

Indigenous VET participation, completion and outcomes: change over the past decade

Georgina Windley
National Centre for Vocational Education Research



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Level 5, 60 Light Square, Adelaide SA 5000

PO Box 8288 Station Arcade, Adelaide SA 5000, Australia

Phone +61 8 8230 8400

Email ncver@ncver.edu.au Web <<http://www.ncver.edu.au>> <<http://www.lsay.edu.au>>

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About the research

Indigenous VET participation, completion and outcomes: change over the past decade

Georgina Windley, NCVET

It has been eight years since the National Indigenous Reform Agreement (also known as 'Closing the Gap') set out a series of areas and targets designed to close the gap between Indigenous and non-Indigenous outcomes on a range of measures. A key objective was to halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade. The links between tertiary education and employment are well established, and the education participation of Indigenous people is increasing. Nevertheless, what is questionable is whether the qualifications gained are improving employability, boosting employment outcomes and reducing employment disparity: while the gap is closing in educational attainment, it is not closing in regards to labour market participation.

This report examines, and provides a clearer picture of, how Indigenous participation in vocational education and training (VET) and outcomes have changed over the last decade. Drawing on data from the National Centre for Vocational Education Research's (NCVER) National VET Provider Collection, National Apprentice and Trainee Collection and Student Outcomes Survey, this report focuses on Indigenous participation and completion in VET (including apprenticeships and traineeships), as well as on the employment, further study and personal outcomes of training. It identifies high-level trends in VET participation (including location and specific student and training characteristics), how completion rates vary, where employment outcomes are strongest, and the extent to which further study is being undertaken.

Key messages

- The overall picture shows that, despite fluctuations in the wider VET sector, Indigenous participation in vocational education and training remains high.
- While Indigenous enrolment in lower-level qualifications is higher than in non-Indigenous enrolments, there has been a shift away from enrolments in lower-level certificates, with increasing proportions of Indigenous enrolments in higher-level qualifications (certificate III and above). This is a positive sign, given that employment rates are higher for those with higher-level qualifications.
- Despite downturns in overall apprentice and trainee commencements in recent years, Indigenous people have a higher rate of participation in both trade and non-trade apprenticeships and traineeships compared with non-Indigenous people.
- Indigenous VET completion rates (for all VET) and Indigenous apprentice and trainee completion rates vary according to location and certain student and training characteristics, but despite slight increases in recent years, they remain lower than non-Indigenous VET completion rates.
- Overall employment outcomes for Indigenous VET graduates are lower than those for non-Indigenous graduates, with the proportion of Indigenous VET graduates employed after training lower than non-Indigenous graduates. Employment outcomes do vary, depending on student and training characteristics, field of education and occupation, and it is clear that some Indigenous graduates, such as those undertaking trade apprenticeships, have better employment prospects than others.

- Indigenous graduates are less likely to be employed before training. However, Indigenous and non-Indigenous graduates not employed before training are equally likely to be employed after training.

While there is steady, positive improvement in Indigenous students enrolling in higher level qualifications (certificate III and above) and good employment outcomes for those completing an apprenticeship, there has been little improvement in program completion and in the employment outcomes of Indigenous VET graduates over the last decade. It is critical that the VET sector considers different approaches. This could include the introduction of targets and the implementation of strategies, policies and programs analogous to those operating in the higher education sector.

The aim of these initiatives would be to promote the uptake and support the completion of VET qualifications, which, based on the evidence, lead to higher-level skills and successful employment outcomes. A more targeted approach to VET provision for Indigenous learners, particularly young people who do not have previous employment, may also strengthen VET's effectiveness in improving employment outcomes for Indigenous learners.

Developing policy, programs and practice, and subsequently evaluating them, needs to account for the rich qualitative data available in this field and is discussed in more detail in the companion piece to this report, *Indigenous participation in VET: understanding the research* (Ackehurst, Polvere & Windley 2017).

While quantitative evidence from the national data collections provides insight, this is only part of the story when it comes to Indigenous participation in vocational education and training. Qualitative experiences are vital for understanding and responding to the diverse circumstances of Aboriginal and Torres Strait Islanders and their connections to varied regional and language groups. The forthcoming report *Enhancing training advantage for remote Aboriginal and Torres Strait Learners* by John Guenther et al. examines some of the factors that can influence training retention in very remote areas and which ensure that training is relevant to the unique labour markets in those communities.

Dr Craig Fowler
Managing Director, NCVET

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NCVER is located in Adelaide, the traditional lands of the Kurna people. We acknowledge the Kurna people as the traditional custodians of the Adelaide region and recognise that their cultural and heritage beliefs are still as important to the living Kurna people today.

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Executive summary

This report examines how Aboriginal and Torres Strait Islander (ATSI) participation in vocational education and training (VET) and their employment outcomes have changed over the last decade. Throughout this report, the term 'Indigenous' is used interchangeably with 'Aboriginal and Torres Strait Islander Australians' and encompasses both Aboriginal people and Torres Strait Islander people.¹ The analysis in this report relates to the Indigenous population as a whole and to broad geographic categories, and we acknowledge there is considerable regional and cultural variation and diversity.

It has been eight years since the National Indigenous Reform Agreement (also known as 'Closing the Gap') set out a range of areas and targets designed to close the gap between Indigenous and non-Indigenous outcomes on a range of measures. Education plays an important role in remedying levels of disadvantage and improving employment outcomes. While there are no specific targets focusing on post-compulsory education, the link between participation in post-compulsory education and a range of outcomes (including employment, health and wellbeing) is well established, especially in the context of employment outcomes, a key area of reform, as outlined in the agreement.

Even though the overall benefits of education and training for Indigenous students are apparent, whether or not the qualifications gained are improving their employability, boosting employment outcomes and reducing employment disparity is questionable: while the gap is closing in educational attainment, it is not closing in regards to labour market participation (Department of the Prime Minister and Cabinet 2017).

To facilitate understanding of Indigenous participation and completion in VET, as well as the employment, further study and personal outcomes of training, this report draws on data from NCVET's National VET Provider Collection, National Apprentice and Trainee Collection and Student Outcomes Survey. While comparisons are made with the non-Indigenous population where appropriate, the intent is to focus on Indigenous participation.

The report aims to provide a clearer picture of Indigenous participation and outcomes in vocational education and training. It identifies high-level trends in changes in VET participation (including location and specific student and training characteristics) and describes how completion rates vary; where employment outcomes are strongest; and the extent to which further study is being undertaken.

The overall picture indicates that Indigenous participation in VET remains strong, with a general move away from enrolment in lower-level certificates towards a greater proportion of Indigenous students enrolled in higher-level qualifications. This is a positive sign, given that employment rates are higher for those with higher-level qualifications. Indigenous VET completion rates vary according to location and certain student and training characteristics; however, they remain lower than non-Indigenous VET completion rates. Employment

¹ While the term 'Indigenous' is widely used, we recognise that is not universally accepted. We acknowledge that Indigenous people live in diverse circumstances, and have connections to varied regional and language groups.

outcomes for Indigenous VET graduates are lower than those for non-Indigenous graduates, and Indigenous graduates are less likely to be employed after training than non-Indigenous graduates. Indigenous and non-Indigenous graduates who were not employed before training are equally likely to be employed after training. Finally, employment outcomes do vary, depending on student and training characteristics, field of education and occupation, and it is clear that some Indigenous graduates have better employment outcomes than others.

Indigenous participation in VET has shifted away from lower-level qualifications towards higher-level qualifications.

Key findings

Participation trends:

- Despite overall declines in participation in the VET sector in recent years, Indigenous participation in VET remains high compared with their participation in higher education and compared with non-Indigenous participation in VET.
- Indigenous people are still more likely to undertake lower-level certificates I and II than non-Indigenous people, but, overall, Indigenous participation in VET has shifted away from lower-level qualifications (certificates I and II) towards higher-level qualifications (certificate III and above). This trend is less pronounced in remote and very remote areas, where lower-level qualifications still make up the majority of enrolments.
- In the context of previous highest education level, certificates III and IV appear to be increasingly acting as a pathway into diploma and higher-level qualifications.
- There have been considerable increases in certain fields of education (as a proportion of all program enrolments); however, this is gendered. A decline in the proportion of enrolments in Mixed field programmes (which are predominantly certificate I and II courses) has occurred for both males and females. For males there has been an increase in the proportion of Engineering and related technologies enrolments; for females there has been an increase in the proportion of Society and culture enrolments.
- TAFE (technical and further education) institutes and private providers have a similar share of training provision for Indigenous enrolments, with some differences based on location: TAFEs are more likely to provide training in remote areas, while private providers are more likely to provide training in cities.
- Indigenous people are more likely to be participating in apprenticeships and traineeships than non-Indigenous people, but the trends follow a similar pattern to non-Indigenous participation, including the age and gendered nature of trade and non-trade training and the decline in the non-trades in recent years.

Completion rates:

- Program completion rates and subject load pass rates for Indigenous people have increased slightly since 2010, but they remain low compared with the non-Indigenous rates. Completion rates for the Indigenous population are considerably lower for very remote areas compared with other areas, and certificate I qualifications compared with other qualifications.
- The completion rates for Indigenous apprentices and trainees are lower than for non-Indigenous apprentices and trainees, but, as with the non-Indigenous population, Indigenous people undertaking trade training have a lower completion rate than those undertaking non-trade training.

Indigenous trade apprentices are more likely to be employed after training than their non-Indigenous counterparts.

Employment outcomes:

- Employment outcomes for Indigenous VET graduates have not demonstrably improved over the past decade, with the proportion of Indigenous graduates employed after training not changing significantly between 2006 and 2016. However, this needs to be viewed in the context of the labour market, as Indigenous employment rates have plateaued since 2008.
- The likelihood of employment after training for graduates who were not employed before training is consistent across Indigenous and non-Indigenous graduates.
- Overall, male and female graduates are just as likely to be employed after training, but, for those graduates who were not employed before training, males are slightly more likely than females to be employed after training.
- Graduates with higher-level qualifications (certificate IV and higher) are more likely to be employed after training than those with certificate III or lower-level qualifications (certificate I or II); but certificate III level graduates are more likely to be employed after training than certificate I and II graduates.
- Indigenous graduates in remote areas are more likely to be employed after training than those from cities and regional areas, but they are also more likely to be employed before training.
- Graduates from the Health and Education fields of education are most likely to be employed after training, with the majority of these graduates already employed before training.
- For those graduates who were not employed before training, the fields of education with the highest proportions of those graduates employed after training are Architecture and building, Food, hospitality and personal services, and Engineering and related technologies.
- Looking at employment outcomes by occupation, Technicians and trades workers who were not employed before training are more likely to be employed after training than other occupations. Technicians and trades worker graduates and Community and personal service workers graduates are also more likely to be employed in the occupation of their training compared with other graduates.
- Indigenous trade apprentices (who were not employed before training) are more likely to be employed after training than Indigenous people undertaking non-trade training. Further to this, these Indigenous trade apprentices (who are predominantly males) are more likely to be employed after training than their non-Indigenous counterparts. These findings clearly show that employment outcomes are particularly strong for Indigenous males (not employed before training) undertaking trade training.

Further study outcomes:

- The proportion of Indigenous and non-Indigenous graduates enrolled in further study has remained reasonably consistent over the last decade, with around a third of Indigenous and non-Indigenous graduates enrolled in further study.
- Indigenous graduates with higher-level qualifications (certificate IV and diploma or higher) and lower-level qualifications (certificate I and II) are more likely to be enrolled

in further study than certificate III graduates. Indigenous graduates with higher-level qualifications (certificate IV and diploma or higher) are more likely to be enrolled in further study than their non-Indigenous counterparts.

- Approximately 28% of young Indigenous graduates (15–24 years) who are studying certificates I and II are going on to further study at a higher level, but this proportion has not changed over the last 10 years.
- The institutions where Indigenous graduates are undertaking further study are changing, with greater proportions of VET graduates enrolled in private and community providers than the case a decade ago. Despite some decline, TAFE remains the dominant provider of further study for Indigenous people.
- Indigenous graduates continue to report high levels of satisfaction with VET and personal benefits from undertaking training, regardless of whether they are employed after training or not.

This report shows that vocational education is an important pathway for Indigenous learners and a key component in the challenge to close the gap in employment disparity. However, when it comes to completion rates, further study outcomes and parity in employment outcomes, Indigenous VET graduates continue to lag behind non-Indigenous VET graduates.

Indigenous graduates continue to report high levels of satisfaction with VET and personal benefits from undertaking training.

Introduction

The recent *Overcoming Indigenous disadvantage* report, released by the Productivity Commission (Steering Committee for the Review of Government Service Provision 2016), shows that there have been improvements in Indigenous participation in education, from Year 12 completion through to tertiary education (Steering Committee for the Review of Government Service Provision 2016).

Increasing the education levels of the Indigenous population plays an important role in reducing disadvantage and employment inequality.

This report examines Indigenous participation in vocational education and training and the employment outcomes resulting from VET courses over the past 10 years, covering the period since the introduction of the National Indigenous Reform Agreement (Closing the Gap) in 2008. The research findings provide a clearer picture of Indigenous participation and completion in VET, as well as employment outcomes.

The chapter following this introductory section provides a summary of the broader context of Indigenous participation in education and in the labour market, while the next chapter focuses on the inputs into the VET system; that is, Indigenous VET participation, including rates of participation, qualification levels, fields of education, provider type and participation in apprenticeships and traineeships. This chapter aims to identify some of the trends in Indigenous VET participation over the past decade.

The theme of the following chapter is the outputs of VET – Indigenous completion and completion rates. Its aim is to show where completion is stronger and weaker by comparison with the non-Indigenous population.

The chapter that follows explores the outcomes of training, focusing on the employment outcomes of training, including selected student and training characteristics (such as qualification level and provider type), remoteness, field of education and occupation, and apprentices and trainees. This chapter also examines the further study outcomes and personal benefits of Indigenous participation in VET.

The nature of this report means that it provides an overview of participation and outcomes data, with some limited reference to the literature where appropriate. The report is complemented by a number of companion pieces, including the research summary by Ackehurst, Polvere and Windley (2017) and the policy summary by NCVET (2017), both of which aim to provide more context and background information on the research and policy levers pertinent to this report.

An infographic is available at <https://www.ncver.edu.au/data/data/infographics/indigenous-vet-participation,-completion-and-employment-outcomes-infographic> which provides a more interactive version of the graphs provided in this report.

Data sources

The analysis in this report is descriptive in nature. The main sources used are NCVER's data collections and surveys, as well as Australian Bureau of Statistics (ABS) population, employment and schools data and Department of Education higher education selected statistics. For more information on the data sources, see appendix A. Analysis in this report focuses primarily on 2005–2015 government-funded students and courses. However, 2015 total VET students and courses is considered in some cases.

Data notes

Indigenous and 'not stated' identification

An analysis by Biddle and Crawford (2015) shows that, between the 2006 census and the 2011 census, there was a net increase in the Indigenous population, a consequence of changed Indigenous identification and an increase in people self-identifying as Indigenous.

NCVER's datasets show a decrease in the proportion of Indigenous status 'not stated' and a slight increase in the proportion identifying as Indigenous; for example, in the National VET Provider Collection (government-funded students and courses) in 2005, 3.9% of students identified as Indigenous and 17.3% were 'not known'. In 2015, 5.4% of students identified as Indigenous and 3.6% were not known. The remaining students identified as non-Indigenous. It is important to bear in mind that these changes to the Indigenous and 'not stated' identification may have some impact on the participation rates presented in this report.

Sample size

In the analyses using the Student Outcomes Survey the unweighted sample size for Indigenous respondents is 1770 in 2015 and 831 in 2016. In this analysis 2015 and 2016 data has been combined to create a more robust sample. Confidence intervals have been included in all charts reporting this data; confidence intervals allow data users to determine the amount of certainty (or error) in a reported measure when comparing groups. This is important, given that measures are based on information provided by a sample rather than a population.

Limitations

This report focuses on VET graduates rather than subject completers and students who do not complete courses. We acknowledge that program completion is an issue among Indigenous VET students, particularly those from remote and very remote areas. Forthcoming qualitative research undertaken by Guenther et al. (2017) addresses the issue of completion and retention in very remote areas in more detail.

While employability and employment outcomes are often a priority, other benefits of education and training relate to skill development and building confidence and identity.



Background and context

This chapter provides a summary of the relevant background information relating to education and employment for Indigenous people, including trends in education participation, policy levers and employment rates. It provides context to the subsequent discussion on VET participation and outcomes.

The benefits of tertiary education

The economic and social benefits for Indigenous people of increasing participation in, and completion of, formal tertiary education and training is well documented, with a raft of research pointing to the role of education in improving labour market participation (Gray, Hunter & Lohar 2012; Karmel et al. 2014; Mahuteau et al. 2015). While employability and employment outcomes are often a priority, other benefits of education and training relate to skill development and building confidence and identity, all of which can be transformational. These include improving literacy and numeracy skills and communication skills; local community ownership of courses; connection to aspects of culture and local knowledge; respect from others in the community; developing self-confidence and a stronger sense of identity; and transitioning into higher levels of study (Guenther et al. 2017; McRae-Williams et al. 2016; Miller 2005).

Increases in education and training

Indigenous participation in education has increased across all the sectors over the past decade.

The apparent Indigenous Year 7/8 to Year 12 secondary school retention rate grew from 39.5% in 2005 to 59.4% in 2015.² While it is still some way off the 85.2% Year 7/8 to Year 12 apparent retention rate for non-Indigenous students, the gains that have been made bode well for future increases, with the Closing the Gap target – to halve the gap in Year 12 completion by 2020 – on track to be achieved (Department of the Prime Minister and Cabinet 2017). These increases have been driven by the targets, as well as the overarching National Partnership on Youth Attainment and Transitions, which sought to improve the educational outcomes and transitions for all young Australians from school to further education, training or employment, but particularly those from disadvantaged backgrounds.

Indigenous participation in higher education has also increased, albeit to a lesser extent. In 2005 the higher education participation (as a rate of the 15 to 64-year-old Indigenous population) was 2.4%, increasing to 3.6% by 2015. This contrasts with the 2015 non-Indigenous participation rate of 6.7% (figure 2 on page 21). The higher education participation rate for all students has increased since the introduction of the demand-driven system in 2012. According to Universities Australia (2017), there are now 70% more Indigenous university students than there were in 2008. The Closing the Gap report shows that Indigenous participation has continued to grow more steadily compared with all

² Sourced from ABS (2015).

Indigenous people remain overwhelmingly more likely to engage with VET than with higher education.

domestic higher education students over the last decade, with a 93% increase (from 8330 in 2005 to 16 062 in 2015) in the number of Indigenous students in higher education compared with a 47% growth for all domestic students. Also, the enrolment rate for Indigenous students is growing more quickly than that of all students (Department of the Prime Minister and Cabinet 2017). However, Indigenous students still have low participation rates in university compared with non-Indigenous students, and Universities Australia has reiterated its commitment to closing this gap with a new strategy and the introduction of targets to improve enrolment and completion rates (Universities Australia 2017).

Despite the growth in Indigenous participation in higher education and ongoing efforts to boost enrolments, Indigenous people remain overwhelmingly more likely to engage with VET than with higher education – and have always been more likely to participate in VET than in higher education. Research by Biddle (2013) found that, at age 15 years, young Indigenous students indicated a preference for VET over university. The pathway into VET often starts quite young, with Indigenous students participating in VET in Schools at a higher rate than non-Indigenous students (Misko, Korbel & Blomberg forthcoming). In their analysis, Misko, Korbel and Blomberg (forthcoming) find there were around 5500 Indigenous students in VET in Schools programs in 2006 (representing 3.2% of the total); this had increased to around 15 500 in 2015 (representing 6.0% of the total and a change of almost 180%).

The participation rates for all VET students tend to show more fluctuation than do the other two education sectors, with participation for all students growing rapidly between 2009 and 2012. This is largely due to the National Agreement for Skills and Workforce Development and earlier and subsequent policy levers introduced by the various jurisdictions, which aimed to encourage growth in the sector. From 2012 we see a decline in VET participation across the board, which was likely influenced by changes in the policies and initiatives originally intended to stimulate growth; changes in the post-Global Financial Crisis (GFC) labour market; and possibly the introduction of the demand-driven system in the higher education sector having an impact on VET enrolments (Atkinson & Stanwick 2016). Indigenous participation in VET will be examined in closer detail in the following chapter.

When comparing Indigenous enrolments in VET and higher education, the authors of the *Review of higher education access and outcomes for Aboriginal and Torres Strait Islander People* (known as the *Behrendt Review*; Department of Industry, Innovation, Science, Research and Tertiary Education 2012) make a number of suggestions to explain the appeal of VET to Indigenous students:

- Lower entry requirements make VET a more accessible study option for Indigenous students, who may not have the academic qualifications or the aspiration to undertake higher education.
- Indigenous students may also be attracted to VET by its method of study, work-based and workplace learning approaches, the ability to ‘earn as you learn’ during VET training, curricular content, or the career options that a VET qualification provides.
- VET’s geographical availability makes it more popular, as VET providers are more widespread than higher education institutions.

The authors of the review (Department of Industry, Innovation, Science, Research and Tertiary Education 2012) are concerned that VET acts as a diversion from, rather than an entry point into, higher education, with the high numbers of young people enrolled in VET subsequently reducing

Indigenous people with higher levels of education have employment rates comparable with the non-Indigenous population.

the pool of young Indigenous people who could potentially transition from school into higher education. Since the *Behrendt Review* was released in 2012, the higher education sector has attracted more Indigenous students and has been funded to do so through the Higher Education Participation Partnerships (HEPP) program. But despite this growth and ongoing efforts to boost enrolments, Indigenous people remain overwhelmingly more likely to engage with VET than with higher education.

Using data from 2015 total VET activity students and courses, we can see there are over 165 000 Indigenous students enrolled in VET courses in 2015 (including around 12 000 apprentices and trainees in-training), compared with around 16 000 Indigenous students in higher education in 2015.³

Given these numbers, it is clear that VET continues to play a significant role in educating and training Indigenous people, the aim being to improve employment outcomes. However, the extent to which VET achieves the desired outcomes for Indigenous participants needs further analysis.

Employment

Attaining higher levels of education plays a huge role in boosting employment outcomes for the population as a whole, with Indigenous people no exception. Indigenous people with higher levels of education (diploma and higher VET qualifications, and bachelor and higher degrees) have employment rates comparable with the non-Indigenous population (Karmel et al. 2014; Crawford & Biddle 2017; Department of Prime Minister and Cabinet 2017).

The story is more complex for VET certificates I, II, III and IV. Indigenous females holding these qualifications have lower employment rates than males, and for both genders it appears that completing Year 12, along with having a certificate-level qualification, strengthens the rate of employment. Males who have completed Year 12 and have a certificate III level qualification have employment prospects just as high as those with higher-level qualifications (Karmel et al. 2014).

Despite the overall increases in education and training over the last decade – and noting the strong links between attainment of higher levels of education and employment – improvements in employment outcomes, increases in labour market participation and a reduction in employment disparity between the Indigenous and non-Indigenous population thus far appear to be limited.

When analysing Indigenous employment rates over the last decade, it is important to look at the broader national employment context. There has been a drop in the employment-to-population ratio since the Global Financial Crisis of 2008 (figure 1), which has still not fully recovered. The decrease has mainly been for full-time employment, with part-time employment remaining steady. This is the context in which we consider Indigenous employment rates.

³ Sourced from the 2015 National VET Provider Collection (total VET activity), National Apprentice and Trainee Collection (as at December 2015) and Higher education selected statistics student data 2015, appendix 2 – equity groups.

Figure 1 Australian employment-to-population ratio, 15 to 64-year-olds, 2005–15, %



Source: ABS (2017).

The most recent employment data, 2014–15, from the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) show that 48.4% of the 15 to 64-year-old Indigenous population is employed, compared with 72.6% of their non-Indigenous counterparts (table 1). In addition, the survey shows that the employment rate for Indigenous people is higher for males (51.4%) than females (40.9%) and higher in non-remote areas (49.0%) compared with remote areas (35.6%; ABS 2016a).

Table 1 Labour force characteristics, proportion of 15 to 64-year-old population employed, 2014–15, %

Proportion employed	Indigenous	Non-Indigenous
Employed	48.4	72.6
Full-time	60.1	70.7
Part-time	39.8	29.2

Note: The full-time and part-time rates are a proportion of those employed.

Source: ABS (2016a).

Further, the Closing the Gap report indicates no improvement in reducing the gap in the employment rate between the Indigenous and non-Indigenous population. Indeed, since 2008, employment prospects have worsened for the Indigenous population, as they have been affected by the removal of the Community Development Employment Programs (CDEP) scheme, as well as by the Global Financial Crisis and cyclical downturns in the labour market, to a greater extent than the non-Indigenous population (Department of the Prime Minister and Cabinet 2016).

Crawford and Biddle (2017) show that, while the percentage of the 15 to 64-year-old Indigenous population in employment grew from 35% to 48% between 2002 and 2008, this rate has remained stable in recent years.

Despite the recent lack of growth in the employment rate, the value of VET in improving employment prospects for Indigenous people cannot be disputed. Looking at the relationship between VET education and the movement into employment between 2006 and 2011,

Despite the overall increases in education and training over the last decade, a reduction in employment disparity between the Indigenous and non-Indigenous population thus far appear to be limited.

Those with a VET qualification at any level were significantly more likely to have employment than those with no post-school qualifications at all.

Crawford and Biddle's (2017) multivariate analysis of the Australian Census Longitudinal Dataset (ACLD) shows that, at a national level, Indigenous people with a certificate III or IV who were not employed in 2006 were not significantly more likely to be employed in 2011 by comparison with those with a certificate I or II. (The results are slightly different for major cities and regional areas.) But those with a VET qualification at any level were significantly more likely to have employment than those with no post-school qualifications at all.

To add to this, Crawford and Biddle's (2017) analysis of 2002, 2008 and 2014–15 National Aboriginal and Torres Strait Islander Social Survey data shows that, consistently, Indigenous people with higher levels of vocational education are more likely to be employed than those with lower or no qualifications. In 2014–15, 73% of diploma and above holders were employed, compared with 68% of certificate III and IV holders and 40% of certificate I and II holders (which is only slightly above the 36% of those with no post-school qualifications). Not unexpectedly, there are variations between the sexes and by remoteness. Their analysis shows that there was also a considerable increase in the proportion of Indigenous people (15–64 years) with certificate III and IV as their highest education level between 2008 and 2014–15, increasing from 14% in 2008 to 24% in 2014–15. This has substantially contributed to the education stocks of the Indigenous population.

By providing a more detailed analysis of VET participation, completion and employment outcomes, this report builds on the work of Crawford and Biddle (2017), drawing on NCVET's data collections and the Student Outcomes Survey to examine where the growth in VET participation and outcomes is the strongest.

For more discussion on the contextual and policy issues, refer to the two companion summary papers by Ackehurst, Polvere and Windley (2017) and NCVET (2017).



Indigenous participation in VET

The Indigenous population continues to participate in VET at a higher rate than the non-Indigenous population

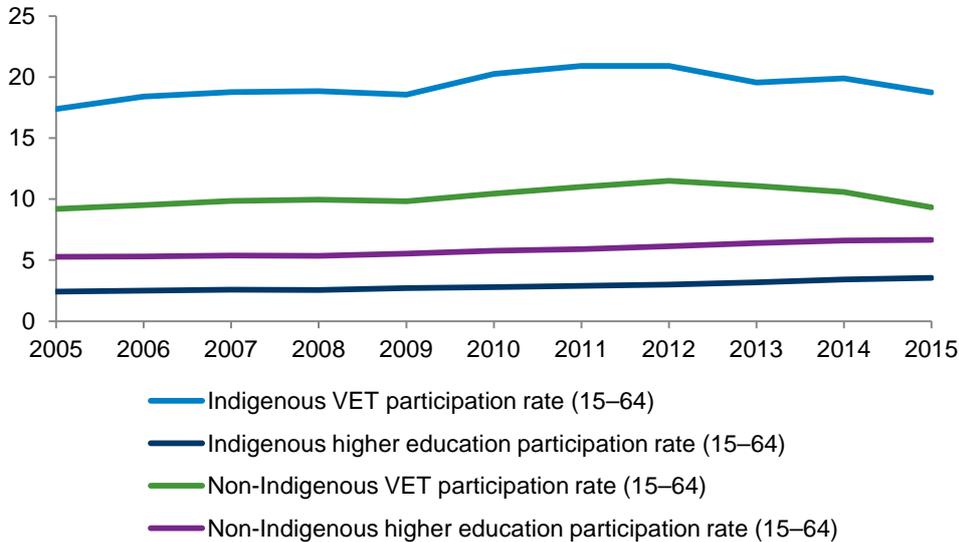
Participation rates for Indigenous and non-Indigenous students

Indigenous participation in vocational education and training has grown considerably over the last decade. In 2005 there were 81 915 government-funded Indigenous program enrolments, increasing to 105 191 in 2015. For the non-Indigenous population, government-funded program enrolments grew from 1 478 024 in 2005 to 1 668 318 in 2015.

When we convert this to participation rates, we can see the Indigenous population continues to participate in VET at a higher rate than the non-Indigenous population, with 18.7% of the 15 to 64-year-old Indigenous population enrolled in VET in 2015, compared with 9.3% of non-Indigenous 15 to 64-year-olds (figure 2).

There has been some growth in VET participation for Indigenous and non-Indigenous students over the past decade, with participation rates in 2012 reaching a peak of around 20.9% for Indigenous people and 11.5% for non-Indigenous people. As discussed previously, this is largely due to the National Agreement for Skills and Workforce Development and specific policy levers which aimed to encourage growth in the sector. Subsequent changes in policy and financial arrangements since 2012 mark a decline in VET participation across the board (Atkinson & Stanwick 2016).

Figure 2 Indigenous and non-Indigenous VET and higher education participation rate, 15 to 64-year-old population, 2005–15, %



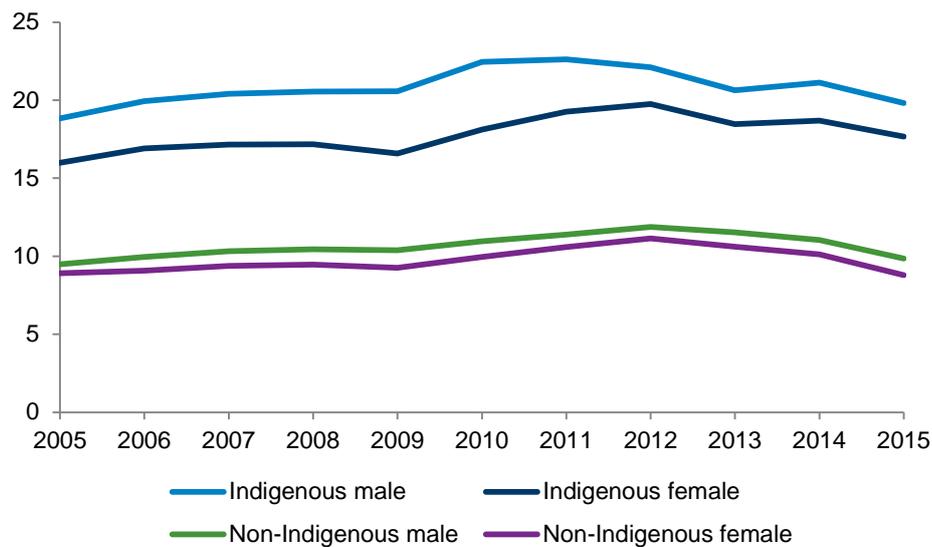
Note: In order to determine participation as a rate of the 15 to 64-year-old non-Indigenous population, we have deducted the estimated Indigenous population (from ABS 2014) from the total Australian population (from ABS 2010).

The higher education student data is for all students of all ages.

Source: National VET Provider Collection (government-funded students and courses) 2005–15; ABS (2014; 2016b); Department of Education and Training, Higher education selected statistics, student data 2005–15 and appendix 2 – equity groups.

Despite the declining VET participation rate, it is clear that Indigenous people of both sexes and of different ages are much more likely to participate in VET as an educational pathway than are non-Indigenous people (figures 3 and 4). This is particularly the case for Indigenous males, who are 10 percentage points (19.8%) more likely to undertake VET than their non-Indigenous counterparts (9.8%; see figure 3). Indigenous young people (15–24 years) are 8.6 percentage points more likely undertake VET than non-Indigenous people of the same age (figure 4).

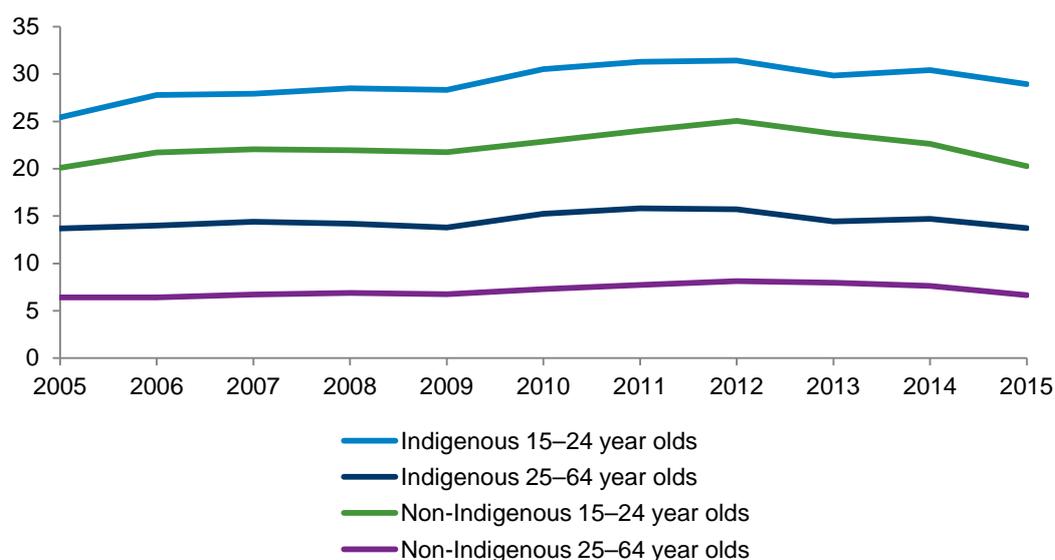
Figure 3 Indigenous and non-Indigenous rates of VET participation by sex, 15 to 64-year-old population, 2005–15, %



Note: In order to determine participation as a rate of the 15 to 64-year-old non-Indigenous population, we have deducted the estimated Indigenous population (from ABS 2014) from the total Australian population (from ABS 2010).

Source: National VET Provider Collection (government-funded students and courses) 2005–15; ABS (2014, 2016b).

Figure 4 Indigenous and non-Indigenous rates of VET participation by age, 15 to 64-year-old population, 2005–15, %



The past 10 years have seen an increase in the proportion of enrolments in higher-level qualifications.

Note: In order to determine participation as a rate of the 15 to 64-year-old non-Indigenous population, we have deducted the estimated Indigenous population (from ABS 2014) from the total Australian population (from ABS 2010).

Source: National VET Provider Collection (government-funded students and courses) 2005–15; ABS (2014, 2016b).

Looking at figure 2, we can see Indigenous students continuing to participate in VET at a much higher rate than they participate in higher education. The advantages and disadvantages of high VET participation rates, low higher education participation rates and VET pathways into university are widely known (see, for example, Department of Industry, Innovation, Science, Research and Tertiary Education 2012), and have been discussed in the companion paper (Ackehurst, Polvere & Windley 2017). However, we now look at qualification levels to examine how participation in different qualification levels has changed over time.

Qualification levels

In 2015 Indigenous people remain more likely to be enrolled in lower-level qualifications (certificates I and II) than the non-Indigenous population.

Table 2 Indigenous program enrolments by qualification level, 2015

AQF qualification level	Indigenous		Non-Indigenous	
	No.	%	No.	%
Diploma or higher	7 830	8.7	250 196	17.5
Certificate IV	9 451	10.5	271 616	19.0
Certificate III	31 443	34.8	583 962	40.9
Certificate II	26 098	28.9	238 337	16.7
Certificate I	15 483	17.1	84 270	5.9
Total	90 305	100.0	1 428 381	100.0

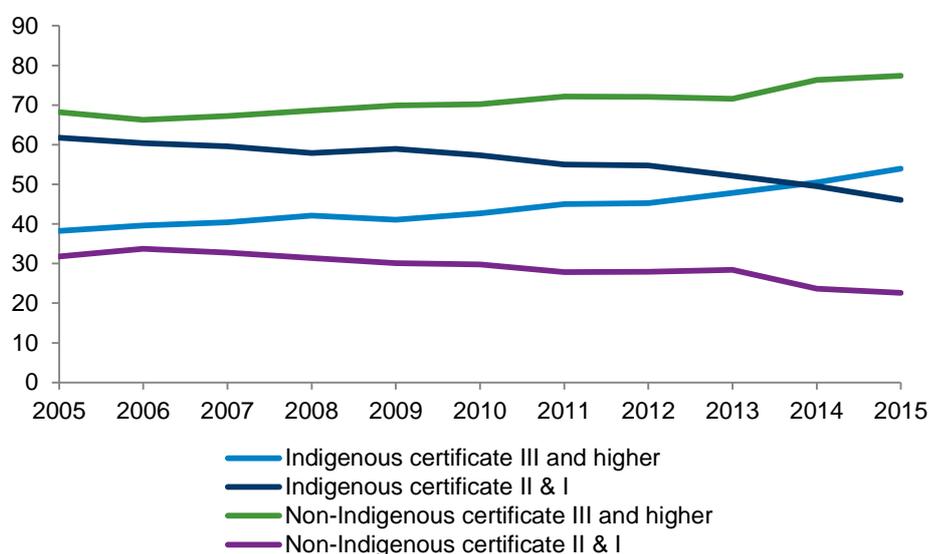
Source: National VET Provider Collection (government-funded students and courses) 2015.

Enrolments in diploma or higher qualifications have made up a growing proportion of all VET enrolments in all regions.

However, the past 10 years have seen an increase in the proportion of enrolments in higher-level qualifications (certificate III level and above) for both Indigenous and non-Indigenous people (figure 5). This has coincided with a decline in the proportion of enrolments in lower-level qualifications (certificates I and II). These trends are partly influenced by the National Agreement for Skills and Workforce Development, which aims to raise education levels and provide greater access to certificate III level qualifications and higher.

As noted earlier, certificates I and II have long been considered as a re-entry or pathway option for Indigenous people who have been disengaged with education, training and employment and, while Indigenous people are still more likely to undertake certificate levels I and II than non-Indigenous people, the predominance of these two lower-level certificates for Indigenous people has been gradually decreasing over the last 10 years. In 2005 certificates I and II made up 61.7% of enrolments, this figure falling to 46.0% in 2015.

Figure 5 Indigenous and non-Indigenous VET enrolments as a proportion of all program enrolments, by qualification level, 2005–15, %



Source: National VET Provider Collection (government-funded students and courses) 2005–15.

It can be seen that over the past few years enrolments in diploma or higher qualifications have made up a growing proportion of all VET enrolments in all regions, with the increase most prominent in major cities and inner and outer regions (figure 6).

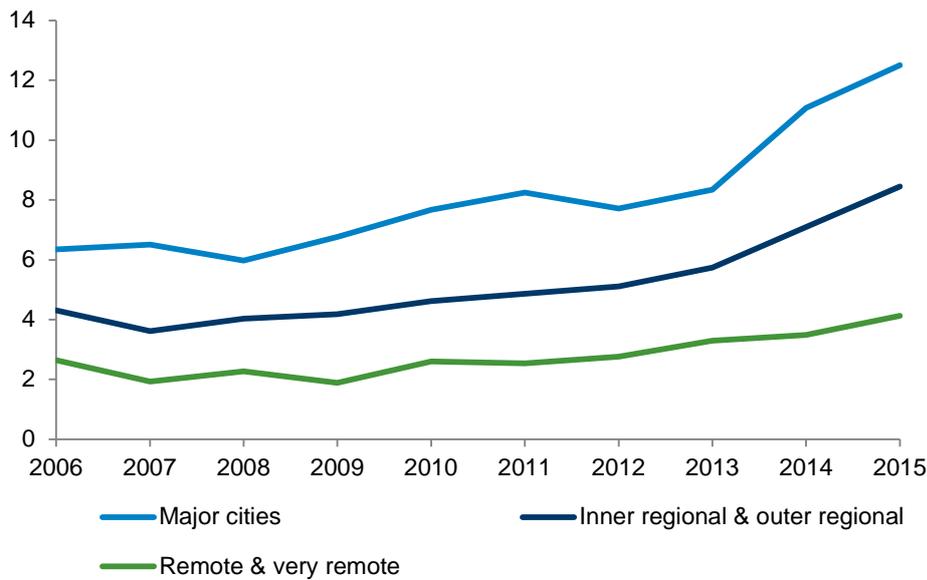
An analysis of VET FEE-HELP uptake and training completion finds that Indigenous students were just as likely to draw on VET FEE-HELP to help fund their diploma or higher-level study as were non-Indigenous students, but they were less likely than non-Indigenous students to complete their qualification (NCVER 2015). Completion of VET courses, including diploma and higher, will be further discussed in a later chapter.

Similarly, higher-level certificates III and IV have overtaken certificates I and II in major cities and in inner and outer regional areas (combined) as a percentage of all enrolments. Certificates III and IV make up 49.6% of enrolments in major cities and 47.6% of enrolments in inner and outer regional areas (combined) in 2015 (figure 7).

In remote and very remote areas, certificates I and II remain the dominant qualification level for Indigenous people. While certificates I and II have gradually decreased as a percentage of all enrolments, from 69.3% of enrolments in 2009 to 59.8% of enrolments in 2015, they are still more common than certificates III and IV, which made up 36.0% of enrolments in these areas in 2015 (figures 7 and 8).

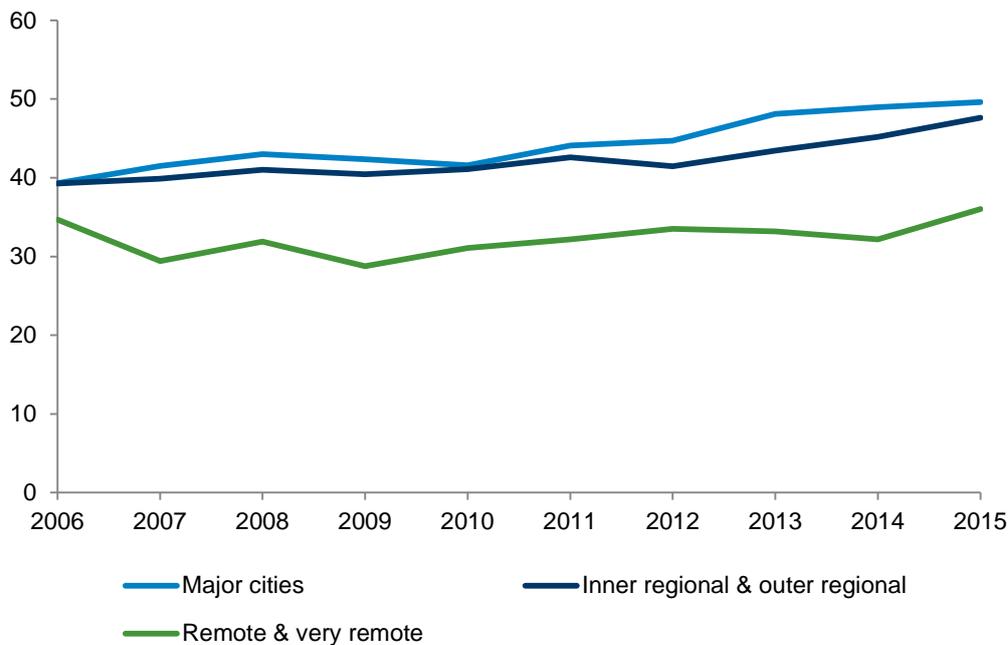
In remote and very remote areas, certificates I and II remain the dominant qualification level for Indigenous people.

Figure 6 Indigenous diploma or higher program enrolments by remoteness area, as proportion of all program enrolments for each region, 2006–15, %



Source: National VET Provider Collection (government-funded students and courses) 2006–15.

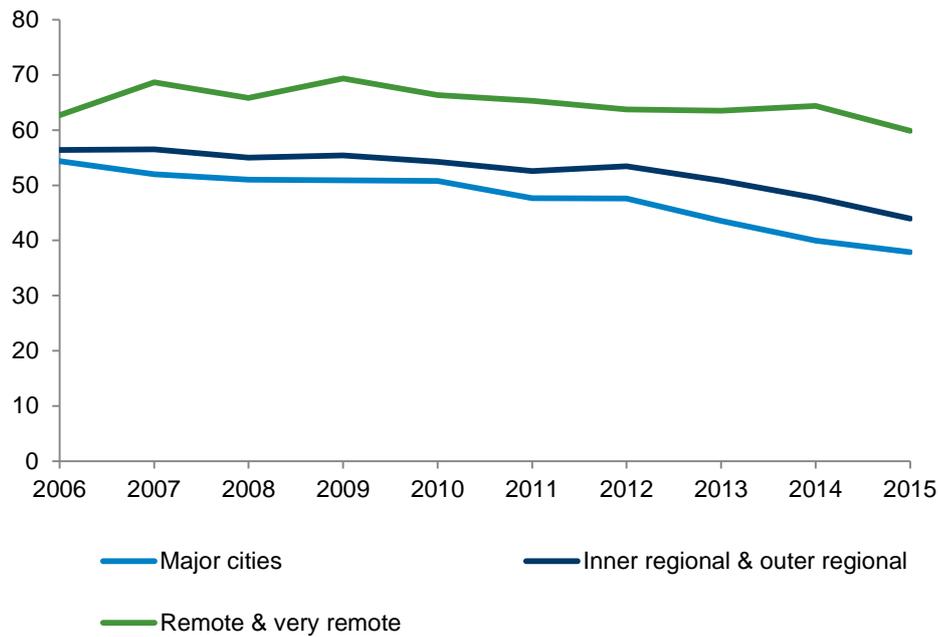
Figure 7 Indigenous certificate III and IV program enrolments by remoteness area, as proportion of all program enrolments for each region, 2006–15, %



Source: National VET Provider Collection (government-funded students and courses) 2006–15.

Indigenous males are more likely to be enrolled in certificates I and II than Indigenous females.

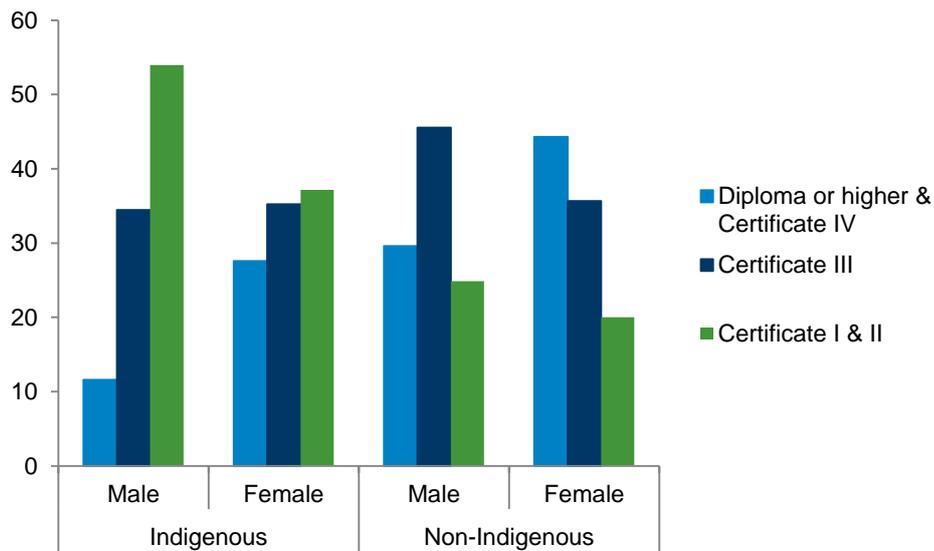
Figure 8 Indigenous certificate I and II program enrolments by remoteness area, as proportion of all program enrolments for each region, 2006–15, %



Source: National VET Provider Collection (government-funded students and courses) 2006–15.

Indigenous males are more likely to be enrolled in certificates I and II than Indigenous females, who are more likely to be enrolled in certificate IV and diploma or higher-level qualifications. Both Indigenous males and females are more likely to be enrolled in lower-level certificates and less likely to be enrolled in higher-level certificates than their non-Indigenous counterparts (figure 9).

Figure 9 Proportion of program enrolments by qualification level, sex and Indigenous status, 2015, %



Source: National VET Provider Collection (government-funded students and courses) 2015.

Previous qualification level

Vocational education, particularly lower-level certificates I and II, has long been recognised as an education option for Indigenous learners who have not completed secondary school, as these qualifications can serve as a re-entry into education and training and can provide pathways into higher levels of VET and to university. However, they can also be subject to churn, as students move from one low-level VET course to another, with limited progression into higher-level qualifications.

By looking at previous qualification levels, we can see how education levels and progression from one qualification level to another have changed over the past decade (table 3).

Across all qualifications, the proportion of those with a previous highest level of education of Year 11 or lower has decreased, from 69.2% in 2005 to 55.2% in 2015 (not shown in table). This is in part a reflection of the broader trend, which is seeing Year 12 retention and school completion rise, as discussed earlier.

For certificate I and II enrolments, the majority of students have a previous highest education level of Year 11 or lower (74.7% for certificate I and 71.2% for certificate II in 2015), which is not surprising, given that certificate levels I and II are entry-level qualifications. As table 3 shows, this percentage has decreased slightly over the last 10 years. However, we can also see slight increases in the proportion of students undertaking a certificate I or II who already hold a certificate I or II, suggesting that there is still some degree of churn in the lower-level certificates.

For diploma and above qualifications, an increasing proportion of Indigenous students are reporting a certificate III or IV as their previous highest qualification level. In 2005, 22.8% of diploma and above enrolments had certificate III or IV as a previous highest qualification, increasing to 41.4% in 2015. In contrast, the proportion of those with Year 12 or Year 11 or lower as their previous highest-level qualification declined between 2005 and 2015, from 61.0% to 39.8%. We see a similar pattern with certificate IV level qualifications. This shows that certificates III and IV are increasingly serving as a pathway into higher-level diploma or higher qualifications.

Certificates III and IV are increasingly serving as a pathway into higher-level diploma or higher qualifications.

For Indigenous males, the top field of education is Engineering and related technologies.

Table 3 Proportion of Indigenous program enrolments by qualification level, by previous highest-level qualification, 2005 and 2015, %

Current qualification level	Previous highest qualification level	2005	2015
Diploma or higher	Diploma and above	14.1	16.4
	Certificate III & IV	22.8	41.4
	Certificate I & II	2.0	2.4
	Year 12	25.9	18.6
	Year 11 or lower	35.1	21.2
Certificate IV	Diploma and above	10.6	11.3
	Certificate III & IV	21.2	38.7
	Certificate I & II	3.1	4.2
	Year 12	19.7	19.5
	Year 11 or lower	45.4	26.3
Certificate III	Diploma and above	3.3	2.2
	Certificate III & IV	8.9	14.5
	Certificate I & II	5.2	7.2
	Year 12	22.7	25.0
	Year 11 or lower	60.0	51.1
Certificate II	Diploma and above	1.9	1.4
	Certificate III & IV	5.1	7.2
	Certificate I & II	5.3	8.3
	Year 12	12.1	11.8
	Year 11 or lower	75.7	71.2
Certificate I	Diploma and above	1.3	1.7
	Certificate III & IV	3.1	7.3
	Certificate I & II	3.9	7.8
	Year 12	7.0	8.5
	Year 11 or lower	84.6	74.7

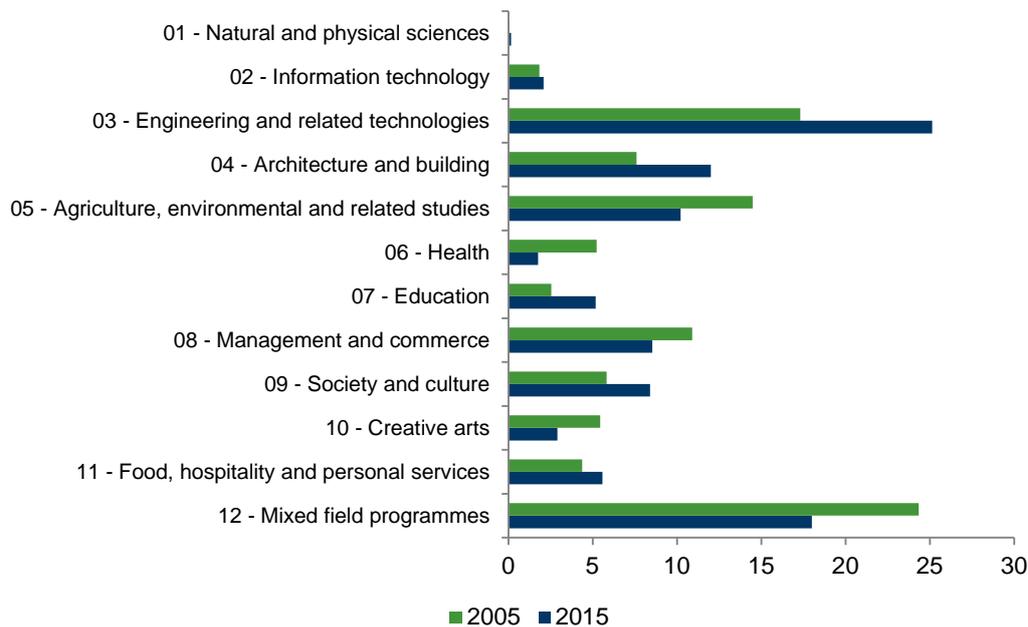
Source: National VET Provider Collection (government-funded students and courses) 2005, 2015.

Field of education

We now turn to field of education to identify the fields that have increased and those that have declined in prominence. For Indigenous males (figure 10), the top four fields of education in 2015 (as a percentage of all enrolments) are Engineering and related technologies (25.1%); Mixed field programmes (18.0%); Architecture and building (12.0%); and Agriculture, environmental and related studies (10.2%). The fields of education that have seen the largest increase since 2005 are Engineering and related technologies (17.3% in 2005 and 25.1% in 2015, up 7.8 percentage points) and Architecture and building (7.6% in 2005, and 12.0% in 2015, up 4.4 percentage points).

Looking at the engineering sub-level more closely, there has been a decline in Mechanical and industrial engineering and technology, which accounted for 41.3% of Engineering and related technologies enrolments in 2005, down to 16.9% in 2015. In contrast, Civil engineering has increased, accounting for 1.1% of enrolments in Engineering and related technologies in 2005, growing to 17.1% in 2015. At 19.8%, Process and resources engineering has the highest proportion of enrolments in the engineering field (not shown in figure).

Figure 10 Proportion of program enrolments by field of education, Indigenous males, 2005 and 2015, %



For Indigenous females, the top field of education is Society and culture.

Source: National VET Provider Collection (government-funded students and courses) 2005, 2015.

For Indigenous females (figure 11), the top four fields of education in 2015 (as a percentage of all enrolments) are Society and culture (23.2%); Management and commerce (22.7%); Mixed field programmes (15.2%); and Food, hospitality and personal services (11.5%). The greatest increase since 2005 has been in Society and culture (13.9% in 2005 to 23.2% in 2015, up 9.3 percentage points) and Food, hospitality and personal services (8.4% in 2005 to 11.5% in 2015, up 3.1 percentage points).

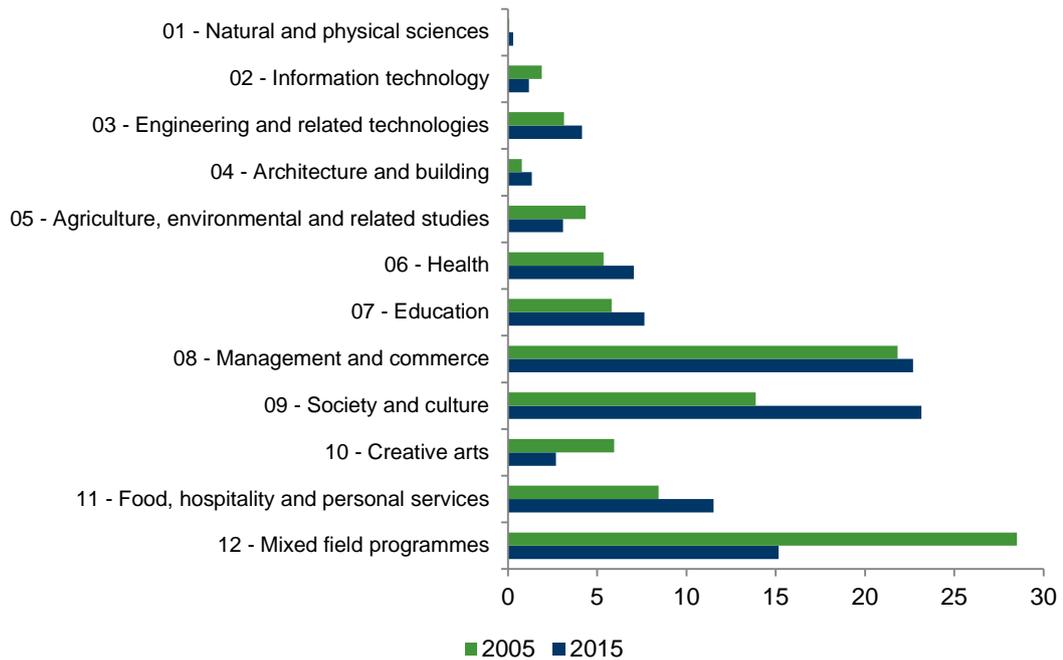
Looking at the sub-level, we can see that most of the growth for Indigenous females within Society and culture has been in the Human welfare studies and services sub-level, which made up 64.8% of all Society and culture enrolments in 2005, and 85.6% in 2015 (not shown in figure). In recent years we have also seen growth in these types of occupations in this field, suggesting that the increase in enrolments is a response to labour market demand (Atkinson & Stanwick 2016).

While Mixed field programmes remains one of the top four program enrolments for both males and females, it experienced a large decrease between 2005 and 2015, especially for women (accounting for 28.5% of enrolments in 2005, dropping to 15.2% in 2015). Mixed field programmes provide general and personal development education, including literacy and numeracy skills, and personal, social and workplace relationships. These programs also involve developing an understanding of the key competencies and the skills needed for job-search activities, employment and personal survival skills.⁴ It is important to note that approximately 90% of Mixed field programmes at AQF level are certificate I and II level courses.

⁴ ABS, Australian Standard Classification of Education (ASCED), 2001, <<http://www.abs.gov.au/ausstats/abs@.nsf/0/E7DD34DE4E24C955CA256AAF001FCA69?opendocument>>.

At the national level, TAFE and private providers have a similar proportion of Indigenous enrolments.

Figure 11 Proportion of program enrolments by field of education, Indigenous females, 2005 and 2015, %



Source: National VET Provider Collection (government-funded students and courses) 2005, 2015.

In the following chapter on employment outcomes, we consider the employment outcomes for Indigenous students studying in the fields of education that have seen considerable growth over the past decade.

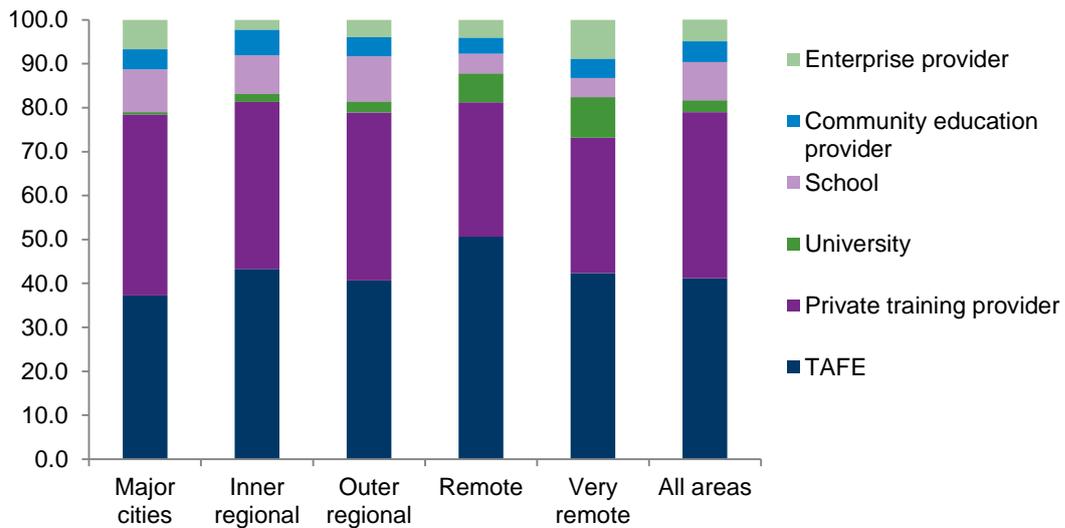
Provider type

In addition to using government-funded data to review the trends over the past decade, we are also able to look at the new data covering total VET activity, which enables us to examine the role of different provider types. There is an assumption that Indigenous students enrol mainly in TAFE institutes and community providers, but with these data we are able to test this assumption.

Figure 12 shows the breakdown of provider type by geographical region. At the national level, TAFE and private providers have a similar proportion of Indigenous enrolments, 41.2% and 38.8% respectively. This alters, depending on location, with TAFE having a smaller share in major cities (37.2%) and a larger share in remote and very remote areas (45.8%). Schools appear to be less engaged in VET provision in remote and very remote areas (4.4%) compared with the other regions (approximately 10%), but universities play a greater role in remote and very remote areas (8.1%) than in the other regions (approximately 1–3%). This is largely due to the presence of Charles Darwin University and Batchelor Institute of Indigenous Tertiary Education in the Northern Territory, where university provision of VET makes up 32.7%. Looking at the breakdown of provider type by states and territories, we see private providers have a strong presence in Queensland (57.2%) compared with the other states (figure 13).

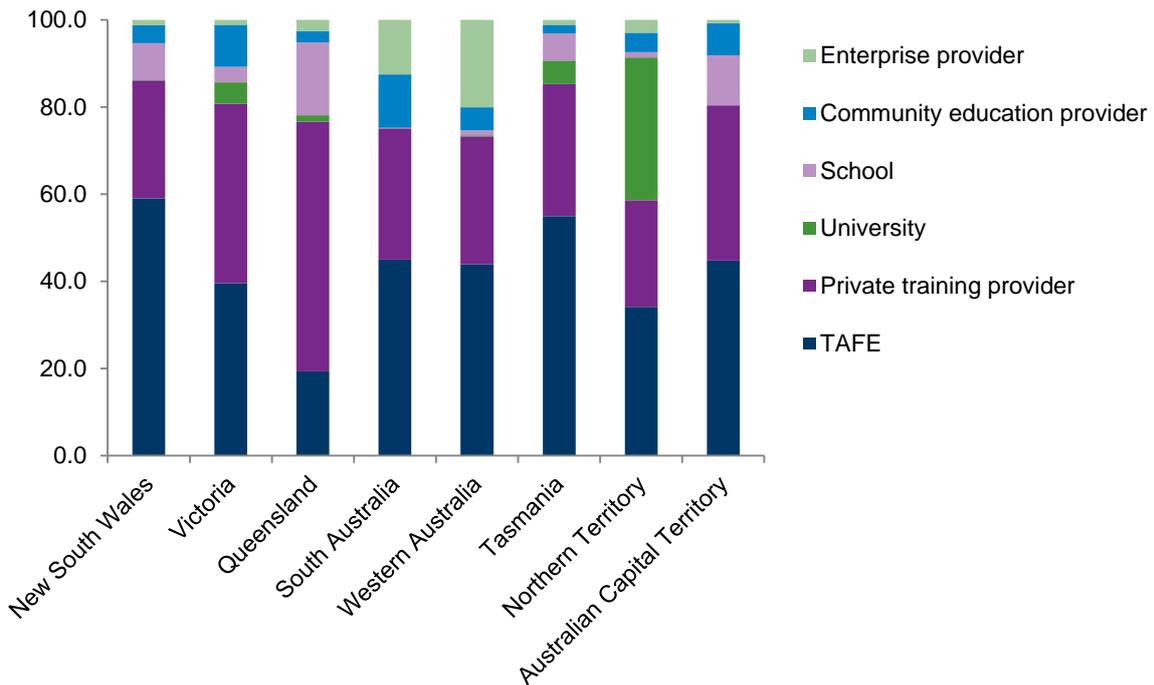
This shows us that, overall, Indigenous students are no less likely to enrol in private providers than in TAFEs, although TAFEs have a greater presence in remote areas. In the chapter on employment outcomes, we will also look at employment outcomes by provider type.

Figure 12 Indigenous program enrolments by provider type and remoteness index, 2015, %



Source: National VET Provider Collection (total VET) 2015.

Figure 13 Indigenous program enrolments by provider type and state and territory, 2015, %



Source: National VET Provider Collection (total VET) 2015.

Indigenous people have a higher rate of participation in apprenticeships and traineeships than the non-Indigenous population.

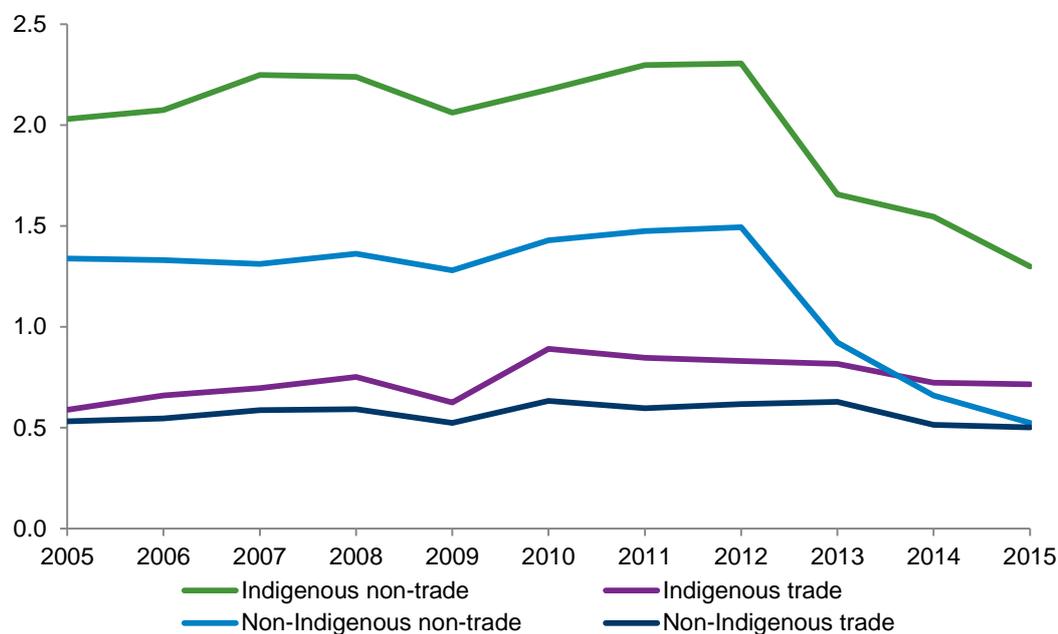
Apprenticeships and traineeships

Apprenticeships and traineeships remain an important training and employment pathway option for Indigenous people, and in 2015 there were 12 140 Indigenous apprentices and trainees in-training (6160 were undertaking trade training, 5980 were undertaking non-trade training).⁵

Indigenous people have a higher rate of participation in apprenticeships and traineeships than the non-Indigenous population (figure 14), but despite this strong participation rate, the growth and decline in Indigenous commencements follow a similar pattern to non-Indigenous commencements. Similar to non-Indigenous apprentices and trainees, the non-trades have seen the largest decline over the past couple of years, largely due to the removal of employer incentive payments (Atkinson & Stanwick 2016).

The decline in trade commencements in 2008–09 can be attributed to the Global Financial Crisis, while the subsequent strong peak in trade commencements between 2009 and 2010 coincided with the establishment of the Apprentice Kickstart program, which was introduced as a temporary measure to help maintain apprenticeship commencements following the GFC. It appears that these declines and the spike over this period are more pronounced for Indigenous trade commencements by comparison with non-Indigenous. For more information on the role of incentive and support programs and their influence on commencement trends see Atkinson and Stanwick (2016).

Figure 14 Indigenous and non-Indigenous apprenticeship and traineeship commencements as a rate of the 15 to 64-year-old population, 2005–15, %



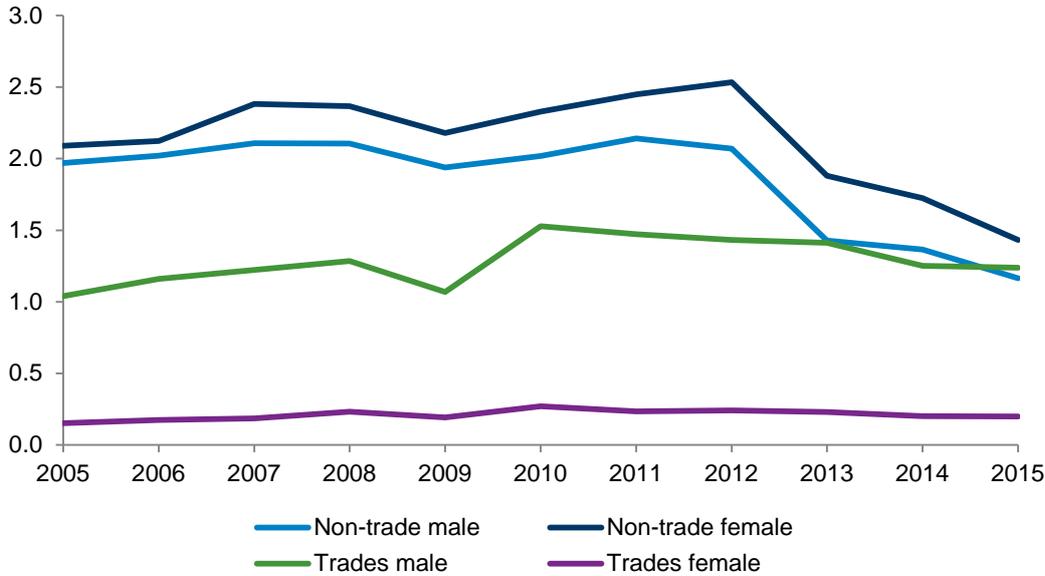
Note: The participation rate is calculated as a rate of the 15 to 64-year-old Indigenous and non-Indigenous population (rather than labour force, as the Indigenous labour force data are not available on a regular basis).

Source: National Apprentice and Trainee Collection 2005–15.

⁵ Sourced from the National Apprentice and Trainee Collection, September 2016 estimates.

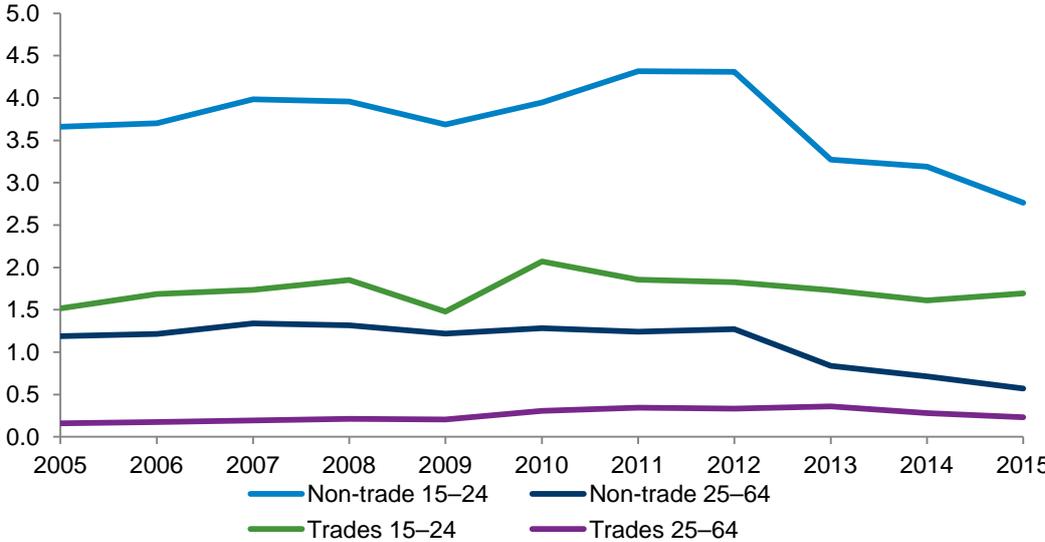
When examined by sex and age, Indigenous participation in apprenticeships and traineeships tends to follow a similar pattern to non-Indigenous participation, with females more likely to be undertaking non-trade training and males more likely to be undertaking trade training (figure 15). Younger Indigenous people (15 to 24-year-olds) are also much more likely to undertake trade and non-trade apprenticeships and traineeships than older Indigenous people, aged 25–64 years (figure 16).

Figure 15 Indigenous trade and non-trade commencements by sex, as a rate of the 15 to 64-year-old population, 2005–15, %



Note: The participation rate is calculated as a rate of the 15 to 64-year-old Indigenous and non-Indigenous population (rather than labour force, as the Indigenous labour force data are not available on a regular basis).
 Source: National Apprentice and Trainee Collection 2005–15.

Figure 16 Indigenous trade and non-trade commencements by age, as a rate of the 15 to 64-year-old population, 2005–15, %

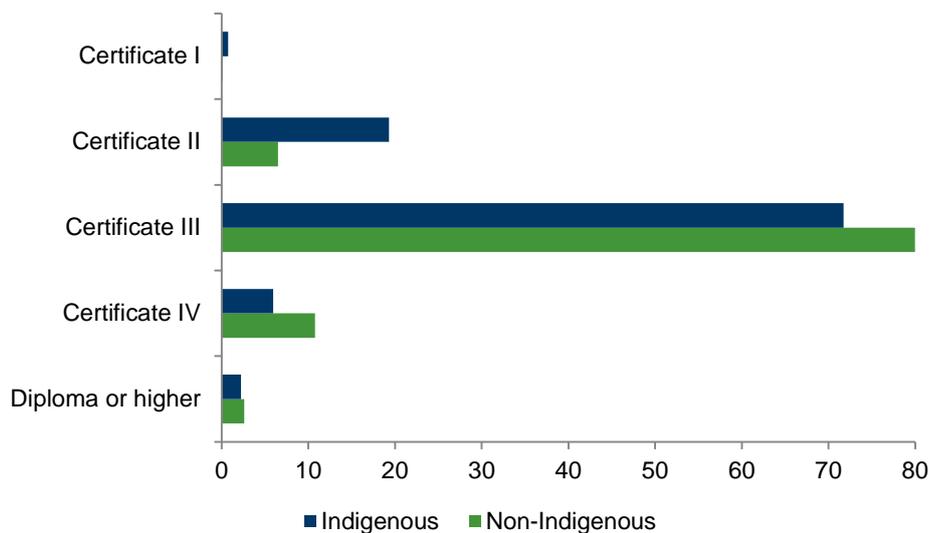


Note: The participation rate is calculated as a rate of the 15 to 64-year-old Indigenous and non-Indigenous population (rather than labour force, as the Indigenous labour force data are not available on a regular basis).
 Source: National Apprentice and Trainee Collection 2005–15.

Indigenous and non-Indigenous apprentices and trainees are most likely to be undertaking a certificate III level qualification.

Indigenous and non-Indigenous apprentices and trainees are most likely to be undertaking a certificate III level qualification (71.7% and 80.0% respectively), but Indigenous apprentices and trainees are more likely to be enrolled in certificate II level qualifications and less likely to be enrolled in certificate IV level qualifications than non-Indigenous apprentices and trainees (figure 17).

Figure 17 Indigenous and non-Indigenous apprentice and trainee commencements by qualification level, 2015, %



Source: National Apprentice and Trainee Collection 2015.

According to an analysis undertaken by Biddle, Brennan and Yap (2014), the majority of Indigenous apprentices and trainees are enrolled in a certificate III, especially males, with over three-quarters of them enrolled in this level of qualification. A much smaller proportion of Indigenous females were enrolled in a certificate III, but they made up a higher percentage of those enrolled in a certificate IV or diploma/advanced diploma. These differences are likely to reflect the gendered nature of trade/non-trade training, as trade occupations are generally at the certificate III level.

Given the gendered differences in qualification levels, it is not surprising that Biddle, Brennan and Yap (2014) find the expected occupations of male and female Indigenous apprentices or trainees will be very different. Males are much more likely to be participating in apprenticeships and traineeships, which result in their becoming tradespersons or related workers, whereas females are more likely to be working towards an occupation as a clerical, sales and service worker (Biddle, Brennan & Yap 2014).

The employment outcomes of Indigenous apprentices and trainees will be considered in a later chapter.

Following our investigation of the inputs of VET in the form of participation rates, we will examine the outputs of the system through program completions and completion rates for all VET students, as well as for apprentices and trainees.



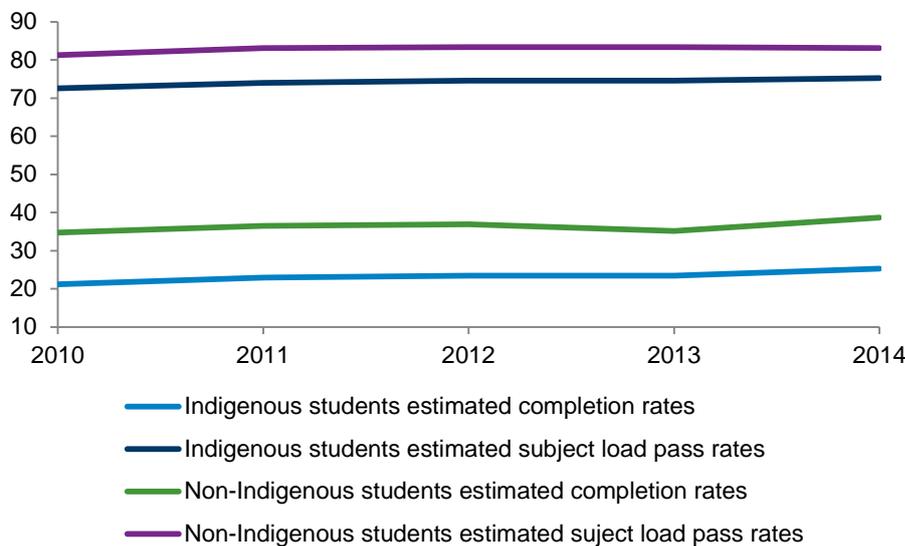
Indigenous VET completion rates

Indigenous completion rates remain low compared with non-Indigenous people.

Over the past 10 years, total Indigenous completions have risen in line with the rise in total Indigenous enrolments. In 2015 Indigenous program completions were 20 540, compared with 7848 in 2005.

But despite these increases in raw completion numbers over the past decade, Indigenous completion rates remain low. While Indigenous program completion rates and subject load pass rates have increased at a similar rate to the rates of non-Indigenous students over the past few years, they remain approximately 13 percentage points behind for program completion rates, and eight percentage points behind for subject load pass rates (figure 18).

Figure 18 Estimated program completion rate and subject load pass rate, Indigenous and non-Indigenous, 2010–14, %



Source: National VET Provider Collection (government-funded students and courses) 2009–15.

Nuances in Indigenous program completion rates can be observed when looking more closely at location and qualification level, as shown in table 4. Western Australia is the only state with an Indigenous program enrolment completion rate less than 20% (17.8%), followed by the Northern Territory (21.6%). These two jurisdictions have the greatest disparity between Indigenous and non-Indigenous completion rates, with 22.7 and 24.7 percentage points respectively. The completion rates for these jurisdictions may be explained by the high proportion of the Indigenous students residing in remote and very remote areas.

Program completion rates are also lower for those living in very remote parts of Australia (16.6%) compared with cities and regional areas.

Similar to the non-Indigenous population, Indigenous rates of completion are much lower for the lower-level qualifications, particularly certificate I, compared with higher-level qualifications. However, the greatest disparity between Indigenous and non-Indigenous program completion rates is at the certificate III level, at 11.6 percentage points. As with the non-Indigenous population, Indigenous females are slightly more likely to complete their qualification than Indigenous males (28.1% and 23.0% respectively).

Table 4 Indigenous and non-Indigenous estimated program completion rate, 2014, %

Estimated program completion rate 2014		
	Indigenous	Non-Indigenous
<i>State or territory</i>		
New South Wales	26.7	39.5
Victoria	23.9	36.0
Queensland	32.5	45.2
South Australia	22.1	33.0
Western Australia	17.8	40.5
Tasmania	33.1	35.8
Northern Territory	21.6	46.3
Australian Capital Territory	34.9	39.3
<i>Program level</i>		
Diploma and above	33.4	41.1
Certificate IV	35.0	41.8
Certificate III	31.6	43.2
Certificate II	23.2	31.0
Certificate I	13.2	23.1
<i>ARIA remoteness</i>		
Major cities	29.2	40.4
Inner regional	25.6	36.0
Outer regional	27.2	35.0
Remote	21.0	30.4
Very remote	16.6	28.1
<i>Age</i>		
19 years and under	24.0	32.7
20–24 years	27.2	39.7
25–44 years	24.2	39.8
45 years and over	28.4	41.3
<i>Sex</i>		
Males	23.0	35.9
Females	28.1	41.7
Total	25.3	38.7

Note: ARIA = Accessibility/Remoteness Index of Australia.

Source: National VET Provider Collection (government-funded students and courses) 2009–15.

Apprentice and trainee completion rates

As with non-Indigenous apprentice and trainee completion rates, Indigenous trade apprentices are less likely to complete their qualification than those in non-trade training (table 5). The Indigenous trade and non-trade completion rates increased slightly between 2009 and 2012 (from 33.7% to 36.5% for trade occupations, and 45.6% to 48.1% for non-trade occupations). Despite these increases in 2012, the Indigenous apprentice and trainee completion rate is approximately 11 percentage points behind the non-Indigenous completion rate.

Table 5 Indigenous and non-Indigenous apprentice and trainee completion rates by occupation, commencing 2009–13, %

	2009	2010	2011	2012	2013
<i>Indigenous</i>					
Trade occupations	33.7	33.1	35.9	36.5	28.5*
Non-trade occupations	45.6	46.3	45.0	48.1	50.0
Total Indigenous	42.5	42.1	42.3	44.7	42.2*
<i>Non-Indigenous</i>					
Trade occupations	48.2	47.1	47.2	48.1	37.1*
Non-trade occupations	56.8	56.3	57.0	59.2	57.1
Total non-Indigenous	53.9	53.1	53.8	55.6	48.3*

Notes: * Indicates completion rate 'to date' with a significant proportion of apprentices and trainees still continuing their training. These rates will increase in coming quarters.

Source: National Apprentice and Trainee Collection, December 2016 estimates.

As with non-Indigenous apprentice and trainee completion rates, Indigenous trade apprentices are less likely to complete their qualification than those in non-trade training.

Indigenous graduates still remain less likely to be employed after training compared with non-Indigenous graduates.



Outcomes of training for Indigenous graduates

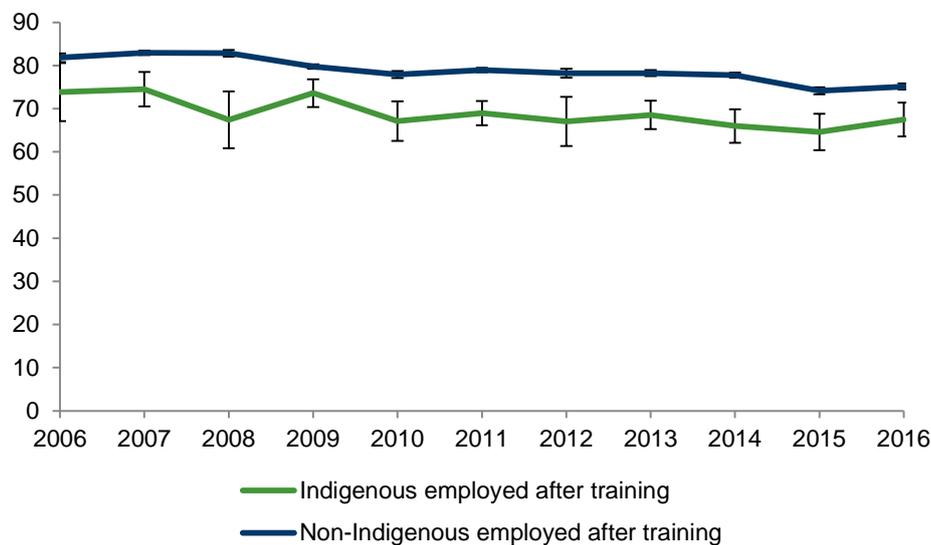
Drawing on NCVET's Student Outcomes Survey⁶, this chapter focuses on gaining a clearer picture of the employment and further study outcomes, as well as the personal benefits of VET, for Indigenous graduates.

Employment outcomes

Looking at the proportion of Indigenous and non-Indigenous VET graduates employed after training, we can see employment outcomes have not changed significantly over the past decade. For Indigenous graduates, 73.9% were employed after training in 2006 and 67.5% in 2016. For non-Indigenous graduates, 81.8% were employed after training in 2006 and 75.1% in 2016. Indigenous graduates still remain less likely to be employed after training compared with non-Indigenous graduates (figure 19).

These figures need to be considered in the context of the prevailing economic conditions and the labour market cycle. As mentioned earlier, growth in Indigenous employment prospects has slowed since 2008, possibly due to the Global Financial Crisis and the post-GFC labour market, which appear to have had a detrimental effect on some VET students, particularly younger students (Atkinson & Stanwick 2016).

Figure 19 Proportion of Indigenous and non-Indigenous graduates employed after training, 2006–16, %



Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
Source: Student Outcomes Survey 2006–16.

⁶ Noting the sample size discussed on page 15.

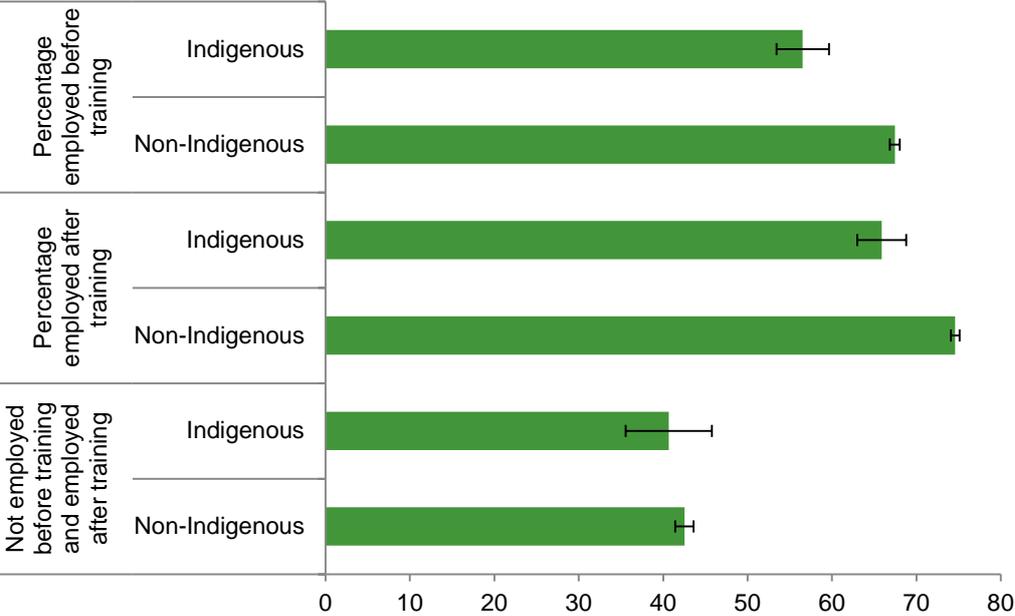
We want to gain a more nuanced view of the employment outcomes for Indigenous graduates and how they compare with non-Indigenous graduates. To do this we compare the proportions of graduates employed before training and after, and the proportion of those not employed before training and those employed after training.

In figure 20 we can see that Indigenous graduates are less likely to be employed after training than non-Indigenous graduates (65.9% and 74.6% respectively). Indigenous graduates are also less likely to have been employed before training than non-Indigenous graduates (56.5% and 67.4% respectively).

Given the Closing the Gap targets associated with reaching employment parity, our interest in this report lies mainly with those Indigenous graduates not employed before training and their employment outcomes after undertaking training. Looking at figure 20, we can see that the proportions of Indigenous and non-Indigenous graduates who were not employed before training but were employed after training are quite similar (40.7% of Indigenous graduates and 42.5% of non-Indigenous graduates), indicating that Indigenous graduates who were not employed before training are just as likely to be employed after training as their non-Indigenous counterparts. However, this is largely due to decreases in employment after training for non-Indigenous graduates not employed before training over the last decade.

The proportions of Indigenous and non-Indigenous graduates who were not employed before training but were employed after training are quite similar.

Figure 20 Employment outcomes of training, Indigenous and non-Indigenous graduates, 2015–16, %



Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
 Source: Student Outcomes Survey 2015–16.

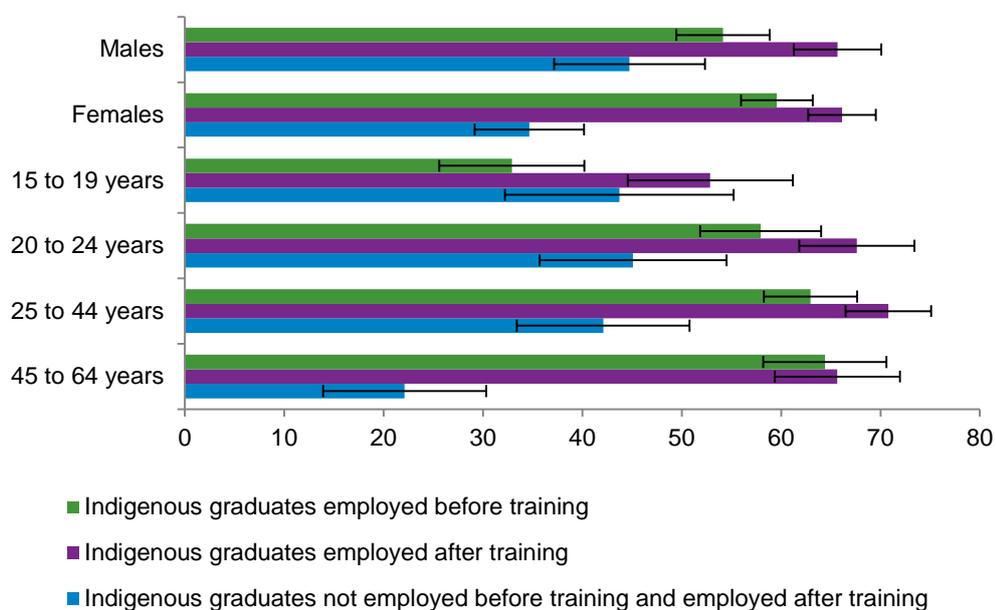
Diploma or higher and certificate IV graduates are more likely to be employed after training compared with other qualification holders.

Employment outcomes by student and training characteristics

The three diagrams that follow show some of the differences in employment outcomes between those employed before training and those who were not. In figure 21, we can see that male and female Indigenous graduates have similar employment outcomes. However, males who were not employed before training but employed after training are more likely to be employed after training than their female counterparts.

Unsurprisingly, younger Indigenous graduates (15–19 years) are less likely to be employed before training than older graduates (20–64 years). But these younger graduates are also less likely to be employed after training than older Indigenous graduates (20–64 years). However, the difference between younger graduates (15–19 years) employed before compared with those employed after is 20 percentage points, indicating that VET still plays an important role in producing employment outcomes for Indigenous young people.

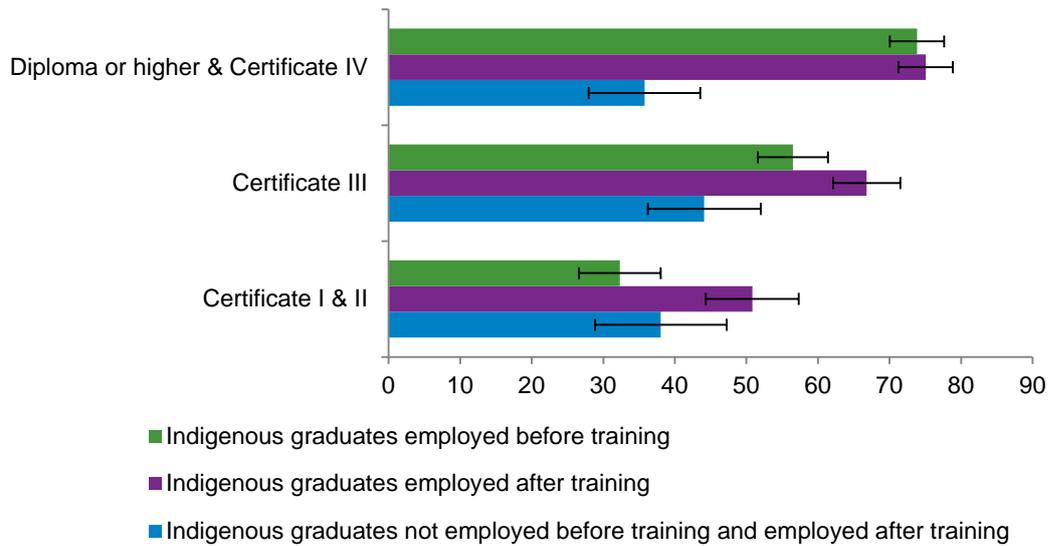
Figure 21 Proportion of Indigenous graduates employed before training, employed after training, and those not employed before training and employed after training, by sex and age, 2015–16, %



Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate. Source: Student Outcomes Survey 2015–16.

Figure 22 shows that diploma or higher and certificate IV graduates are more likely to be employed after training compared with other qualification holders, while certificate III graduates are more likely to be employed after training than certificate I and II graduates. This is not dissimilar to Crawford and Biddle’s (2017) analysis of the Australian Census Longitudinal Dataset, discussed previously. While Indigenous graduates are less likely to undertake higher-level qualifications (certificate IV and higher) by comparison with other qualification levels, they have the strongest employment outcomes. That said, certificates I and II do show an increase in the proportion of those employed before training, compared with employed after, with around a third of certificate I and II graduates employed before training, and around half employed afterwards.

Figure 22 Proportion of Indigenous graduates employed before training, employed after training, and those not employed before training and employed after training, by qualification level, 2015–16, %

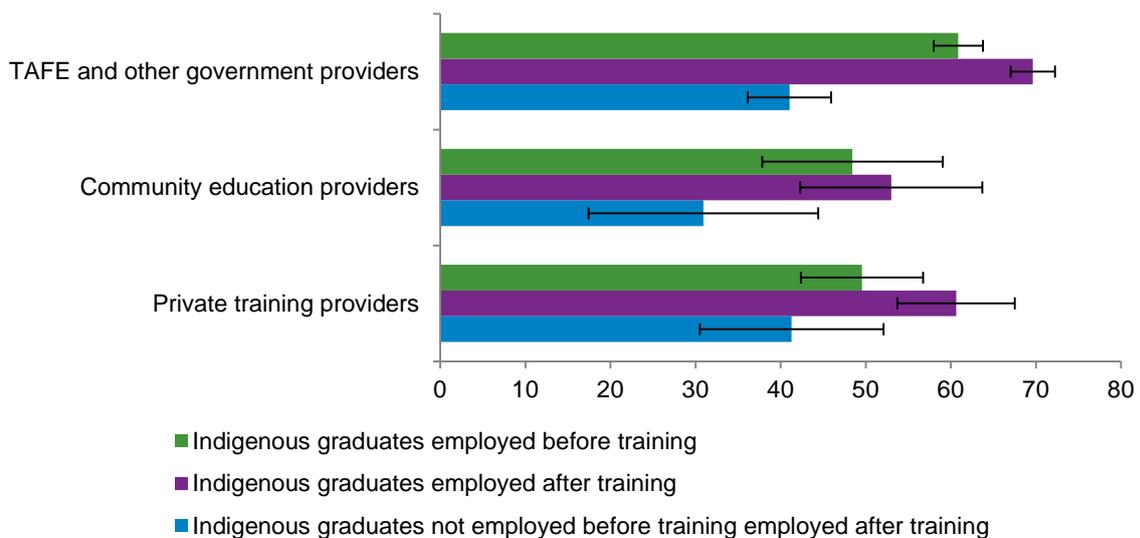


Certificate III graduates are more likely to be employed after training than certificate I and II graduates.

Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
Source: Student Outcomes Survey 2015–16.

Looking at provider type in figure 23, it is clear that the employment outcomes for Indigenous graduates who were not employed before training are reasonably consistent across provider type (TAFE and other government providers 41.0%, private providers 41.3% and community providers 30.9%). For all graduates, those who studied at TAFE are more likely to be employed after training compared with graduates from other providers, but TAFE graduates are also more likely to be employed in the first place.

Figure 23 Proportion of Indigenous graduates employed before training, employed after training, and those not employed before training and employed after training, by provider type, 2015–16, %



Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
Source: Student Outcomes Survey 2015–16.

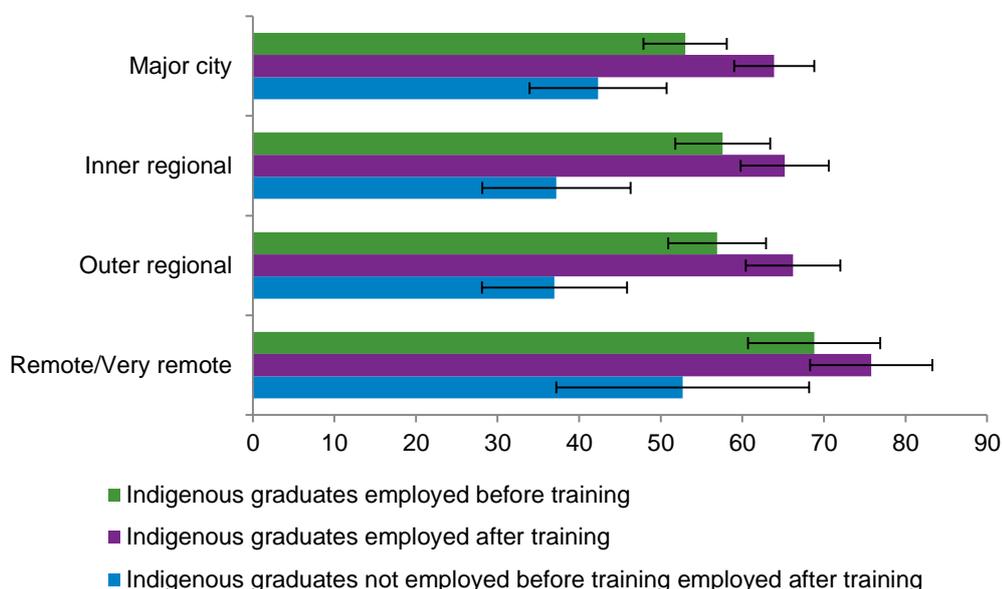
Indigenous graduates from remote and very remote areas are more likely to be employed after training than graduates from other areas.

Employment outcomes by remoteness

Looking at remoteness, Indigenous graduates from remote and very remote areas are more likely to be employed after training than graduates from other areas. However, graduates from remote and very remote areas are also more likely to be employed before training than are graduates from other areas (figure 24).

These findings prompt some interesting questions about the perception of the limited employment opportunities for Indigenous people in remote and very remote areas. Perhaps training in remote areas is a requirement for existing jobs, or training is being undertaken for a specific job. Guenther et al. (2017) explore training and employment outcomes in remote areas in greater detail.

Figure 24 Proportion of Indigenous graduates employed before training, employed after training, and those not employed before training and employed after training, by remoteness area, 2015–16, %

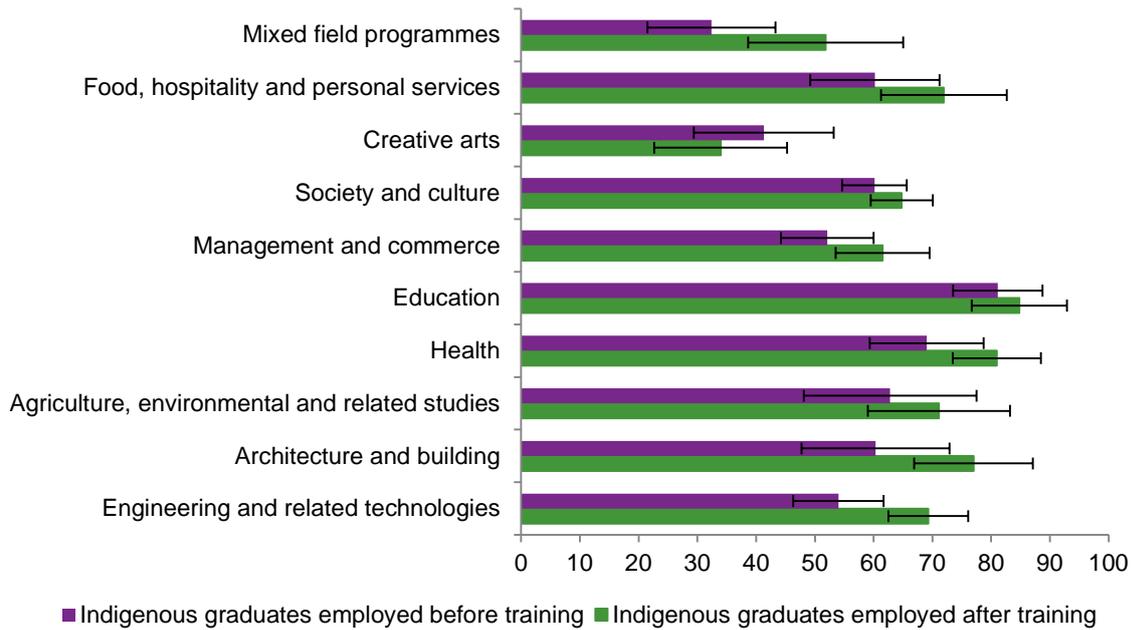


Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
Source: Student Outcomes Survey 2015–16.

Employment outcomes by field of education and occupation

At 84.8% and 80.9%, Education and Health are the two fields of education where graduates are most likely to be employed after training, mainly due to the large proportions of graduates already employed in these fields of education (81.1% and 69.0% respectively; figure 25). The fields of education which see the greatest difference in the proportions of those employed before training and then employed after training are Mixed field programmes, Architecture and building, Engineering and related technologies (19.4, 16.7, and 15.3 percentage points respectively).

Figure 25 Proportion of Indigenous graduates employed before training and employed after training, by field of education, 2015–16, %

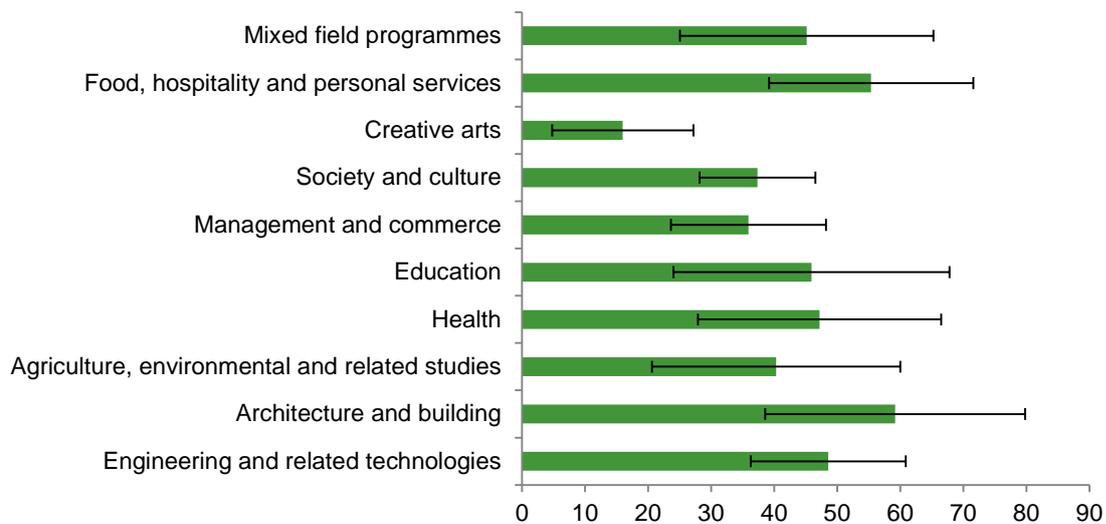


Notes: The fields of education Natural and physical sciences and Information technology have been excluded from calculations as the numbers of Indigenous students were too low to create a robust example. The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate. Source: Student Outcomes Survey 2015–16.

The story is a little different for graduates who were not employed before training. As figure 26 shows, the fields of education with the highest likelihood of graduates being employed after training are Architecture and building (59.2%); Food, hospitality and personal services (55.4%); and Engineering and related studies (48.6%).

Creative arts appears to have the least favourable employment outcomes for those graduates who were not employed before training (16.0%).

Figure 26 Proportion of Indigenous graduates not employed before training and employed after training, by field of education, 2015–16, %

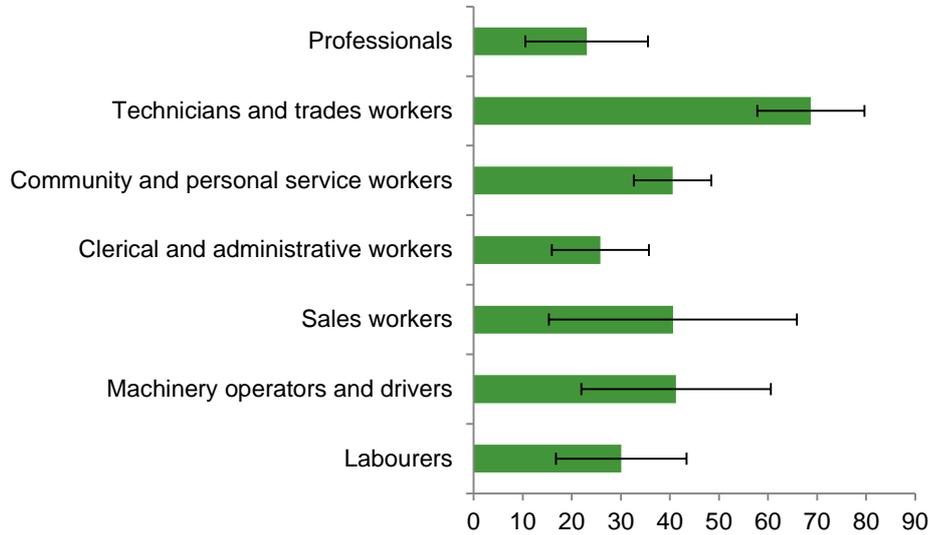


Notes: The fields of education Natural and physical science and Information technology have been excluded from calculations as the numbers of graduates were too low to create a robust example. The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate. Source: Student Outcomes Survey 2015–16.

Technicians and trades workers are significantly more likely to be employed after training compared with other occupations.

Looking at intended occupation, in figure 27 we can see those who trained as Technicians and trades workers are significantly more likely to be employed after training compared with other occupations, with 68.7% of graduates not employed before training employed after training.

Figure 27 Proportion of Indigenous graduates not employed before training and employed after training, by intended occupation (1-digit ANZSCO), 2015–16, %



Note: Managers have been excluded from the analysis as the sample was too unreliable.
The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
Source: Student Outcomes Survey 2015–16.

For all Indigenous graduates, Technicians and trades workers and Community and personal service workers are significantly more likely to be employed in the same occupation as the training course (62.6% and 59.7% respectively, in figure 28).

Figure 28 Proportion of Indigenous graduates employed after training in same occupation as training course (1-digit ANZSCO), 2015–16, %



Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
Source: Student Outcomes Survey 2015–16.

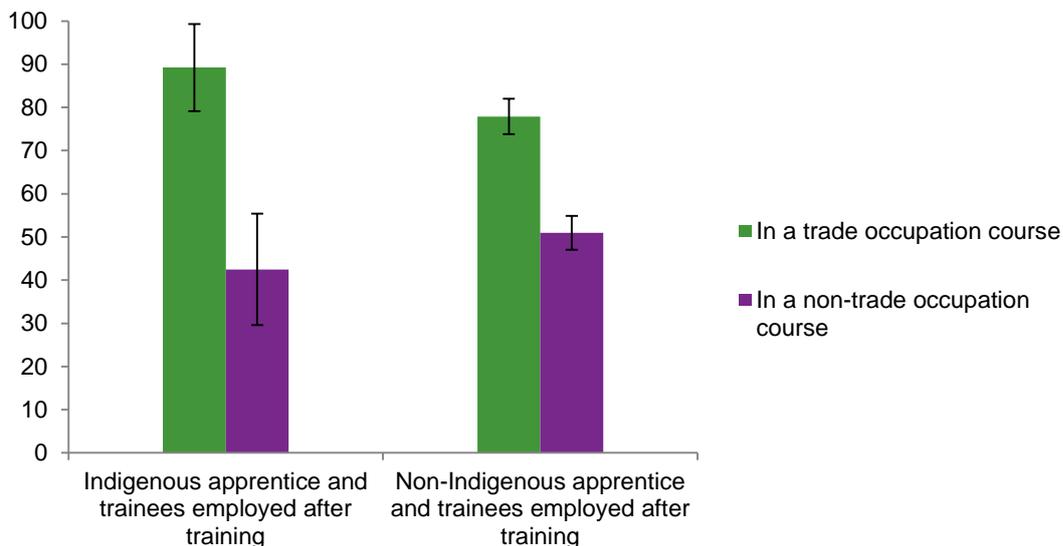
Employment outcomes for apprentices and trainees

The majority of Indigenous and non-Indigenous graduates undertaking an apprenticeship or traineeship are employed after training. This is not unexpected, as having employment is a requirement of undertaking an apprenticeship or traineeship.

When we look more closely at apprentice and trainee graduates who were not employed before training, we can see there are clear differences in employment outcomes, depending on occupation and sex. Figure 29 shows that Indigenous and non-Indigenous graduates who were not employed before training are far more likely to be employed after training if they were undertaking a trade occupation course compared with those undertaking a non-trade occupation course. We can also see that Indigenous graduates (not employed before training) who were undertaking a trade occupation course are more likely to be employed after training compared with their non-Indigenous counterparts (89.2% and 77.9% respectively).

Given that employment outcomes are stronger for Indigenous graduates who have undertaken trade training, it could be expected that the employment outcomes are gendered.

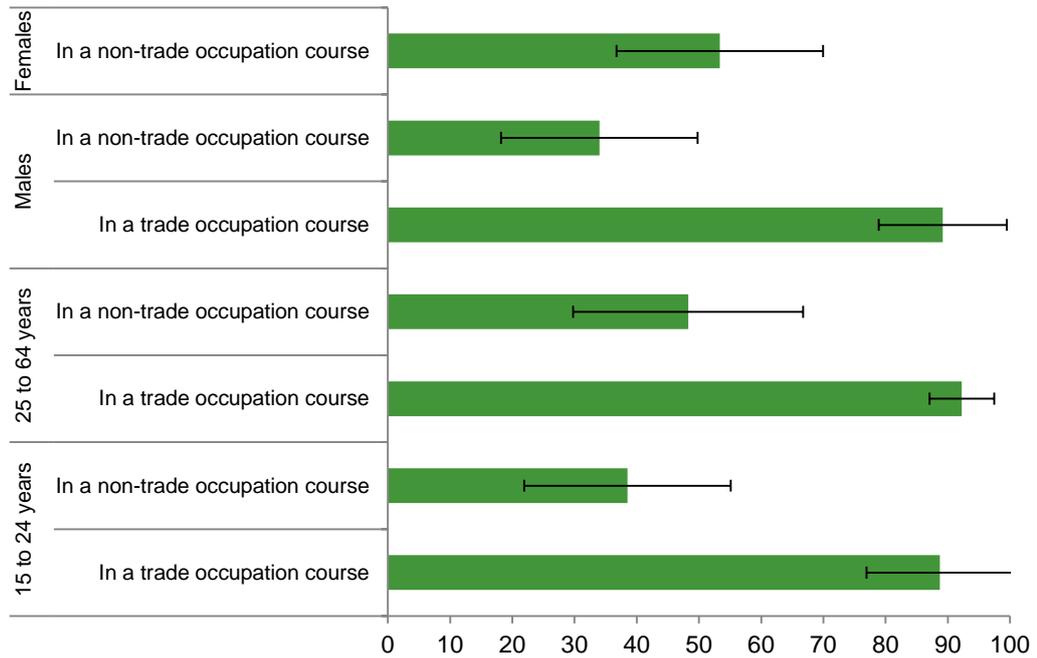
Figure 29 Proportion of Indigenous and non-Indigenous apprentice and trainee graduates who were not employed before training and employed after training undertaking a trade/non-trade occupation course, 2015–16, %



Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
Source: Student Outcomes Survey 2015–16.

Given that employment outcomes are stronger for Indigenous graduates who have undertaken trade training, it could be expected that the employment outcomes are gendered. In figure 30 we see that male graduates (who were not employed before training) who were undertaking a trade course are much more likely to be employed after training than males who were in a non-trade course (89.2% and 34.0% respectively). For females, the number of those in trade courses is so low they were excluded from the analysis, but for females in non-trade courses (not employed before training) around half were employed after training.

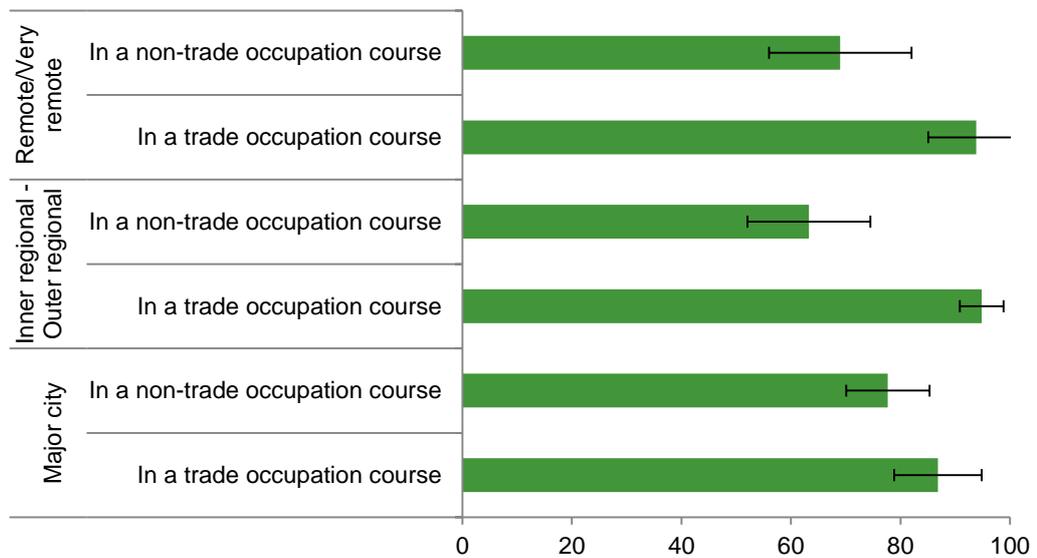
Figure 30 Proportion of Indigenous apprentice and trainee graduates who were not employed before training and employed after training undertaking a trade/non-trade occupation course, by sex and age, 2015–16, %



Note: Indigenous females in a trade occupation were excluded from the analysis as the numbers were too low to provide a robust sample.
 The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
 Source: Student Outcomes Survey 2015–16.

Looking at remoteness area in figure 31, we can see that those undertaking non-trade occupation courses in major cities are more likely to be employed after training than similar graduates in inner and outer regional locations (77.7% and 63.3% respectively). Employment outcomes for trade occupation graduates are consistently high across all locations.

Figure 31 Proportion of Indigenous apprentice and trainee graduates employed after training undertaking a trade/non-trade occupation course, by remoteness area, 2015–16, %



Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
 Source: Student Outcomes Survey 2015–16.

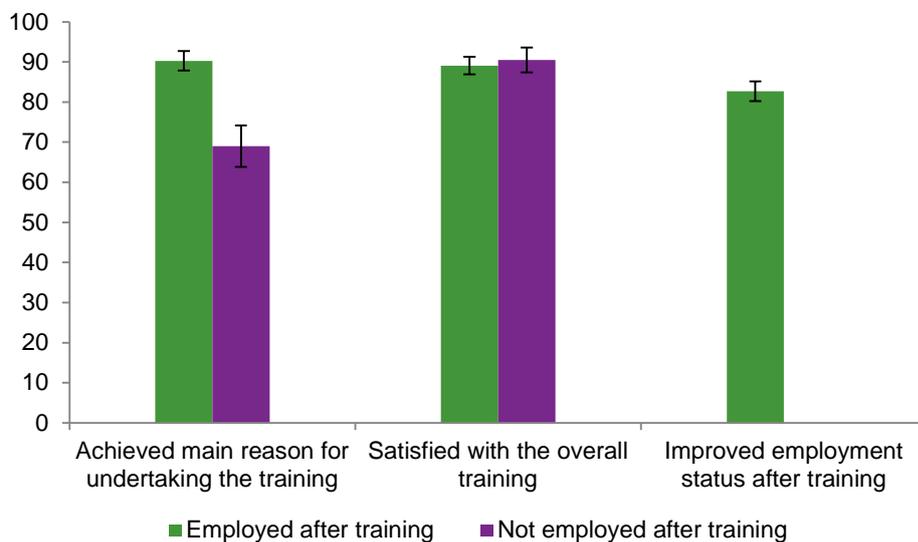
These findings reiterate the importance of trade training for Indigenous graduates, particularly males, as such training provides strong employment outcomes for this group.

Around eight in 10 graduates had improved their employment status after training.

Satisfaction with training and job-related benefits of training

Despite having generally lower employment outcomes, the majority of Indigenous graduates are overall quite satisfied with their training, regardless of whether they were employed after training or not. The majority of graduates who were employed after training achieved their main reason for doing the training (90.3%). Over two-thirds of those not employed after training (69.0%) also stated that they achieved their main reason for undertaking training. Around eight in 10 graduates had improved their employment status after training (figure 32).

Figure 32 Satisfaction with training, Indigenous graduates, 2015–16, %

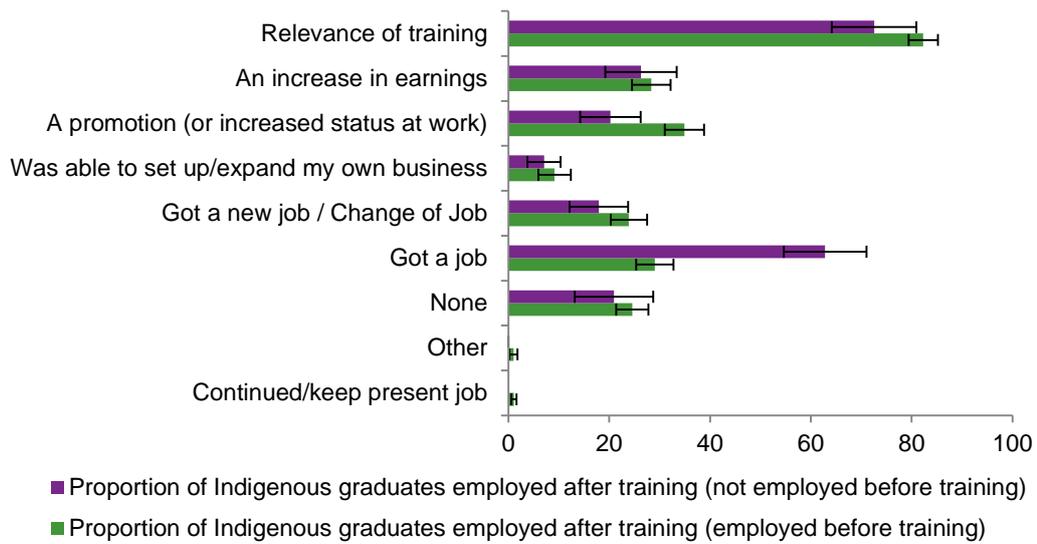


Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
Source: Student Outcomes Survey 2015–16.

Of those who were employed after training, the majority cited their training as relevant to their job (82.3% of those employed before training and 72.6% of those not employed before training). Other job-related benefits include getting a job (62.8% of graduates not employed before training); a promotion (34.9% of graduates who were already employed before training); getting a new job, or changing a job (23.9% of graduates already employed before training); and an increase in earnings (over a quarter of graduates). However, one-fifth of the graduates not employed before training and one-quarter of the graduates who were employed before training reported no job-related benefits at all (figure 33).

Indigenous and non-Indigenous enrolment in further study remained reasonably consistent between 2006 and 2016.

Figure 33 Job-related benefits and relevance of training for Indigenous graduates, 2015–16, %



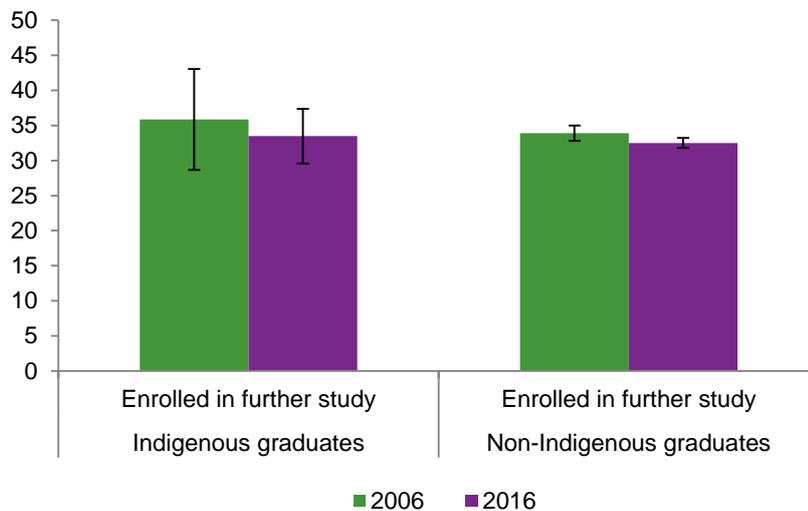
Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate. Source: Student Outcomes Survey 2015–16.

Further study outcomes

Employment outcomes for Indigenous graduates are only part of the story. As discussed earlier, the higher the education attainment, the higher the likelihood of employment. And as the Closing the Gap report recognises, there is no employment gap at the higher levels of education (Department of the Prime Minister and Cabinet 2017). In this context, exploring further study outcomes for Indigenous people becomes important.

As figure 34 demonstrates, Indigenous and non-Indigenous enrolment in further study remained reasonably consistent between 2006 and 2016, with around a third of graduates going on to further study.

Figure 34 Proportion of Indigenous and non-Indigenous graduates enrolled in further study, 2006 and 2016, %



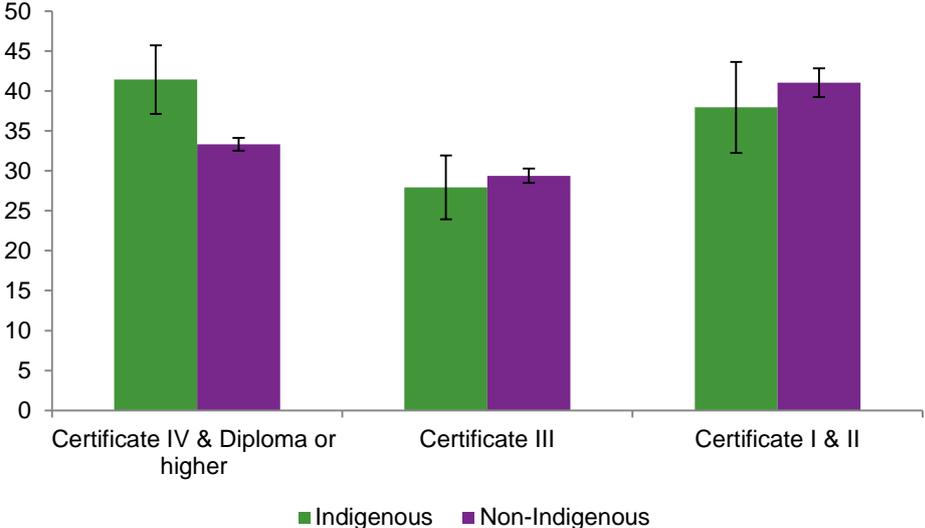
Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate. Source: Student Outcomes Survey 2006, 2016.

Both Indigenous and non-Indigenous graduates are more likely to be enrolled in further study if they have completed a higher-level qualification (diploma or higher and certificate IV) or a lower-level qualification (certificates I and II) compared with those who have completed a certificate III. This is likely due to the fact that some certificate III training leads to employment in specific occupations (that is, trade training).

Indigenous graduates who have completed a higher-level qualification (diploma or higher and certificate IV) are more likely to be enrolled in further study than their non-Indigenous counterparts (figure 35).

Indigenous graduates who have completed a higher-level qualification are more likely to be enrolled in further study than their non-Indigenous counterparts.

Figure 35 Proportion of Indigenous and non-Indigenous graduates enrolled in further study, by qualification level, 2015–16, %



Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate. Source: Student Outcomes Survey 2015–16.

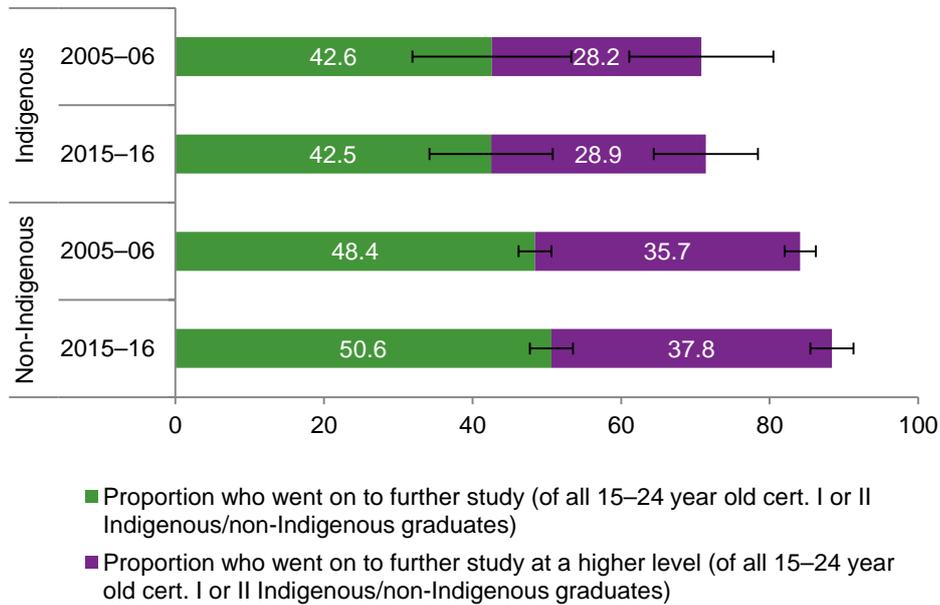
The question we really want to focus on is whether further study is being undertaken at a higher level; that is, are Indigenous graduates more likely to progress to higher levels of education than in the past? Looking at whether Indigenous graduates are undertaking further study at a higher level, we can see that the proportions have not really changed over the last decade.

As we can see in figure 36, around 42% of young Indigenous certificate I and II graduates (15–24 years) went on to further study in 2005–06 and 2015–16. But only around 28% of all Indigenous graduates (aged 15–24 years) undertaking certificate I or II were enrolled in further study at a higher level, and these proportions have barely changed over the decade. This compares with 37.8% of their non-Indigenous counterparts (aged 15–24 years and undertaking certificate I and II level qualifications) enrolled at a higher level in 2015–16.

It is also apparent that the remainder of young graduates (aged 15–24 years and who undertook a certificate I or II) who are enrolled in further study are going on to further study at lower or similar levels (approximately 13% of Indigenous graduates and 13% of non-Indigenous graduates), meaning there is still considerable churn in those lower-level certificates.

The proportion of Indigenous VET graduates enrolling in university has not changed over the past decade.

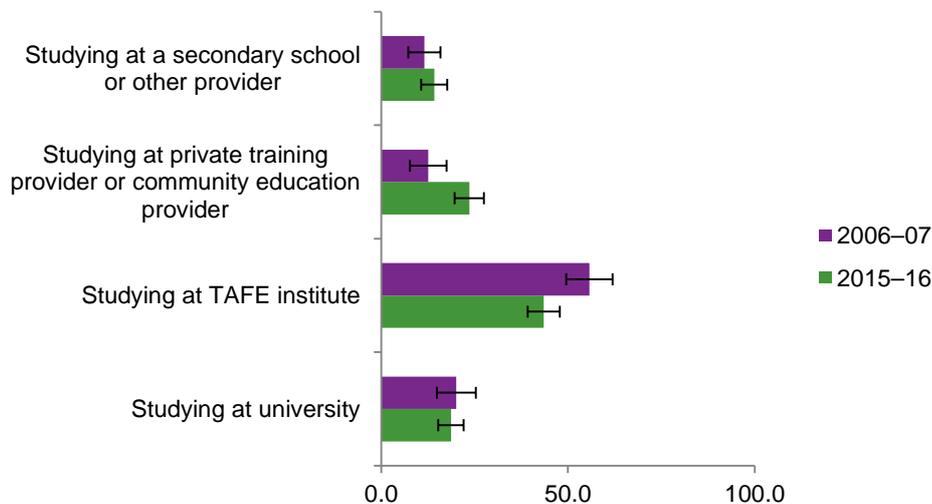
Figure 36 Further study outcomes for 15 to 24-year-old students undertaking a certificate I or II, by Indigenous status, 2005–06 and 2015–16, %



Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
Source: Student Outcomes Survey 2005–06, 2015–16.

When we look at where Indigenous graduates are undertaking their further study, we can see that more of them are heading to private providers or community providers than in previous years. Figure 37 shows that in 2006–07, 12.6% of graduates enrolled in further study in 2007 were studying at private or community training providers, with this proportion growing to 23.6% in 2015–16. The proportion going to TAFE institutes decreased from 55.7% in 2006–07 to 43.5% in 2015–16, but overall TAFEs retain the largest proportion of Indigenous graduates enrolled in further study. The proportion of Indigenous VET graduates enrolling in university has not changed over the past decade.

Figure 37 Indigenous graduates by type of institute of further study, 2006–07 and 2015–16, %



Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate.
Source: Student Outcomes Survey 2006–07, 2015–16.

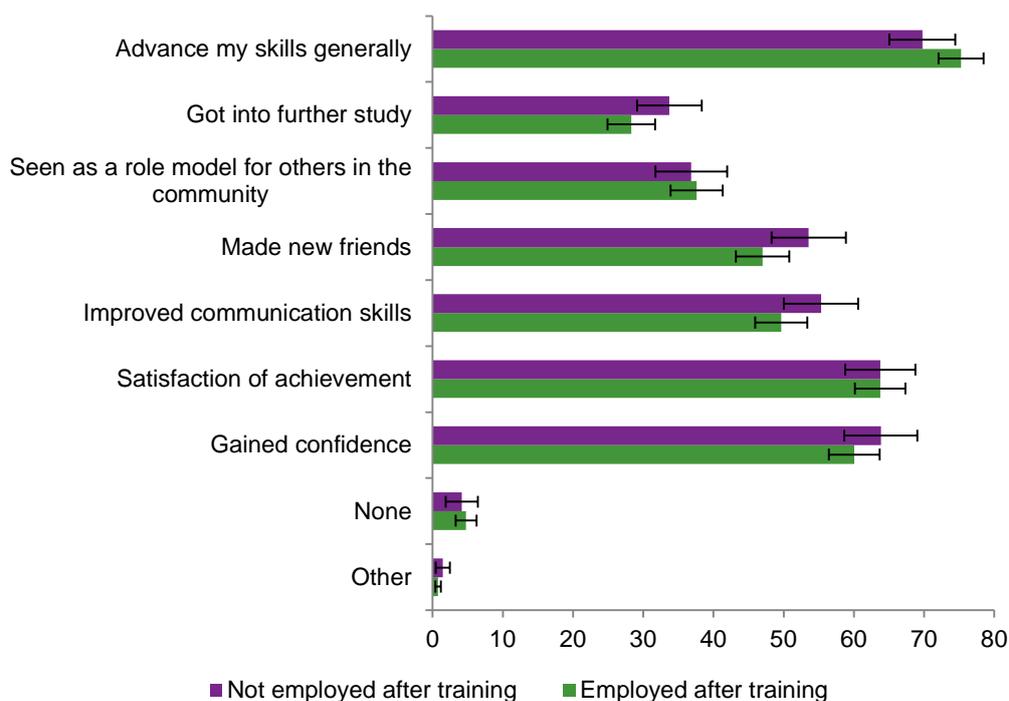
Personal outcomes

Understanding the employment outcomes, job benefits of training and further study outcomes of VET for Indigenous Australians is vital for furthering the gains made in the Closing the Gap targets associated with education and employment parity. But employment and study outcomes are not the only outcomes worth considering. Personal outcomes, such as advancing skills, satisfaction of achievement, gaining confidence and improving communication skills, are also important for building the capacity of Indigenous people and are key outcomes, as they empower individual Indigenous people and their communities (Miller 2005).

As we can see from figure 38, Indigenous graduates continue to report high levels of personal benefit from engagement in VET, including around three-quarters advancing their skills, around half improving their communication skills and a third reporting being viewed as a role model in the community. Whether the graduate was employed after training or not made little significant difference to these personal benefits.

Indigenous graduates continue to report high levels of personal benefit from engagement in VET.

Figure 38 Personal benefits of training for Indigenous graduates employed after training and those not employed after training, 2015–16, %



Note: The black bars are confidence intervals. These provide a measure of the sampling variability of an estimate. Source: Student Outcomes Survey 2015–16.

It is this combination of employment and personal benefits that appears to make VET an attractive and integral education pathway for Indigenous people.



Discussion and conclusions

Overarching trends in Indigenous VET participation and employment outcomes

These findings make it clear that, despite the high-level fluctuations that have affected the entire VET sector, Indigenous participation in vocational education has remained high over the last decade. However, we can also see that the proportion of Indigenous graduates who are employed after training has not increased during this period, although this needs to be viewed in the context of the post-GFC labour market, given that the employment prospects of Indigenous people have not improved since 2008.

We have also seen changes in the qualification levels in which VET enrolments are occurring. Indigenous students are still more likely to be enrolled in certificate I and II level programs compared with non-Indigenous students, but we are seeing a greater proportion of Indigenous enrolments in certificate III and IV and diploma and higher-level qualifications. However, this trend is less pronounced in remote areas compared with cities and regional areas.

We can also see that certificates III and IV are increasingly acting as a pathway into diploma and higher qualifications, but enrolments in diploma or higher qualifications remain low compared with the non-Indigenous population. Yet it is Indigenous graduates with higher-level qualifications (certificate III, certificate IV, diploma and higher) who are more likely to be employed after training than certificate I and II graduates. While certificate I and II graduates are less likely to be employed after training compared with those with higher-level qualifications, around half of certificate I and II graduates are employed after training, up from a third of graduates who were employed before training.

In an interesting juxtaposition, Indigenous students in remote areas are more likely to enrol in certificate I and II qualifications than in higher qualification levels; however, Indigenous VET graduates from remote areas are more likely to be employed after training than those from cities and regional areas, but they are also more likely to be employed before training. This raises questions about the role of VET in meeting the needs of these unique labour markets and the impact of various employment service programs and related training in these remote areas.

Despite the continued high participation rates and changing enrolment patterns, completion rates remain lower for Indigenous VET students compared with the non-Indigenous population. VET program completion rates are particularly low for Indigenous students in very remote areas (particularly those jurisdictions with a higher proportion of students in very remote areas) and those undertaking certificate I level qualifications.

Variations in enrolment and employment outcomes

Education and Health are the fields of education in which graduates are most likely to be employed after training, mainly due to the large proportions of graduates already employed in these fields. For graduates who were not employed before training, the fields of education with the highest proportions of graduates employed after training are

Architecture and building; Food, hospitality and personal services; and Engineering and related technologies, with around half of these graduates employed after training.

Indigenous males are more likely to be enrolled in Engineering and related technologies and Architecture and building than females, and, combined, the two fields made up over a third of program enrolments for Indigenous males in 2015.

Women are more likely than men to be enrolled in subjects such as Education, Health, Management and commerce, and Society and culture, which have high proportions of graduates employed before training.

Mixed field programmes, which are predominantly lower-level certificate courses, remain one of the top four program enrolments for both males and females, but it has experienced a considerable decrease over the last decade, reflecting the downward trend in certificate I and II level courses.

Outcomes for apprentices and trainees

Indigenous apprentice and trainee commencement rates have been subject to downturns in recent years, similar to the non-Indigenous population. However, Indigenous people have a higher rate of participation in both trade and non-trade apprenticeships and traineeships compared with non-Indigenous people. Despite this high participation rate, the completion rates for both trade and non-trade Indigenous apprentices and trainees remain lower than those of non-Indigenous apprentices and trainees, although the rates for the former have increased slightly over recent years.

Indigenous trade apprentices and trainees (who were not employed before training) are more likely to be employed after training than Indigenous non-trade apprentices and trainees. Further to this, these Indigenous trade apprentices (who are predominantly males) are more likely to be employed after training than their non-Indigenous counterparts. These findings clearly show that employment outcomes are particularly strong for Indigenous males who undertake trade training.

Further study outcomes

The proportion of Indigenous and non-Indigenous graduates enrolled in further study has remained reasonably consistent over the last decade, with around a third of Indigenous and non-Indigenous graduates enrolled in further study. For young Indigenous graduates (15–24 years) who studied lower-level certificates (certificates I and II), over 40% are enrolled in further study, with over a quarter going on to further study at a higher level, but this proportion has not changed over the last 10 years. The remainder of those enrolled in further study (around 13% of young Indigenous graduates aged 15–24 years who studied certificates I and II) are enrolled in qualifications at the same or lower levels, meaning there is still some churn in the lower-level qualifications. While TAFE remains the dominant institution for further study, its proportion has decreased over the last decade, with an increase in further study enrolments at private and community training providers.

Conclusion

The most recent Closing the Gap report pays little attention to participation in vocational education, its ability to act as a pathway into higher education and its contribution to the employment outcomes and improved employment prospects for Indigenous people (Department of the Prime Minister and Cabinet 2017). However, VET represents an important pathway for Indigenous learners and a key component in the challenge to close the gap in employment.

As this paper and others have shown, undertaking VET has advantages for Indigenous students, these including: personal outcomes, such as enhanced self-confidence and skill levels, improved communication skills and feelings of being respected by others in the community; and educational outcomes, such as improved subject and course completions, and movement to further study at higher levels. Indigenous graduates continue to report high levels of satisfaction with VET and personal benefits from undertaking training, regardless of whether they are employed after training or not.

Training also delivers employment outcomes for Indigenous people. But it is also apparent that these outcomes can vary according to the level of qualification being undertaken, the field of education studied and the intended occupation.

Perhaps similar to the programs, funding and targets operating in the higher education sector, the VET sector should consider developing a suite of policies, programs and strategies focusing on the areas of study that appear to be successful in supporting Indigenous students into employment. This could be achieved by placing even greater emphasis on facilitating pathways into higher-level diploma and higher qualifications; supporting retention and completion strategies to improve completion rates; and encouraging and facilitating the uptake and completion of apprenticeships and traineeships, particularly in the trades.



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Appendix A – data sources

NCVER's collections and surveys

National VET Provider Collection

The National VET Provider Collection provides data on programs of training, including nationally recognised training and recognition of prior learning, reported to a nationally agreed standard, from government-funded and privately operated training providers, both registered and non-registered. The National VET Provider Collection is the data source for the following publications:

- *Total VET students and courses*
- *Government-funded students and courses.*

The collection provides information about Australia's VET system (delivered via both public and private providers), including students, participation, courses and qualifications, module/unit of competency enrolments, hours of delivery, and full-time training equivalents. This report draws mainly on government-funded students and courses data from 2005 to 2015, but total VET students and courses data are also used to provide information on provider type for 2015.

National Apprenticeship and Trainee Collection

The National Apprenticeship and Trainee Collection provides data on all persons employed under a training contract and includes both apprentices and trainees.

Data are collected from state training authorities on training activity in apprenticeships and traineeships in Australia, including information on training rates and duration of training. Records submitted include information on the following:

- people who have participated in an apprenticeship/traineeship training contract, including their demographics, schooling and prior education and cultural and language attributes
- all training contract transactions, including each commencement, cancellation, withdrawal, completion or expiry associated with the life of the apprenticeship/traineeship training contract
- each employer participating in an apprenticeship/traineeship training contract
- each program undertaken as part of the apprenticeship/traineeship training contract
- each registered training organisation associated with an apprenticeship/traineeship training contract.

National Student Outcomes Survey

The National Student Outcomes Survey collects information on VET students' reasons for training, their employment outcomes, satisfaction with training and further study outcomes, six months after training.

Students included in the survey are those who completed their training in the previous calendar year and have an Australian address as their usual address.

This report draws on the outcomes data of government-funded VET students, broadly defined as all activity delivered by government providers and government-funded activity delivered by community education and private training providers, from 2005 to 2016. In most cases, data have been combined for the years 2015 and 2016 to create a more robust sample.

For more information on NCVER's data collections and surveys please refer to <<https://www.ncver.edu.au/about/about-ncver/about-our-data>>.

VET and apprentice and trainee completion rates

NCVER has a well-established method for calculating completion rates. A program completion rate is the proportion of VET programs started in a given year that will eventually be completed. A subject load pass rate is the ratio of hours studied by students who passed their subject(s) to the total hours committed to by all students who passed, failed or withdrew from the corresponding subject(s). A contract completion rate (for apprentices and trainees) refers to the proportion of contracts of training started in a given time period that have since been completed. For more information on NCVER's method for calculating completion rates, refer to NCVER (2016), Bednarz (2012) and Karmel and Mark (2010).

Other data sources

Higher education data have come from the Department of Education and Training Higher education selected statistics including:

- Student data 2005–15
- Student data 2015, appendix 2 – Equity groups
- Award course completions 2015.

To calculate participation rates for VET, higher education and apprenticeships and traineeships, we have used population data from the following sources:

- ABS 3238.0: *Estimates and projections, Aboriginal and Torres Strait Islander Australians, 2001 to 2026*
- ABS 3201.0: *Population by age and sex, Australian states and territories, March 2016*
- ABS 6291.0.55.001: *Labour force, Australia, detailed – electronic delivery, January 2017*
- 4221.0: *Schools, Australia, 2016.*



National Centre for Vocational Education Research

Level 5, 60 Light Square, Adelaide, SA 5000
PO Box 8288 Station Arcade, Adelaide SA 5000, Australia

Phone +61 8 8230 8400 **Email** ncver@ncver.edu.au

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