Certificate I and II qualifications in automotive, hospitality, conservation and land management. These qualifications are in higher local demand and the TTC is able to utilise the program-funded infrastructure to deliver these courses.

Seaton High School Electrotechnology Trade Training Centre (TTC) is located at a South Australian government school. The TTC was originally contracted to deliver Certificate II and III qualifications in manufacturing and engineering/electrotechnology. Consortium partners considered these qualifications achievable and suitable to local industry requirements.

Due to low student enrolments, difficulties securing trained staff and a lack of community interest, the TTC no longer offers the Certificate II and Certificate III qualifications in manufacturing.

The Certificate III qualifications in engineering and electrotechnology required students to undertake a school-based apprenticeship. The school was unable to secure apprenticeship opportunities for all students enrolled in these training courses. Consequently, these qualifications were withdrawn and replaced with an appropriate Certificate II pathway qualification which allows students to transition into a relevant Certificate III qualification following completion of their Year 12 studies.

Employer and Industry Groups' Expectations

- Employer groups interviewed had mixed views about TTCs - reflecting the divergent performance of schools and the different requirements of industry. Employer groups pointed, on the one hand, to individual success stories, while on the other, to the gap between employer expectations and what students can actually offer in terms of skills and relevant experience with a Certificate II.
 - A number of these groups have long held the view that school students would have insufficient work place experience to equip students with the necessary work ready skills (see Clarke, K (NCVER 2012) and the Australasian Curriculum, Assessment and Certification Authorities paper Vet in the Senior Secondary Certificate of Education Issues (April 2014)).
- There was a concern that some state education authorities and many TTCs were not sufficiently connected to employers and industry needs.
- A number noted that students and parents' expectations were being raised unfairly because the courses were not always well-regarded by businesses.

- ACCI strongly argued that TTCs, and schools more generally, were over reaching on their capability to deliver.
- Some employers want VET in school to be about VET and not a plethora of other objectives.
- The industry groups interviewed were keen to see students encouraged to follow VET as a valued pathway but concerned about how this is being implemented, and one group (Victorian Automotive Chamber of Commerce) were so concerned about quality, that if the issue cannot be resolved, they consider the focus of TTCs (and VET in schools more broadly) should be on pre-vocational courses.
- Other employer groups were very nuanced in their comments on TTCs – suggesting that TTCs would perform well if they worked closely with local employers and were valued by them.

Employer and industry groups are concerned about the value proposition for employers while schools report that employers value their students

- For TTCs to be effective as employment pathways, employers and industry must see value. Some industry groups have questioned the value proposition of students completing Certificate II and units of Certificate III without effective real workplace learning. They went further and stated that some schools and school systems are disadvantaging students in this regard.
 - This is especially the case given the industrial relations system requires employers to pay students on the basis of their qualifications (competencies) rather than the employers' perception of their value. Some employer groups questioned the employment value of students with Certificate II qualifications who have had limited practice with accredited competencies, and who did not have any or sufficient real life work experience.
 - The Australian Industry Group (Ai Group) was more nuanced in its response, considering that this was an issue for particular industries and highlighting the need for a very carefully and well-informed approach to course selection by schools.
 - Employer groups reiterated the importance they place on real life work experience; something that a TTC, even with industry-standard equipment, cannot provide. One industry group interviewed noted that employers would value a second year apprentice who spends four days on the job and one day with their RTO more than a student from the TTC who spends four days at school (and with only part of that time in the TTC) and one day at work.
 - That said, successful TTCs do produce students valued by employers (including some TTCs that offer units of Certificate III for capable students).
 - Many TTCs in their annual activity reports and survey responses reported successful transitions of their trade students to work, being approached by employers to identify students for employment and willingly losing students to full-time employment after work placements. These messages were reinforced in my meetings with principals, head teachers and some employers.

Competency-based Wages

The Construction and Property Services Industry Skills Council (CPSISC), among other employer and industry groups consulted, noted the adverse impact of competency-based wage progression on Vet in Schools students.

“The impact of competency-based wage progression ...has been highlighted as a potential and significant hindrance to a seamless pathway from a Vet in Schools program or School-based Apprenticeship into a construction trade qualification. Competency-based wage progression has existed in several states and territories for some years.

Competencies achieved in a Vet in Schools program linked to nationally-accredited qualifications enable successful Vet in Schools graduates to obtain second stage (and even third stage) apprentice wages based on the retiring annual increment model of wage progression.

This ‘fast-tracking’ of apprenticeships through Vet in Schools is a clear sticking point in the construction industry, with questions raised over the quality of Vet in Schools training, the validity of work placements, and the industry qualifications of trainers and teachers. Recurring reports through CPSISC’s stakeholder networks indicate that construction industry employers are overlooking Vet in Schools graduates, commenting that site-based productivity of school-leavers commencing as second year trade apprentices compared with second year trade apprentices who commenced full-time post-school is significantly lower.

This is a pivotal issue for the construction industry as the construction industry is a popular VET choice for school students. False expectations about the success of a Vet in Schools program as an indicative pathway to employment are a primary concern.”

(Source: VET in Schools CPSISC Research – August 2014)

There was general although not universal support for the idea that this issue should be examined further. Ai Group noted that the Fair Work Commission had only relatively recently reviewed competency-based wages and that the heart of the problem lay with schools offering the wrong courses.

Others saw fundamental problems with any comparability between largely institutional-based training in schools, and largely work-based training.

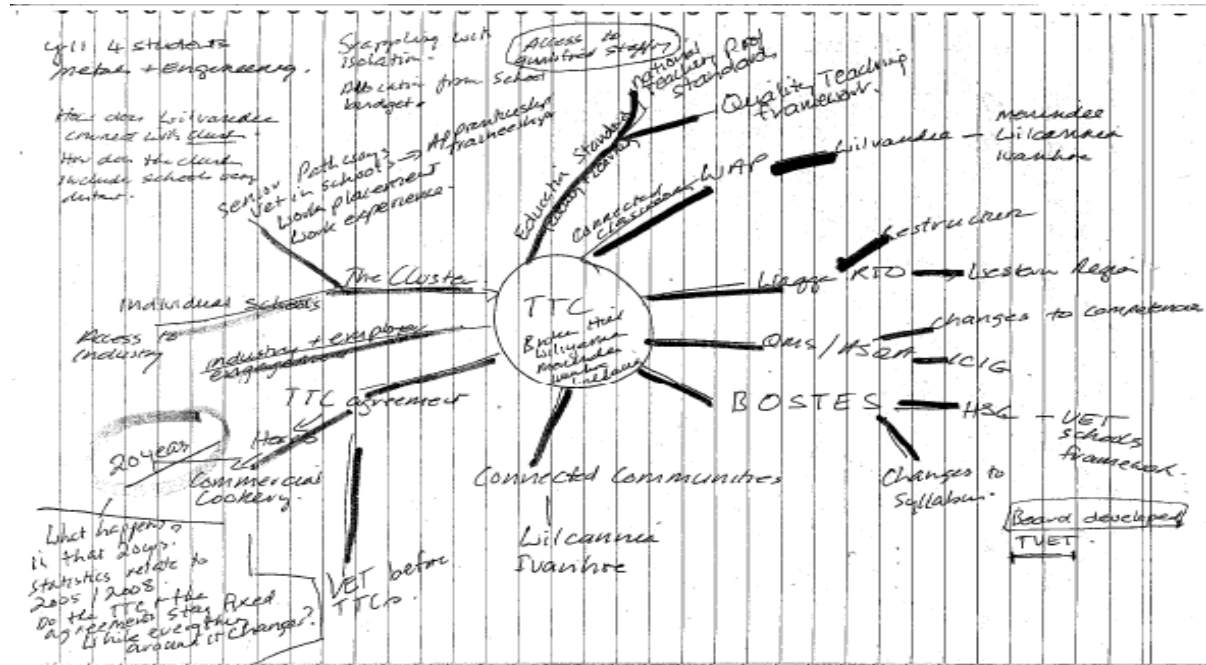
Most employer groups placed particular emphasis on structured workplace learning. While the Victorian Automotive Chamber of Commerce was highly critical of the value of structured workplace learning as they see it operating at present (it has students *observing* rather than *doing*), this was not the consensus view.

Changing Goal Posts

VET arrangements within school systems and post-school are complex and frequently changing. The VET in school system within each jurisdiction is complex and industry groups need to invest considerable time and effort to be across the variations in the systems in eight different jurisdictions (for example, the Vet in Schools Construction and Property Services Industry Skills Council CPSISC Research – August 2014).

A number of principals interviewed remarked on the complexity of the system and the frequent changes. Head teachers and teachers in TTCs deal with the complexity all the time often assisted by consultants or advisers from their respective education authorities.

One teacher drew a diagram from her perspective to illustrate the system as she experiences it.



The system is complex for those dealing with it on a daily and weekly basis. It is certainly a challenge for parents, prospective students and employers seeking up-to-date information in order to make well-informed decisions.

Changes in industry's views regarding engineering qualifications

During my school visits, head teachers at two different schools drew my attention to significant changes in industry skill council support for particular engineering courses. An employer interviewed as part of this review, who provides structured workplace learning to TTC students, also expressed concern. The Catholic Education Office has expressed deep reservations about this change and the initial lack of consultation.

I was informed by a number of sources that these changes will necessitate amendment to the contractual obligations of schools affected. While contractual changes are not a major issue, the concern being expressed is that the pendulum was swinging from 'over reach' to 'under reach'. If that is correct, and I am not in a position to judge this particular case, it would be an issue affecting the performance of TTCs.

NSW Catholic Education Commission – concerns about changes to Training Packages based on Industry Skills Council decisions

In late 2012, Manufacturing Skills Australia (MSA) (the Industry Skills Council) and State Training Services held a meeting with employers and other stakeholders in Newcastle to discuss implications for the delivery of the Certificate in II Engineering qualification through school-based delivery. Key concerns that were identified included the following:

- Implications for employers having to pay a higher wage for employees holding the Certificate II in Engineering qualification under the award. The industry award revolves around the number of training points (status) an employee holds. Qualifications (Certificate I and II) are made up of a number of units of competence which individually align with a number of 'industry points'. If prospective employees have industry unit recognition below 24 industry points (Certificate I) employers are able to pay them \$4.85 (30%) less than the 24 point worker; this is the difference between a 24 Point (Certificate I) worker and an 18 year old un-apprenticed junior (the difference is \$6.63 or 41% less where the employee is 17 years of age). The difference in the pay in the award between Certificate I and Certificate II is only \$0.48 or just under 3%.
- Perception by some large employers that students are disadvantaged by holding a Certificate II qualification. (Small employers dominate the sector.)
- That institutional learning was of a lesser quality than training that took place on-the-job. There was no distinction between school-based delivery of training provided through TAFE or other private RTOs.
- Concerns related to workplace health and safety for certificate holders that had less exposure to real work situations.
- That historically, the Certificate II qualification was always designed for those that were already employed within the industry.

On 20 March 2013, MSA introduced changes to a number of qualifications effectively limiting access for school students to qualifications delivered as part of the Metals and Engineering Industry Curriculum Framework (ICF) course. The courses affected were the Certificate II in Engineering (MEM20105), Certificate II in Engineering - Production Technology (MEM20205) and Certificate III in Engineering – Production Systems (MEM30105).

MSA added the following statement to these qualifications:

“This qualification (Metals and Engineering Training Package MEM05) is not suited and should not be used for people who are not employed in an engineering production or manufacturing environment. It is not suited and should not be used for school students unless they are formally engaged in a traineeship in accordance with the Australian Apprenticeships policy.”

Indications from MSA are that the current Certificate I in Engineering qualification will be totally removed, or have the same restriction placed on it as the Certificate II in Engineering when the Training Package is next rewritten and released.

Issues raised by the NSW Catholic Education Commission

- There was recognition that the award and implications for employers warranted a change but the change that was made will have long-term impacts on the industry.
- Qualification has been significantly 'watered down'.
- Not enough depth to offer as a 240 hour Industry Curriculum Framework (ICF) course. An ICF course enables students to undertake an optional HSC examination to have the course contribute towards an ATAR.
- Less exposure to using equipment actually increases the risk to students once they start employment.
- RTOs, trainers and students seek more relevant skills (e.g. projects, measuring). Students enrolled in the Industrial Technology Metals in Stage 5 have greater opportunities to develop skills than through the new qualification.
- Schools would offer the Industrial Technology course in Stage 6 as it offers an ATAR pathway.
- Request a greater variety of electives to be included to meet the needs of clients, employers and industry.
- Employer satisfaction in many regions is very high, with some employers only offering apprenticeships to students if they have completed 'VET in Schools' training.
- The MEM05 training and assessment packages were created in consultation with local employers.
- The new changes will discourage employers from employing students.
- Proposed changes do not address the entry pathways into the industry.

Enrolments and Delivery 2014

The changes have had significant impact on delivery of the Metals and Engineering course. There has been an approximate 20% decrease in enrolments in Metals and Engineering in the 2014 (Year 11) cohort. This decrease will double when enrolments are considered over Years 11 and 12.

A number of Diocesan RTOs made the decision to withdraw training in the MEM05 qualifications and have students enrol in the Industrial Technology course. These Dioceses didn't have TTCs offering these qualifications. One Diocese is only offering the qualifications at their TTC. Other Dioceses will review offering the qualification to students participating in schools other than TTCs post 2014."

Actions by Manufacturing Skills Queensland

The following information has been provided by the Commonwealth Department of Education.

In February 2013 Manufacturing Skills Queensland (MSQ) published a policy on the attainment of engineering qualifications in Vet in Schools.

MSQ's stated policy is that it does not support the delivery of higher level engineering qualifications to school students unless they are undertaking a recognised Australian School-based Apprenticeship (ASbA). MSQ considers students who complete Certificate II and partially complete Certificate III engineering qualifications while at school jeopardise their ability to transition into full-time apprenticeships in the sector due to manufacturing and engineering industrial relations instruments and resultant wage considerations.

MSQ encourages school students who are not engaged in an ASbA to undertake Certificate I level engineering qualifications, or to undertake the MSQ developed training packages, MSA20208 Certificate II in Manufacturing Technology or MEM20413 Certificate II in Engineering Pathways, both of which have been specifically designed for the requirements of Vet in Schools and other similar institutional delivery scenarios.

Several TTC projects in Queensland were originally contracted to deliver Certificate II and III qualifications in Engineering and Construction. In response to the MSQ policy, all TTCs in Queensland offering these qualifications sought variations to their funding agreements to replace them with the lower level qualifications as recommended by industry.

Conclusion

The key challenge is to have more TTCs operate with close engagement with employers and industry, and have strong consultative arrangements between industry skills councils and employers, education authorities and schools. For TTCs to perform well, it is also critical to have a system around TTCs that does not:

- encourage students to undertake certificate courses that are not well regarded by employers
- prevent those students who were poorly advised by their schools from undertaking other government-funded Certificate II courses (as occurs in some jurisdictions)
- see TTC students priced out of the labour market because of inappropriate training wage arrangements, or
- have the pendulum in course content swing from 'over reach' to 'under reach'.

Alignment with employers' interests cannot be assured without effective engagement with employers. Some states have mandatory structured work placements. Some schools have it as a key element of their approach, whether required by educational authorities or not. However, some do not. This warrants the attention of governments.

6 Best Practice

This chapter looks at key success factors drawing on the experience of principals, head teachers, employers, education authorities, and employer and industry groups interviewed. It showcases five TTCs that were recommended as high achieving, drawing out their particular strengths. Finally, the chapter concludes with some common lessons gleaned from the many interviews, survey responses and the school visits conducted as part of this Review.

Southern Cross Catholic Vocational College, Burwood NSW

A concentrated effort on trades training

Southern Cross Catholic Vocational College (SCCVC) in Burwood commenced operations in 2010 as an initiative of the Trades Training Centres in Schools Program.

SCCVC is the lead school in a cluster that includes 10 other schools and was provided \$11 million for the construction of workshops for automotive, construction and furniture making, a commercial kitchen, food preparation areas, a canteen, a training cafeteria, a training restaurant, hairdressing training salons, theory rooms, store rooms, an office, amenities and the provision of equipment.

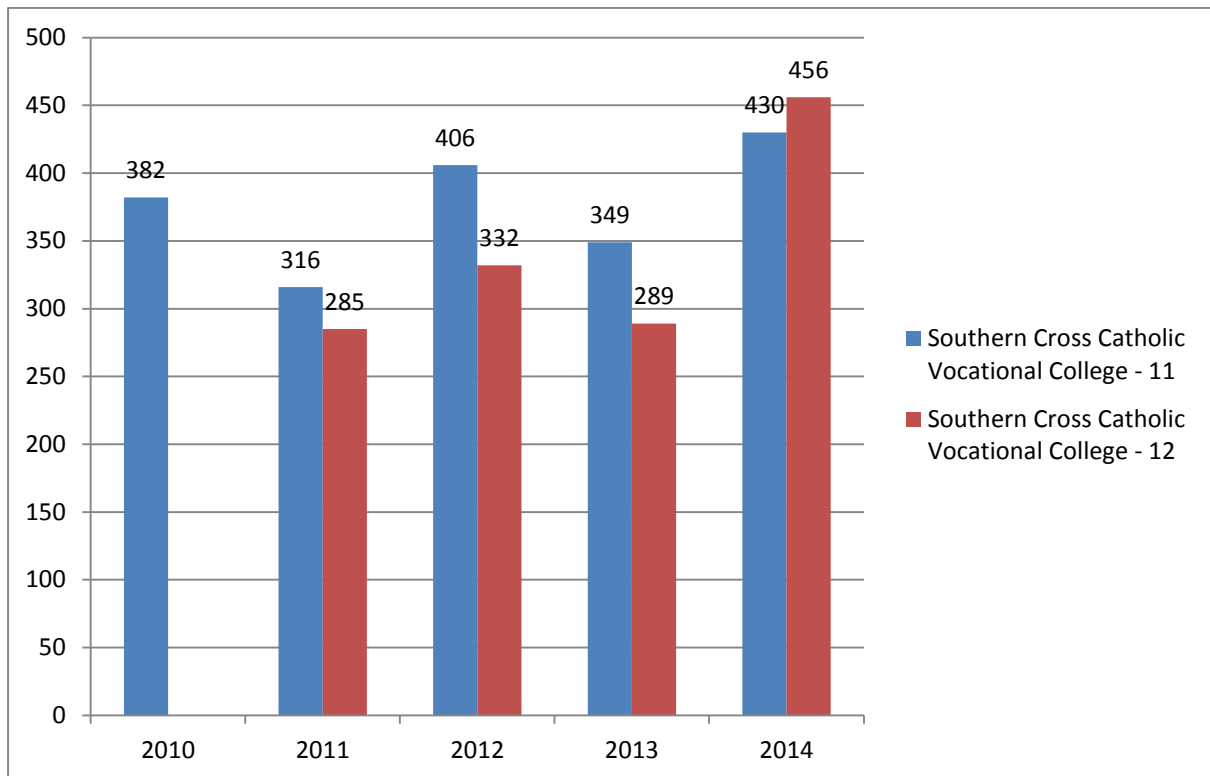
The college provides Year 11 and 12 students with high-quality, personalised learning that is centred on vocational learning and training. This includes the five TTC-funded trade courses as well as 11 further vocational courses. The college has a high level of support from employers across industries, with 70 employers currently providing paid work for students undertaking school-based apprenticeships and traineeships. All students participate in structured workplace learning. There are 858 active host employers participating in the college's structured work placement program.

A wide range of industry partners are also involved in the college's transition events, which include careers expos, mock interviews and excursions. There are two employers/industry representatives on the Advisory Board, along with other TAFE and community representatives.

Students typically undertake three vocational courses and a number of other complementary courses, enabling them to not only obtain their Senior Secondary School Certificate, but also credentialing their vocational courses.

VET delivery has grown significantly over the last four years with SCCVC becoming the largest provider of VET training in the NSW Catholic sector.

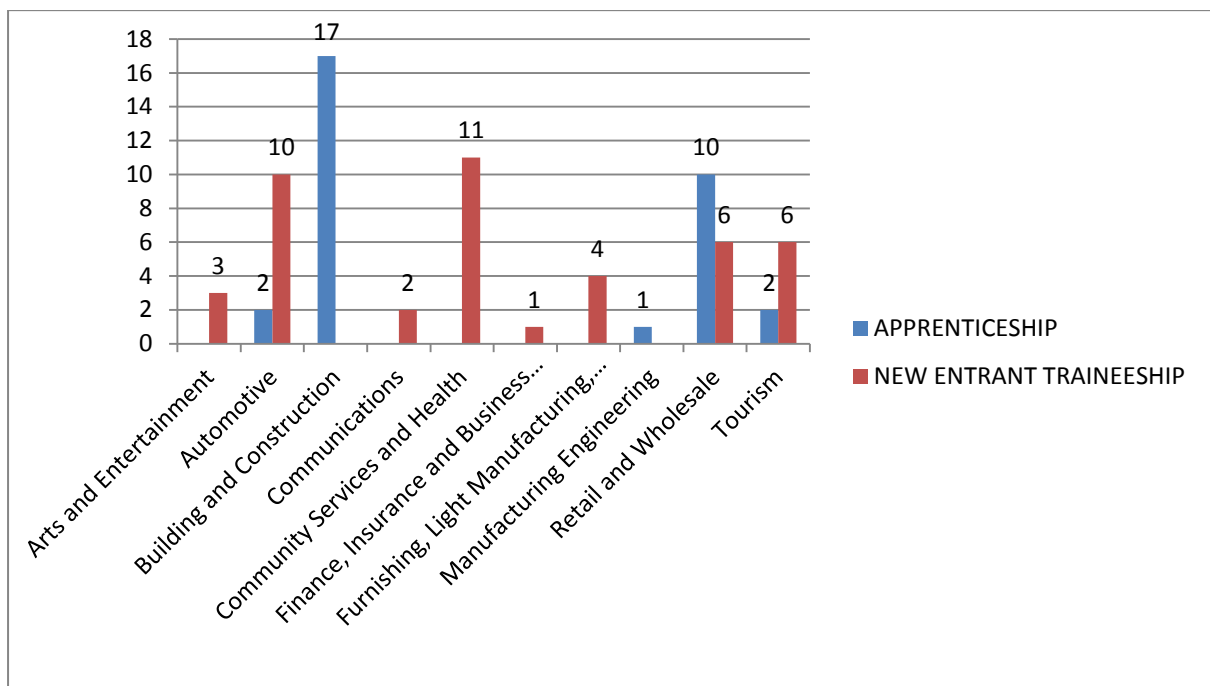
VET Enrolments 2010 – 2014 Southern Cross Catholic Vocational College



School-based Apprenticeships and Traineeships (SBATs) is another key focus area of the college.

Students are supported through the SBAT Coordinator for the Archdiocese.

School-based Apprenticeships and Traineeships 2014 by Industry Group



All students, whether they have a SBAT or not, are mentored by teachers and trainers at the college to ensure that they are supported in their education.

The facilities at SCCVC are state-of-the-art and meet industry and Training Package requirements.

Consultation with industry prior to, during and post establishment has ensured that the facilities and resources available to students and trainers meet current and future needs for training.

Outcomes

The school in the Review survey reported:

- Improved work readiness
 - All students develop a range of employability skills such as initiative and enterprise, planning and organising, self-management and technical skills, etc.
- Improved job skills
- Improved opportunities for employment
 - A number of students gain part-time work from their work placement or are offered full time employment post-school. School-based apprentices and trainees continue with their employer full-time post-school.

Of the students interviewed in the post-school destination survey for 2012 school leavers:

- 92 per cent said they were better prepared for work because they participated in the school's Transition to Work program (Mock Interviews, Careers Interviews and Careers Expo)
- 79 per cent said work placements helped them decide what to do after leaving school regarding further study and work
- 77 per cent said work placements helped them decide what NOT to do after leaving school regarding further study and work
- 90 per cent said they developed more confidence during their work placement experiences
- 82 per cent said work placements provided them with specific skills and experiences that were useful in their chosen career path
- 93 per cent said their work placements helped them to develop the personal attributes and employability skills required to enter the workforce.

In the destination survey of SCCVC students who left school in 2012, students were asked to indicate the main reason for attending SCCVC. 36 per cent indicated that their reason for attending was because there were more practical courses. A further 33 per cent said it was to improve their chances of getting a job and 20 per cent attended SCCVC to complete a specific qualification.

Anecdotally, many students indicate they would not have continued at school if SCCVC did not exist.

Recognition for TTC's strong performance

SCCVC won the national **School Pathways to VET Award** for 2013. The award recognised the College as having delivered excellent education and training programs to secondary school students and its commitment to ensuring students become the best they can, undertaking quality training on and off campus, so they can emerge confident, skilled and employable. This is a category in the Australian Training Awards - the peak national awards for the VET sector.

Challenges

In response to the survey questions “What issues have you encountered in ensuring ongoing industry and employer engagement with the TTC? How have those issues been addressed?” the Principal of SCCVC stated:

‘While employers are highly enthusiastic about the TTC once they see the quality of facilities and training available to students, there is a general lack of awareness about the nature of VET in Schools and TTCs. More broadly, many employers have a limited understanding about apprenticeships in general and even less understanding about school-based apprenticeships.

Employers also face challenges in contributing time and resources to effectively participate in college activities, such as attending partnership events and providing work placements or paid work. This can lead to communication difficulties which are not helped by lack of understanding at the level of Industry Skills Councils and employer bodies, which sometimes promote negative views of the value of VET in Schools.

To address these issues, the college has employed specialist industry liaison staff who have been very successful in raising awareness of the value of VET in Schools and sourcing employers for SBATs and work placements. Industry partnership events and telemarketing campaigns have also assisted with engaging employers.

Work placement service providers also play a vital role in helping to source quality work placements for on-the-job learning. They provide a highly valued and coordinated approach to contacting employers and linking them with schools. Unfortunately, the funding for these organisations is in doubt for next year.

Another important strategy adopted at SCCVC is to replicate the workplace as much as possible. Southern Cross Enterprises has been established to provide business opportunities for students to contextualise their learning while at school – for example, Hospitality students being involved in catering for functions.’

Success Factors

In summary, the following features make SCCVC one of the standout facilities in the Trades Training Centres in Schools Program:

- The concentration of effort on vocational education and the utilisation of complementary courses
- Appointment of key personnel to develop the TTC’s partnerships with local employers
- Partnerships with industry, employers and businesses
- Structured work placements
- Emphasis on supporting school-based apprenticeships and traineeships
- Growing enrolments and recognition by students and parents that SCCVC provides excellent pathways post-school

- State-of-the-art training facilities.

Sunshine Coast Technical Trade Training Centre Queensland

Strong engagement with local employers and industry

This TTC was highlighted by two employer groups interviewed as part of this Review as a very successful TTC.

The lead school in this TTC is Caloundra State High School. It clusters with four other schools, but all 12 schools in the region enrol students at this facility. Commonwealth funding under the TTC program was \$2.5 million. In the 2013 school year 112 students were enrolled in the TTC.

The TTC provides vocationally oriented literacy and numeracy support for students that require such assistance.

Their success in engaging with employers and industry

More than 300 employers are available to take students for structured work placements. In 2014, students will spend a total of 10 000 hours in industry. All students participate in structured workplace learning. For example, there is a four week mandatory structured workplace learning component as part of the Door to Construction Program.

The school has strong partnerships with industry and benefits from sponsorship by local firms.

In 2013 this TTC received the following awards –

- 2012-2013 - Construction Skills QLD Construction School of the Year State Finalist
- 2013-2014 - Education QLD Showcase Awards for Excellence in the Senior Years Regional Winner/ State nomination

<p>What issues have you encountered in ensuring ongoing industry and employer engagement with the TTC? How have those issues been addressed?</p>	<p>None - continue to develop positive relationships with wider industry. e.g. In 2014 introduced Cert III Surveying - held an industry information breakfast - attended by 25 local employers - resulting in numerous [structured workplace learning] SWL placements, offers to mentor students, industry training on equipment that we can't provide.</p> <p>Have utilised extensively support from QLD Peak Industry Bodies - engaged now for 5 years - very good relationships.</p>
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Extract from the Review survey responses from Sunshine Coast Technical Trade Training Centre

Outcomes

In 2013, 96 percent of TTC graduates were engaged in full-time employment (apprenticeships/labouring) or engaged in further education and training.

Employers are now approaching the SCTTTC directly to recruit apprentices. For example, in April 2014, Thompson Builders contacted the TTC and are now employing four 2013 graduates.

The school reported that “the SCTTTC consistently receives positive feedback from parents in regard to our development of students and monitoring past students supporting them in connecting with career opportunities. Several have commented that they saw tremendous growth in their young person’s self-esteem, commitment etc. since attending SCTTTC”.

(Sources: Activity Report; Commonwealth Department of Education; information supplied by the Queensland Department of Education; Sunshine Coast TTC response to the Review survey)

Loyola Senior High School, Mt Druitt, NSW

The school offers a concentrated trades offering

Loyola Senior High School is the lead school in a cluster involving five other schools in the western suburbs of Sydney. The school is situated in an area of low socio-economic status.

This TTC was originally a consortium project with input from the Motor Traders Association of New South Wales, Rooty Hill RSL, TABMA, Impact Training Institute and TAFE Western Sydney Institute.

Commonwealth funding of approximately \$9 million was provided for the construction of a multipurpose automotive, construction, engineering and electrical building and a hospitality building, the refurbishment and relocation of a hairdressing facility and extension to the school library and also the provision of equipment.

The capital costs for the Trade Training Centre overall have been shared approximately 70:30 between Commonwealth Government and the school, however, the initial project was more like 90:10 prior to the expansion of the project in recent years.

The TTC was operational in 2011 and delivers qualifications in 11 trades including automotive, construction (including shop fitting), electrotechnology, engineering, plumbing, hairdressing and hospitality to address skills shortages in the trades of motor mechanic, metal fabricator, carpenter, general electrician, plumber, cook and hairdresser.

The school reported great outcomes in terms of apprenticeships and while it was conscious of the debate surrounding competency-based wages, the school has had considerable success with employers taking on students with Certificate II and partial Certificate III qualifications. Employers often approach the school seeking apprentices and offers of full-time apprenticeships following blocks of work placements.

The careful planning of the layout of the facilities allowed the school’s hospitality facilities to be used to supply the school café /canteen, and to service large functions both indoor and outdoor. The school also provides offsite catering. Students were expected to participate in all aspects of the operation of the facility.

Students enrolled in the TTC are offered limited curriculum options (non ATAR). There is an overwhelming focus on obtaining VET experience and qualifications. A typical student would study English, Catholic Studies, Industry Based Learning (or work studies) and Units of Competency in the Certificate III in their chosen trade (equivalent to a second year apprentice upon completion) as well as multiple VET courses such as Information and Digital Technology, Business Services Certificate II and III, Tourism, Hospitality (Food and Beverage), Construction, and Sports Coaching.

A student doing a Certificate III in childcare would typically also do English, Food and Beverage Certificate II, Business Certificate Cert III, Catholic Studies, Industry Based Learning.

The school has engaged industry experienced trade teachers, has strong contacts with employers and has a full-time Industry Liaison and Business Development Officer set aside to liaise with local employers, business and community.

The principal stressed that the expectations of the Loyola TTC was that the focus had to be on real work experiences and accepting (and managing) high risks.

Catholic Regional College (CRC) Trade Training Centre, Sydenham, Victoria

An international showcase: The College uses five school businesses to give students practical experience

This Catholic Regional College (CRC) TTC is an international showcase for entrepreneurial effort in the delivery of trade courses in schools. This college received \$6 million in Australian Government funding under the Trade Training Centres in Schools Program towards the construction of two commercial kitchens, food preparation rooms, training restaurant, hospitality theory room, construction, furniture making and picture framing workshop, machine room, sign writing and design workshops, seminar room, offices, store rooms and amenities and also the provision of equipment.

It is delivering qualifications in bakery, construction, hospitality, manufacturing and printing to address skills shortages in the trades of baker, carpenter and joiner, cook, picture framer and sign writer. Its teachers have a very strong background in industry and are able to draw on that expertise and industry credibility to gain structured workplace placements. For example, the school has catered for large corporate events and successfully placed students in some of Melbourne's best restaurants.

The college runs five businesses on its school site as a means to provide practical experiences (simulated work settings). The school also provides external structured workplace learning. (In Victoria structured work placements are recommended but not mandatory.)

The five businesses are:

- The CRC bakery
- Quatrefoils Restaurant
- Sydsigns
- Frames@CRC

- The Crate Theatre

The careful planning for site location of the TTC took into account the need for public access to the businesses, including after-hour access.

The college operates a well-equipped bakery that services two outlets: the bakery open to the school and the public, and the school cafeteria. The **CRC bakery** operates five days a week Monday to Friday 9.00 am – 4.00 pm. The college employs a professional baker and an apprentice (formerly from the college) and students undertake a Certificate II in retail baking. Students are involved in the production of goods for sale and in servicing front of shop. While the business has had considerable success, its strong relationship with the local industry has avoided complaints about competition.

Quatrefoils Restaurant is a fully licensed restaurant. It is open two to three nights a week (usually Tuesday to Thursday) most terms and can be booked for special occasions. It provides students with practical experience in front and back-of-house operations. Earnings from the restaurant have been invested in new kitchen equipment.

Frames@CRC is supported by industry and works in conjunction with Box Hill TAFE to deliver Certificate II in Picture Framing. It offers high quality framing services to the public (including businesses). The Framing business also employs a full-time apprentice who was a Year 12 student the previous year and is also the first Sudanese employee for the College.

Sydsigns has state-of-the-art technology and offers training in Sign Manufacturing. The public are able to purchase banners, flags, 3 D letters or illuminated signage, and corporate ID signs for commercial premises. Roland DG Australia, a worldwide supplier of wide-format inkjet printers and print and cut devices, has donated equipment to the school and also committed to supplying upgrades to the equipment.

The **Crate Theatre** is breaking even financially with training being the focus. The college noted it was a more challenging business. The theatre is a versatile multi-purpose venue that seats 186 people. It is suitable for a wide range of uses including production, performances and ceremonies. The college can offer restaurant and function space as well.

The TTC and the establishment of the five businesses represented an important new direction for the school. Traditionally, CRC Sydenham had a strong academic focus with only two VET subjects on offer. However, data showed only 48 per cent of graduates actually ended up in universities. In the last seven years, CRC has developed a strong focus on VET. Presently, almost all students select one or more VET subjects on offer. As a great deal of VET subjects are two year courses, students from year 10 follow the natural progression in year 11.

Qualifications delivered at CRC in 2013	No of Year 9, 10, 11 students enrolled
Certificate III Retail Baking (Combined) FDF30710	25
Certificate II Furniture Making LMF20309	44
Certificate II Hospitality (Kitchen Operations) SIT20307	38
Certificate II Picture Framing LMF20602	18
Certificate II Signage 22003VIC	13

Industry and employer engagement

The following comes from the school's responses to the Review survey questions:

- *"From the onset of the planning of our TTC we sought and obtained industry advice in the design and layout of the training facilities of the different trades. On an ongoing basis we are able to draw on senior executives from relevant industries such as hotels and an award winning restaurant.*
- *Employer engagement is an issue that is somewhat one sided as far as ongoing support is concerned. The school in all its VET programs does spend a great deal of time and effort to nurture contacts and ensure the support continues. To widen the network, the school calls on parents of students with businesses or connections for further support. There is also support "fatigue" apparent by even the most dedicated employers or businesses, particularly since the "market" is somewhat saturated with VET programs.*
- *The school as a whole and the TTC in particular continue to expose itself through marketing, competitions and invitations to outsiders. As the TTC businesses are open to the general public, the training environment is not a closed shop and a great deal of interest is generated by the general public who in turn generate a growth in clientele for our students to work with.*
- *The restaurant is often used to provide a venue for meetings with industry, educators and sponsors. The Crate Theatre has been used for a number of conferences (i.e. Home Economics Victoria) and tours of the TTC generated a great deal of interest and contacts for us to widen networks within the local and wider community.*
- *There have been a great number of industry donations of equipment (Roland printers, cooking equipment by the Stoddart Group and computers by ACER) in support of the new training facility. Our trainers are industry professionals with ongoing support by suppliers and a network of other businesses.*
- *Industry, educators from around Australia including WA, NSW, Tasmania, and Queensland have visited the facility with the last being Catholic College Sale asking for advice and help in the design of their new Trade Skills Centre. Melbourne University's education department has over the years showcased the TTC Sydenham to educators and policy makers from all over the globe including the USA, Germany, Chile, France and the UK. This has led to networks to a sister school in Senegalia (Italy) and workshop of policy makers and educators of the University of Osnabrueck, Technical University of Berlin and the Brillat Savarin College to be held in September in Berlin.*
- *The College prides itself on its membership of industry networks in all trades, regularly consult with VU, Box Hill College of TAFE and William Angliss Institute on issues of training. All our VET students are partaking in work placement including other VCAL and VET programs delivered as*

part of the extensive VET subjects on offer at CRC Sydenham. This is not limited to TTC run programs. We have a workplace training philosophy at CRC Sydenham and created small businesses (CRC Bakery and patisserie, Frames for picture framing, Sydsigns for the signage program, Quatrefoils restaurant for hospitality)."

Outcomes

From structured workplace learning

"Apart from the experience in a workplace, we find a number of students gaining part-time work, offers of apprenticeship after completing schooling and repeated offers from businesses to take on more students for work placement. Past school-based apprentices found full-time employment or progressed into apprenticeships. Requests have been made to change from a block of 2 weeks to maybe 1 day per week over several weeks. This is positive feedback which may be considered in an integrated VCAL model the school currently investigates.

Year 12 attainment

- *In both VCE and VCAL, students have been able to use credits from units of competency gained through TTC courses to assist in the completion of their VCE or VCAL program. As students are able to access the programs from Year 10 onwards, they have increased ability to accumulate units that contribute to completion.*
- *For students who lack engagement in the more academic VCE programs, and therefore may receive N results in many units, credits gained through programs conducted in the TTC are often instrumental in ensuring that students are eligible for completion of their VCE or VCAL program.*

The impact of the TTC on student post-school training and employment

Depending on the particular industry training program, some students continue their training to higher Certificate or Diploma levels. Not all students enrolled in VET program are genuine in a career in the particular industry. Following some students in their pathway it estimated 25 per cent of students follow the career path particularly in hospitality, some use the skills acquired to finance their university studies through part-time employment in the hospitality industry whilst others do not continue after leaving school. There are a number of students who use the scored assessment of VET in VCE to add to their ATAR score without choosing an additional academic subject.

Whilst a number of students do not follow a career in the specific industry, it is safe to say that approximately 50 per cent of students, particularly in hospitality, use the skills acquired for further part-time employment.

There are also ongoing success stories with past students progressing into apprenticeships at Sofitel, Ferguson Plaire Cakes, continuing in and completing certificates in patisserie at William Angliss Institute, apprenticeships in signage with further studies at Victoria University and many more."

A cluster arrangement

The TTC is a cluster project with three other schools and a consortium arrangement. Students from 16 other schools that are not contracted cluster schools have also been enrolled in qualifications at CRC TTC

Ensuring access to schools within the cluster

There are specific VET days and the hospitality program is run after hours starting classes at 4.00 pm to approximately 9.30 pm. This enables students to enrol in courses during ordinary school hours as well as the hospitality program. This also reflects the nature of the industry and adds value to the industry training program.

(Material from the review school visit, annual activity reports, CRC Sydenham's website, and responses to the Review survey)

Aviation High School Queensland

Offering a highly specialist course

This school received \$1.5m in Commonwealth Government funding under the TTC program for a new Aeroskills workshop, the refurbishment of a classroom and provision of appropriate equipment. The students at Aviation High are working with world-class industry standard equipment such as a wind tunnel and flight simulator. As a specialist school, the enrolments for Aviation High are around 390 from Year 8 to 12. The Principal noted that families have moved from interstate so that their child can attend this school.

Aviation High was launched by the Premier of Queensland on 9 August 2007. Formerly Hendra Secondary College, the school was established to provide a direct pathway for students seeking careers in the aviation and aerospace industries in Queensland.

The curriculum at Aviation High has been significantly influenced, and to varying degrees supported, by the aerospace and aviation industries. It offers Queensland Studies Authority subjects from Year 8 to Year 12 that have been contextualised with aerospace and aviation content across a broad range of industry valued subject areas.

In recent years, students have undertaken a practical course in Aircraft Maintenance Engineering (developed by the Queensland Government), which will lead to a Certificate IV in Aircraft Maintenance Engineering, an area of national skills shortage. From 2014, Year 11 students will be undertaking the Certificate II in Aeroskills which is a direct pathway to the Certificate IV.

Aviation High has a unique relationship with Aviation Australia (AA) to offer the one day per week course in Aircraft Maintenance Engineering to senior school students. AA was opened in 2001 and is now recognised by the industry as the leader in aeroskills training in Australia. Approximately \$20 million has been outlaid at AA to provide world-class training infrastructure, courseware and delivery techniques for aircraft maintenance engineering. The move to the delivery of the Certificate II qualification was instigated by AA.

The Trade Training Centre has had enrolments of:

2010 – 41 students

2011 – 47 students

2012 – 44 students

2013 – 34 students

The reduction in the number of enrolments in 2013 can be attributed in part to the downturn in the aviation maintenance industry in Queensland.

The school's application for funding was supported by industry partners such as Brisbane Airport Corporation, Boeing, Aviation Australia, Qantas and Virgin, to name just a few, but in reality the practical support has been largely limited to Aviation Australia. A serious challenge for the school is to convert industry "interest" into "practical support".

Two roles have been critical to the success of the school. The TTC teacher is a pilot and very committed to the success of the TTC. He has industry and teaching experience and qualifications. The leadership of the principal is also vital, and over time the school has experienced changes in leadership that have affected the TTC. The current principal, who has been at the school for approximately 18 months, is passionate and enthusiastic and is determined to achieve wider and more effective engagement from the aviation industry.

One of the activities the students of the TTC are involved in is creating unmanned aerial vehicles (UAV) and taking part in competitions specifically designed for these vehicles. The head teacher has replicated the wind tunnel provided by the TTC to enable the UAVs to be tested for flight suitability. It was noted that students need to be encouraged to leave school by 5.00 pm as they are so involved in their studies at the TTC.

The Principal advised that fifty per cent of their students are accepted into Australian Defence Force Academy.

Success factors: a Review perspective

No two TTCs are alike. The short case studies illustrate the diversity of TTCs but two critical issues stand out.

The two critical success factors of TTCs are strong school leadership (the principal and the head teacher) and local employer engagement.

The leadership of the school is vital to getting the best out of the facility. Principals set the tone and direction for the TTC, the appetite for risk and entrepreneurial flair. Head teachers are vital to the quality and industry credibility of the TTC.

Some common lessons

The many hours of interviews, the survey responses from 126 schools and the school visits suggest some important common lessons (for policy designers, state departments and schools).

- Take the time to consult widely to get it right from the start
- Where possible, allow principals to control the design process with strong input from the education authorities and trusted industry advisers.

BUILDING DESIGN: WHAT ROLE SHOULD HEAD OFFICE AND PRINCIPALS PLAY?

The difference between genuine control and minimalist input showed up in the site visits. One TTC principal had spent hours with experts designing the right configuration for the kitchen, café and open area so that now the school has a very functional arrangement (Loyola College). At another TTC

the large hospitality facility is the backroom for the school café. However, a visit to a TTC in a regional area in the same state, subject this time to centralised decision making in Sydney, revealed a washing room without an available drain, a mounted microwave that could not be easily opened, and dysfunctional outdoor exit to a large outdoor area, suitable for outdoor eating, but undeveloped. A senior NSW official has committed to address a range of problems identified at that school.

In other states where building design was highly centralised and the school effectively had to pay for the compulsory service from the state education department, the school principal questioned the value they got from central office.

In many conversations in QLD, NSW, and to a lesser extent in Victoria, it was clear that there were divergences of view about the capacity and interest of principals to manage a design a project like a TTC, with state officials expressing the view that it was best left to central office versus the irritation and frustration by principals that head office thought they always knew best. In both NSW and Victoria, I heard of delays and projects being scaled back because central office cost estimates were based on metropolitan costs rather than local conditions. One principal gave the example of the metropolitan quantity surveyor estimating \$6m as the cost of the building, the Melbourne based companies quoting \$6m, the local quote coming in at \$4m and the final project cost \$4.5m. The variations in costings required a number of reworkings of the plans and unnecessary delay. The principal noted that he has successfully managed a building project many times more expensive. As the principal summarised it “Have control over the funding at the building stage”.

- Engage trades teachers with strong industry backgrounds and strong credibility with local employers (or the capacity to quickly establish credibility)
- The time and effort taken in recruiting the right people will pay dividends
- Utilise all the means available to engage with local employers including:
 - attending local industry meetings
 - engaging with state and national bodies (a number of schools have very effective partnerships)
 - utilising the school’s ex-students and students’ parents in the trades and industry to make connections
 - Seeking structured work placements, sponsorships and free consumables from employer and industry networks. As one principal noted, a local firm may not provide cash but may be able to offer in-kind support.
- Engaging with local RTOs for partnerships, shared facilities or for the hiring of your TTC facilities and engaging with relevant clubs (e.g. automotive clubs, woodworking, etc) on shared opportunities.
- Seek sponsorships from suppliers. Some schools reported remarkable success.
- Be flexible with industry - if appropriate: one school responded flexibly to an employer and trusted partner in the school work placement program, who sought to engage a few students

for simple welding for a short order. The school considered that it would give students the right experience at a time when the business had plenty of work. At times when business had been slow, the firm had still taken students and given them worthwhile work to do.

- Set the expectations of parents and students early. In the case of CRC Sydenham, parents are told that students will be working some nights in the school restaurant, but that is par for the course for the hospitality sector.
- consider extending the school day/using large timetabling block if possible – one hub-school in a cluster has classes from 1.30 pm to 5.00 pm.
- Some TTCs allow businesses to use/hire their facilities.
- Taking acceptable risks can be worth it.
- The best outcomes arrive when students can effectively specialise in trades (“the all things to all people” results in diffused benefits).

7 Views of Education Stakeholders and the Issue of Recurrent Funding

The message from the school survey undertaken as part of this Review, the interviews with all education authorities (state and territory departments, Catholic and independent), and the school principals and head teachers interviewed as part of the Review school visits was that TTCs in general were producing positive outcomes.

The views of principals and head teachers

While employer groups were predominantly concerned with the quality of courses and the need for greater engagement with industry, the issues of concern raised by school principals and head teachers relating to TTCs were very diverse:

- the challenges of establishing and sustaining good/high performing TTCs (having sufficient teaching and financial resources, maintaining student interest and industry engagement)
- establishing the reputation of the TTC with students, parents and local employers
- dealing with a complex and changing education and training system
- making cluster arrangements work
- the administrative workload of TTCs, including the constant demands of competency-based assessment.

<i>Selected comments from the Independent Review survey</i>
Based on exceptional student outcomes, links with Mining Industries, we are in need of extending the facility to offer more students the same opportunities. <i>North Queensland Minerals and Energy Trade Training Centre, Kirwan State High School</i>
The construction of the TSC for Lavalla Catholic College will have huge benefits for our students in years 7-12 in 2015. Currently the demand for spaces within our Certificate courses (Building and Construction and Engineering) far out weighs the outdated facilities capacity. The new TSC will provide double the current certificate opportunities for students to engage in trade training. This in an area of high unemployment gives students the opportunities to gain skilled employment in a competitive market. If we can provide more students with these opportunities we would hope that this would assist in reducing our localised unemployment rate. <i>Lavalla Catholic College Trade Training Centre</i>

This has been a huge boost to our students to study in an industry standard room with an industry trained teacher. Their education about Hospitality and Technology Mandatory is the best that can be provided in an extremely low socio-economic community where few families are employed.

Our community has the second lowest socio-economic disadvantage index.

Orana Trade Training Centre, Saint Mary's Catholic School

Great program - could be improved by a regular contact with centres that have been operating for a extended period of time as to what they have experienced, good and bad, any ideas that may be shared.

Capricornia Coast Trade Training Centre, Yeppoon State High

The issue that I would like to raise is the need for continuous funding. We are so appreciative of the initial set-up funding but it does impose a huge cost to the college. With a \$3.5m facility and over \$800,000.00 worth of equipment it is a significant cost to an independent school to cover in maintenance and the inevitable replacement.

Mackay Christian College Trade Training Centre

The reporting process changes each year and is unwieldy. Clearly, whoever writes it, does not understand the 'on the ground' impact.

The reporting document did not work as intended in 'distributing' to cluster schools in the TTC & caused a huge workload for all members.

Another area for change would be around the ability and capacity to easily vary qualifications as need arises.

Maintaining currency and sustainability will ensure optimal outcomes. Whilst the TTC partners do their utmost to maintain/improve facilities and equipment, some consideration of future support would be appreciated.

Northern Adelaide Regional Trade Training Centre, Northern Adelaide State Secondary Schools' Alliance

Since many of the students that enrol at Ranges TEC full time have all but disengaged from education, they usually require a high level of input and support by teachers and education support staff. This year 12 out of the 54 full time students on campus are eligible to be counted as students with learning disabilities on the Commonwealth Census of school students.

Ranges TEC offers a full time mode of training through its use of the Victorian Certificate of Applied Learning. We have found this an essential part of a successful educational model for applied learners. Without this additional applied learning context, the limited time spent with students in the typical one day a week trade training model is inadequate for many learners.

We would argue that Applied Learning in which trade training forms an integral part needs to be recognised and funded effectively. It requires greater funding than is typical for an academic pathway secondary program because it inevitably must have smaller class sizes (the student teacher ratio at Ranges TEC is more like 9:1 whereas a typical secondary school will have a ratio of about 12:1), it must purchase costly consumable materials, and it must maintain and replace equipment.

There is a gap in the recognition of trade teachers who work with school age students. Since our trade teachers work in this school context the Victorian Institute of Teaching (VIT) requires them to be registered. By way of contrast, trade teachers in TAFEs who work with school age students do not require such registration. Registration is achieved in Victoria through the VIT. Where a trade teacher does not have a formal teaching qualification they must gain “permission to teaching” (PTT) from the VIT. In recent years the requirements for PTT have been severely constrained. Many trade teachers exit, or a few, as in the case of three of our trade teachers embark on a post-graduate training course to gain their teaching qualification (Latrobe University’s Graduate Diploma in Technology Education). Such courses are not designed for tradesmen. Significant attention needs to be given to establishing effective pathways into teaching for trade trainers that do not presuppose typical models of tertiary study.

Christian College Lilydale Trade Training Centre, Ranges TEC - Mount Evelyn Christian School

Whilst there are a lot of positives, public works are somewhat inflexible when there are layout and equipment ideas that could be beneficial for the whole school community and provide ongoing cost savings.

Fairfield Trade Training Centre, Westfields Sports High School

The recurrent funding issue is always there ie cleaning, insuring replacement of equipment etc.

Obtaining suitably qualified staff in the TTC specialist areas is always a challenge, but vital to ensure validity of courses.

Wodonga Senior Secondary College North East Victoria Hub Trade Training Centre

The survey undertaken as part of the Review (TTCs in operation in 2012 and all TTCs) sought feedback on issues surrounding the performance of TTCs, how successful schools had been in engaging with industry and local employers, and access to TTCs for cluster schools (reported elsewhere in this report). It then asked:

“Do you have any other issues with the operation of your TTC that should be drawn to the attention of the Review? If so, briefly what are they?”

The table below summarises the responses from all the TTCs that responded to this question – one hundred and thirteen TTCs. Few schools raised equipment or building issues, although some principals in state schools visited expressed concern about their lack of control over building

decisions. Few raised transport issues, although more comments came forward on this in relation to the survey question about access to clusters.

<i>Do you have any other issues with the operation of your TTC that should be drawn to the attention of the Review?</i> <i>Total no. of responses: 113</i> <i>RESPONSES</i>	<i>Number of times raised</i>
Funding (recognition that VET courses are more expensive), including:	
- Equipment maintenance/replacement	19
- Teaching costs (including industry currency)	13
- Leadership management	4
- Transport/accommodation	4
- Industry liaison/coordination	2
- TAFE (to enable the organisation to effectively engage with schools)	1
State funding of courses/VET reforms (WA, SA and TAS)	6
Difficulties in engaging with industry*	4
Difficulty getting right teachers	6
Constantly changing course requirements	5
Teachers' maintenance and coordination/responsibilities	3
Cluster problems (including shared costs)*	3
Red tape (for the Australian and State Governments and Registered Training Organisations)	4
New state policies regarding VET	3
Poor site location	2
Poor building design between schools	1
Small class size (more expensive than traditional classes)	2
Inadequate equipment	2
Under utilisation	3
Timetabling	3
IR (wage levels for Cert III)	2
Industry's views on qualifications	1
Lack of collaboration	1
Delays	1
Not enough training provided for the use of machinery	1
Lack of strategic planning - proliferation of some courses	1
Cert II to Cert III pathways difficult	1
Ownership of assets and who they can be passed onto	1
WA: problems in dealing with 2 departments	1
Ordering and management of consumables	1
Increased demand including from industry means we need to expand facilities	1
Like to offer more courses	1
Lack of participation from other schools	1
Students reluctant to choose a TTC course	1
Students need considerable support with literacy and numeracy	1
Extra support for literacy and numeracy not funded	1
Varied RTO structure and the difficulty of achieving consistency	1

<i>Do you have any other issues with the operation of your TTC that should be drawn to the attention of the Review?</i>	<i>Number of times raised</i>
<i>Total no. of responses: 113</i>	
<i>RESPONSES</i>	
Demand for quality measures	1
ASbAs not viewed highly by employers	1
Insufficient on-the-job experience	2
Constraints/requirements of State registration of VET teachers/trainers	1

*as noted above, also the subject of earlier survey questions

Funding of VET in schools

The Australian Government does not provide specific funding for VET in Schools. However, jurisdictions and school systems can provide VET in Schools programs using funding provided by the Australian Government through general schools funding or funding provided under the National Agreement for Skills and Workforce Development.

Each jurisdiction has different arrangements regarding funding for government schools. Some jurisdictions allocated funding at the school level and each school manages all of its courses (academic and vocationally oriented) from this budget. Other jurisdictions have a more centralised approach to supporting VET in Schools activities through the education budget.

In some jurisdictions, funding is also provided from the ‘training’ budget for VET in Schools programs and schools can access additional funding from state training budgets with varying conditions regarding approved courses. For example, in some cases the training budget can only be used to fund courses that have a direct pathway to a job in an area of skills need.

In the non-government sector the approach to funding VET in Schools varies considerably. Examples of different financial approaches include:

- Student levies
- Cross-subsidisation through general student fees
- General fund raising and industry contributions including in-kind support and sponsorships

These are discussed below.

Some schools have established businesses that in some cases generate income (e.g. school café, bakery, framing business, signwriting– see Chapter 6).

Recurrent funding

The relatively high cost of operating a TTC compared to other areas of the curriculum was noted by a number of principals. As a ballpark figure, one principal suggested that running costs could be 25 per cent higher than other courses (e.g. Modern History). This short review has not had the resources to test this figure.

Higher costs reflect the materials consumed, the effort required to recruit suitable teachers (a number of the principals interviewed stressed the criticality of having industry experienced trade

teachers), the cost of maintaining industry currency of TTC teaching staff, the cost of arranging structured work placements and industry liaison, transport costs for schools within clusters, and the cost of replacing equipment.

School principals interviewed noted that most equipment would not need to be replaced in the short to medium term (some software would need to be upgraded) but planning and budgeting for depreciation would be important.

There are schools that are already accounting for depreciation in their cost projections. Some schools have entered into sponsorship arrangements with suppliers for the upgrading of equipment (see Roland's contribution to the CRC Sydenham in Chapter 6). Other schools had fund raising to support their TTC.

Schools adopted very different approaches to seeking to recover the cost of consumables through fees for courses. Some had a basic rate (\$40 per year) which was the same across the school for a particular student year while others charged fees to TTC students to recover most or all of the consumable costs. Most schools offered fee relief.

Some schools had sufficiently strong relationships with industry groups and/or local employers that some consumables (e.g. engine parts and sheet metal) were provided free to the school. In other cases donations from the school community were made to the TTC.

The capacity and resourcefulness of schools varied considerably. Those schools operating micro businesses were using profits generated to fund new equipment and/or consumables. Many construction courses successfully sold cubby houses.

Education authorities

A small minority of education authorities did informally raise concerns that the Commonwealth had not provided recurrent funding for TTCs. All accepted that this was explicit in the agreements.

A couple suggested that an improvement in the program would be recurrent funding. For example,

One state department suggested that:

- Ongoing maintenance of facilities and machinery will be the biggest problem for the government sector going forward.
- Schools will not have the necessary funding available to invest in new machinery once existing machinery becomes obsolete. Schools had factored into their plans the cost of maintenance but not the cost of replacing machinery.
- There had been an expectation in the sector at the beginning of the program that schools would generate income from third party use of the facilities and equipment outside of school hours and that industry would provide some level of investment. This has not occurred to the extent anticipated.
- The true cost of operations is not fully understood until a TTC has been running for a few years.
- Although this state's schools receive some funding to cover the depreciation of assets, the funding is insufficient to cover the TTC and many schools are diverting the funding to cover

costs associated with the growth of the school rather than the maintenance and replacement of assets.

- Future Commonwealth grant programs for infrastructure projects should include allowances for depreciation, maintenance and replacement. If these costs are not included in Commonwealth programs, then the states must fully consider lifecycle costs before entering into the program.

Is there a case for Commonwealth recurrent funding now?

The case for recurrent funding is not strong. Schools and education authorities willingly entered into the arrangement on the clear understanding that recurrent funding would not be provided. There are clear precedents for this.

It would be normal accounting/management practice to make allowance for depreciation/replacement and upgrade of assets. Some schools indicated that they had considered these issues long before submitting their application and had made allowances for this.

Those schools that have responsibly accounted for recurrent costs and made adjustments in resource allocation as a result, could rightly feel that their forward thinking was unnecessary if at some later stage the Commonwealth provided funding for depreciation. They too would most likely seek recurrent funding, even where it is within their means to cover these costs.

Those schools that did not take up the offer of participating in the scheme because they were not confident they could cover recurrent costs could rightly feel that they were done a disservice if later the rules are retrospectively changed.

If states had a strong expectation that TTCs would yield a sufficient stream of external income to cover depreciation or other recurrent costs, it not clear to this Review if this expectation was ever conveyed as a target to individual schools.

The capital grants provided were significant and the funding was clearly defined. The suggestion of the Commonwealth extending funding to cover recurrent funding is not well-defined. Proponents had no clear line of delineation between what recurrent costs should be covered by the Commonwealth and those that shouldn't (e.g. bus, fuel, electricity, for industry liaison, consumables, gas, and insurance). Even where they limit their suggestion to one area (e.g. buses) they ignore that many schools have reallocated resources in order to purchase a bus. An individual state department committing to a cluster without adequate consideration of, or provision for, transport suggests insufficient assessment or allowance of a key ingredient to make the cluster work.

Staff continuity

While education authorities were very complimentary of Commonwealth departmental staff, a frequently mentioned concern was the lack of staff continuity within the Department. This reduced efficiency generally.

From the time of the development of the program after the 2007 election to this report, there have been 20 senior executives who have either administered the program or overseen the administration of the program, including 10 Branch Managers, 5 Group Managers and 5 Deputy Secretaries. There may have been more frequent movements at levels below the senior executive

level. The reasons for the changes include government-initiated restructures but also promotions and retirements.

Several education authorities expressed mild irritation that the staff churn meant corporate knowledge at the Commonwealth level suffered. The effects of staff churn were noticeable during this Review. Obtaining answers back to 2009 or 2012 often meant having to make contact with people who were still in the Department but working elsewhere. Only one of the key staff who worked on the Australian Technical College (ATC) initiative transferred to the TTC team but this was well into the design development of TTCs. Some key learnings from the ATC experience were lost, especially the need for a strong focus on the importance (and difficulty) of ongoing employer engagement.

The movement of staff to new and exciting areas is understandable and expected. However, ensuring *sufficient* continuity is important, otherwise staff movement comes at a considerable cost. Staff don't learn first-hand all the consequences of a particular program design, changes or decisions. They don't experience and learn from the inevitable mistakes and unintended consequences that all major implementation involves.

It also comes at a cost to the agencies that have a continuing relationship with the Department. One state department noted that, to their frustration, the Commonwealth team wasn't drawing on the expertise available to the Department.

Frequent movement of staff reduces individual but not departmental accountability.

HISTORY OF THE TRADES TRAINING CENTRES IN SCHOOLS PROGRAM

2007	<p>10 May 2007 – Budget reply speech Opposition leader Kevin Rudd commits to <i>implement a \$2.5 billion Trades in Schools program over ten years to build new Trades Training Centres and upgrade existing facilities and equipment in all of Australia’s 2650 secondary schools – both government and non-government.</i> This commitment is further detailed in <i>Labor’s Education Revolution: New Directions for Vocational Education and Training</i> policy document.</p>
24 November 2007 – FEDERAL ELECTION – incoming Labor Government	
2008	<p>9 May 2008 – ALP government first 100 days – Round One (Phase One) opens Approval determined on merit through a competitive process. Funding is prioritised to secondary schools who meet Program priorities and who demonstrate the greatest need for, and capacity to benefit from, a new TTC or upgraded facilities for a TTC.</p> <p>15 July 2008 – Round One (Phase One) outcomes announced \$91.1 million approved for 34 projects involving 91 schools</p>
2009	<p>3 February 2009 – Building the Education Revolution announced As part of the package \$110 million in TTC funding is brought forward to Round Two from future rounds.</p> <p>5 March 2009 – Round One (Phase Two) outcomes announced \$335.8 million for 103 projects involving 322 schools</p> <p>5 November 2009 – Round Two outcomes announced \$383.8 million for 92 projects involving 298 schools</p>
2010	<p>27 January 2010 – First TTC commences operation Aviation High, Queensland</p>
2011	<p>2 February 2011 – ANAO publishes audit report <i>Administration of the Trade Training Centres in Schools Program</i> The ANAO found that DEEWR’s approach to planning, and its administrative framework for the program, were generally sound but it made recommendations to improve application assessment, compliance and key performance indicators.</p> <p>29 September 2011 – program redesign In response both to the findings of and recommendations in the ANAO Audit of the Program in 2010-11 and to the 2008 agreement of COAG targets to address disadvantage, DEEWR reviewed and enhanced the Program. These enhancements were agreed to by the then Education Minister and started with Round Four funding in 2011. Schools no longer compete for funding which is now prioritised to schools according to socio-economic disadvantage. No changes were made to eligibility, maximum funding per school or other key parameters.</p> <p>16 December 2011 – Round Four outcomes announced \$176.2 million for 87 projects involving 169 schools</p>
2012	
2013	
7 September 2013 – FEDERAL ELECTION – change of government – incoming Coalition Government	
2014	<p>17 December 2013 – Mid-Year Economic and Fiscal Outlook The Government confirms that funding under the Program would cease following Round Five (Phase One).</p> <p>23 January 2014 – Round Five (Phase One) ‘Trades Skills Centres’ outcomes announced \$209 million for 136 projects involving 220 schools. Projects will be known as <i>Trades Skills Centres’</i> to reflect the Government’s commitment to effective industry engagement and aim to deliver improved vocational education and training results for students.</p>

Consultations by the Independent Reviewer for the Trade Training Centres in Schools Program

Education Authority/ Block Grant Authority/ School/TTC	Sector			Contact mode	
	Gov	Cath	Ind	On-site visit	Tele/video conference
Education Authority	✓				✓
Block Grant Authority		✓	✓		✓
<i>Groves Christian College</i>			✓	✓	
<i>St Edmunds's College</i>		✓			
<i>Aviation High Aeroskills and Aeronautics Trade Training Centre</i>	✓				
Education Authority	✓				✓
Block Grant Authority			✓		✓
<i>Bonnyrigg High School</i>	✓			✓	
<i>Doonside High School</i>	✓			✓	
<i>Loyola Senior High School</i>		✓		✓	
<i>Broken Hill High School</i>	✓			✓	
	✓				✓
<i>Willyama High School</i>	✓			✓	
					✓
<i>Ivanhoe Central School</i>	✓				✓
<i>Menindee Central School</i>	✓				✓
<i>Wilcannia Central School</i>	✓				✓
<i>Boorowa Multipurpose Trade Training Centre</i>	✓			✓	
<i>Mater Dei Catholic Trade Training Centre</i>		✓		✓	
Block Grant Authority		✓	✓		✓
<i>Catholic Regional College Trade Training Centre</i>		✓		✓	
<i>KIOSC Trade Training Centre</i>	✓			✓	
<i>Thornbury High School</i>	✓			✓	
<i>Wodonga Senior Secondary College North East</i>	✓			✓	
<i>Albury Wodonga Community College Bakery Trade Training Centre</i>			✓	✓	
Education Authority	✓				✓
<i>St George Hospitality Skills Trade Training Centre</i>			✓	✓	
<i>St Paul's College</i>		✓		✓	
Education Authority	✓				✓
Block Grant Authority		✓	✓		✓
Education Authority	✓				✓
Block Grant Authority		✓	✓		✓
Education Authority	✓				✓
Block Grant Authority		✓	✓		✓

Of note, the ACT was not in scope as this Territory had no operational TTCs in 2012.

Summary of Independent Review on-site visits

Executive Summary

During August and September 2014, visits were undertaken in four states to 16 Trade Training Centres that were operational in 2012. This represents approximately 7% of the 219 TTCs that are in scope for the Review. Visits were not made to Western Australia, the Northern Territory and Tasmania because of time limitations.

The sample comprises a cross section of TTCs including

- stand alone and cluster projects
- varied geographic regions including metropolitan, regional and Remote Service Delivery locations
- projects receiving between \$200 K and \$9 million Australian Government funding.

Of the 16 TTCs visited:

- 8 are in the Government sector, 5 are in the Catholic sector and 3 are in the Independent sector
- 6 are stand-alone centres, 4 share their facility/ies with 1 other school and 6 share their facility/ies with 2 or more schools
- a total of 48 qualifications are being delivered across these 16 TTCs, 10 at Certificate I level, 25 at Certificate II level and 13 at Certificate III level.
 - 8 TTCs are delivering Engineering courses, 8 are delivering Construction courses, 10 are delivering Hospitality courses and 7 are delivering other courses.
- in 2012, 3 TTCs reported fewer than 25 enrolments, 3 reported over 200 enrolments, 6 had completion rates of more than 25 per cent, 2 had more than 10 students enrolled in an Australian School-based Apprenticeship and 1 had more than 10 per cent Indigenous students.
- 1 TTC located in a Remote Service Delivery location (Broken Hill) had High Indigenous enrolments of more than >10%.

Trade Training Centre-	Australian Government funding - \$million	Sector				Type			Certificate level			Qualification type				2012 reporting			
		State	Gov	Cath	Ind	Stand alone	Cluster 1 site	Cluster >2 sites	I	II	III	Engin	Constr	Hosp	Other	Low enrol <25	High enrol >200	High compl >25%	High ASbAs >10
Southern NSW to VIC border																			
Mater Dei Catholic College Trade Training Centre	\$1.18M	NSW		✓		✓				3		✓	✓	✓				✓	
Wodonga Senior Secondary College North East Victoria Hub Trade Training Centre	\$8.18M	VIC	✓					✓		5		✓	✓		✓		✓	✓	
Albury Wodonga Community College Bakery Trade Training Centre	\$0.98M	VIC			✓	✓					2			✓		✓		✓	
Southern NSW																			
Boorowa Multi-purpose Trade Training Centre	\$1.48M	NSW	✓					✓		2		✓	✓			✓			
Melbourne metro																			
Catholic Regional College Trade Training Centre	\$6.00M	VIC		✓			✓			5	2			✓	✓		✓		
KIOSC Trade Training Centre	\$10.31M	VIC	✓					✓		3	1	✓			✓				
Thornbury Commercial Cookery and Hospitality Trade Training Centre	\$0.19M	VIC	✓			✓					1			✓					
Adelaide																			
St George College Hospitality Skills Trade Training Centre	\$1.50M	SA			✓	✓			1					✓		✓		✓	
Grand Junction Construction and Industry Trade Training Centre	\$4.01M	SA		✓			✓		1		1		✓					✓	
Country NSW/Broken Hill																			
Reaching Across Secondary Program Trade Training Centre	\$5.02M	NSW	✓					✓		2		✓	✓	✓					
Sydney metro																			
Loyola Catholic Trade Training Centre	\$8.99M	NSW		✓			✓				6	✓	✓	✓	✓				✓
Bonnyrigg Trade Training Centre	\$1.54M	NSW	✓			✓				1				✓					
Evanside Trade Training Centre	\$4.45M	NSW	✓					✓		2		✓		✓				✓	
Brisbane metro																			
Ipswich Trade Training Centre	\$5.00M	QLD		✓			✓		3			✓	✓		✓		✓		✓
CCM Trade Training Centre	\$4.50M	QLD			✓			✓	5	2			✓	✓	✓				
Aviation High Aeroskills and Aeronautics Training Centre	\$1.50M	QLD	✓			✓					1				✓				

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