Australian Government
Australian Institute of Health and Welfare
Australian Institute of Family Studies

Closing the gap clearinghouse

Improving labour market outcomes through education and training

Issues paper no. 9 produced for the Closing the Gap Clearinghouse

Tom Karmel, Josie Misko, Davinia Blomberg, Alice Bednarz and Georgina Atkinson

February 2014

Contents

Summary 2
Introduction 3
Demographics 5
Participation and outcomes from post-compulsory schooling 6
Importance of attendance and literacy and numeracy 13
Programs to address educational issues for school students 13
Vocational education and training 17
Apprenticeships and traineeships 19
Programs implemented to address VET issues 22
Higher education 25
Economic participation: employment outcomes 27
Regional differences 32
Finding work in strong and weak economies 33
Implementing effective community engagement processes 33
Creating opportunities in the visual arts 34
Valuing cultural attachment 34
Migrating to other labour markets 35
Occupational differences 36
The importance of educational attainment in closing the employment disparity gap 38
Multiple barriers to economic participation 42
Poorer health 42
Prior involvement with the criminal justice system 42
Inadequate housing and accommodation 42
Limited access to employment networks 43
Racial discrimination and negative employer perceptions 43
Outcomes from key employment and labour market programs 44
Lessons from overseas 48
Conclusion 50
Appendix A: Methodology for decomposition 52
Appendix B: Selected programs aimed at young people and their parents by participation or progress to date 53
Appendix C: Selected programs aimed at VET and higher education by participation or progress to date 58
Appendix D: Selected programs aimed at improving employment outcomes by participation or progress to date 60
Appendix E: Additional relevant material in the Clearinghouse 65
References 66

Summary

What we know

- In recent years, the level of participation and attainment by Indigenous Australians in education and training has improved. Yet substantial gaps still exist between Indigenous Australians and non-Indigenous Australians. Education has to be a key focus if the gap between Indigenous and non-Indigenous employment rates is to be closed.
- A higher proportion of Indigenous Australians participate in vocational education and training than non-Indigenous Australians. Indigenous Australians are also more likely to complete lower level qualifications than non-Indigenous Australians.
- The low level of educational attainment is a dominant factor in the employment rate disparity between Indigenous and non-Indigenous Australians. This is compounded by particularly poor employment outcomes among Indigenous Australians with very poor levels of educational attainment. Indigenous Australians with degrees have employment outcomes largely on par with their non-Indigenous counterparts.
- A strong economic environment helps to lift employment rates for both Indigenous and non-Indigenous Australians. Conversely, economic downturn has a negative effect for both—but more so for Indigenous Australians, mainly due to their relatively low skill levels.
- Differences in further education and training participation and outcomes are interconnected with other factors. Key among these are Year 12 completion, health, housing, geographical access and opportunity, and individual motivation and ability. Keeping the focus on school participation and retention, and on commitment to learning and achievement, is crucial to improving these outcomes. Differences in labour market participation are influenced by many of these factors, but also by workplace discrimination and high levels of incarceration.
- Increasing proportions of males in mainstream jobs in non-remote areas are helping to make employment become the norm for Indigenous Australians, especially for children and young people.
- There is a need to reduce duplication of different initiatives, and to streamline and simplify administrative arrangements for programs aimed at supporting Indigenous Australians to succeed in education and training and the labour market.
- The relative absence of comprehensive evaluations of separate programs (including the use of control groups or longitudinal studies), and the lack of an overarching evaluation approach, makes it difficult to assess the impact of many of these interventions.

What works

- There is evidence from Australia and overseas that a range of education and employment programs have led to some improvements in education and employment outcomes for Indigenous Australians.
- At the school level, the following measures have increased student attendance and improved learning outcomes:
  - Principals and teachers who have a strong belief in the potential of Indigenous students as well as high expectations of them.
  - Strong leadership by school principals to raising the quality of teaching and student learning through the implementation of common instructional approaches to the teaching of literacy and numeracy.
  - Social workers and parents working together to improve school attendance for Indigenous Australians.
  - Parental engagement in the decisions that affect their children's participation in schools can help to drive school attendance and retention, which in turn improves basic literacy and numeracy skills with a flow on to Year 12 completion.

- In apprenticeships and traineeships the allocation of mentors early in programs has improved retention rates.
- Employment programs which have in place specific objectives about what is to be achieved, and support mechanisms aligned to these objectives, are more likely to be successful, for example wage subsidies to increase employment outcomes at the local level.
- Among employers, the commitment by senior and middle managers and work colleagues for sustained engagement of Indigenous Australians in work and training leads to more employment opportunities for Indigenous Australians.
- Proactive and persistent approaches by teachers and trainers or program agency staff to help Indigenous clients become aware of specific programs, and to participate in further training.
- Flexible approaches in workplaces and educational institutions that take into account the important role of cultural and family obligations in the lives of Indigenous Australians can help improve the engagement and retention of workers.
- Cultural awareness training for employers and staff in further educational institutions and workplaces where Indigenous Australians study and work can reduce racism and improve understanding between workers.

What we don't know

- The particularly poor employment outcomes for Indigenous Australians with low levels of education can be due to a range of possible factors. These include especially low skill levels compared with non-Indigenous Australians in this category, regional distribution, attitudinal factors (including work orientation and work readiness factors) and discrimination by employers. We do not know the relative impact of these factors. Improving our understanding of them can help governments to better target areas for policy interventions.
- Strong leadership and commitment to raising the quality of teaching and learning by school principals and teachers working with Indigenous students has been found to provide good educational outcomes. We do not know how these successful outcomes can be sustained in the longer term.
- There seems to be a disconnection between the results of program-level assessments and overall population impacts over time. Successful outcomes at program level are not always reflected in population-level statistics. We do not know the reasons for this. The challenge is to take the positive learning from successful program interventions and embed them in practice in mainstream service delivery.
- Migrating from thin labour markets to strong labour markets should ideally help to improve employment outcomes for individuals. We do not know the key factors that drive such benefits for Indigenous Australians who make this move.

Introduction

Economic participation is one of the fundamental building blocks identified in the Closing the Gap initiative (COAG 2008) for reducing disadvantage experienced by Indigenous Australians. This is because work provides economic, social and psychological benefits for individuals and societies. The government is committed to halving the gap in employment outcomes between Indigenous and other Australians by 2018; it is one of the key targets of its Closing the Gap Strategy.

The definition for economic participation used in the National Indigenous Reform Agreement (COAG 2012) covers all aspects of economic activity, including participation in employment, engagement in entrepreneurial and commercial activities and access to native land assets and rights. This paper concentrates on economic activity that is directly related to the outcomes of participation in education and training, particularly employment.

The most important aspect of the economic disparity between Indigenous Australians and the wider Australian population is the relatively small number of Indigenous Australians in employment. While there are many elements to this disparity (as will be noted later in the paper), a likely key contributor is the level of educational disadvantage among the Indigenous population. We use the 2011 Census data to quantify its importance for labour market participation, employment and occupational destinations.

The research we have drawn on is extensive and varied, and includes academic research articles published in refereed journals and other publications published or completed over the last 10 years. We also provide our own analyses of the 2006 and 2011 Census, and of data from the ABS (Australian Bureau of Statistics) Labour Force Survey, National Apprentices and Trainees Collection, National VET (Vocational Education and Training) Collection, the Schools Australia catalogue and the Student Outcomes Survey. We use these to provide descriptive information as well as to investigate linkages between participation and attainment in education and training and employment.

In addition, we apply a simple decomposition calculation (Appendix A) to Census data to investigate the role of educational attainment in employment rates. Based on cross tabulations of employment status by educational attainment, we can isolate the importance of educational attainment in the difference between the employment rate of Indigenous and non-Indigenous populations.

We find that the disparity in educational attainment between Indigenous and non-Indigenous populations explains a dominant proportion of the disparity in the employment rates. This is true for both males and females and for all age groups. Moreover, we find the employment rate disparity relatively unimportant for the Indigenous population with high-level qualifications such as a degree. By contrast, the employment rate disparity is particularly high among Indigenous Australians with very poor levels of educational attainment.

Evidence from studies using highly quantitative techniques (mostly results of basic descriptive statistics and multivariate analyses) is used to report on key and major factors that distinguish economic and education and training participation effects for Indigenous and non-Indigenous Australians. Findings from evaluations and interviews with stakeholders and program participants (where they exist) are used to explain experiences not easily captured by extant population surveys, censuses or administrative data. The *Closing the gap: Prime Minister's report 2013* (Australian Government 2013) and the *Report on government services 2013: Indigenous compendium* (SCRGSP 2013) are key references.

We begin our paper by providing a snapshot of key demographics. We follow this with information on participation and outcomes from senior secondary education, vocational education and training (including apprenticeships and traineeships) and higher education. This is followed by a detailed account of employment outcomes across regions and occupations. The role of educational attainment in explaining the disparity in employment rates is then given a special focus. We report on studies that have looked at the need to take into account the multiple elements of economic participation, and focus in more detail on the role of social capital and cultural attachments and employer discrimination. We conclude by emphasising our key findings about the role of education and the need to streamline programs and strategies. In accompanying appendixes, we provide extra detail on methodological approaches and programs (including key objectives, funding regimes and program evaluations).

Throughout each of the sections, we provide details on a range of programs (mostly Australian Government programs) that have been implemented to help improve Indigenous Australians' education, training and employment outcomes. Where detailed evaluations exist, we also present the findings of these. These program descriptions are not meant to be examples of what works and what does not work, unless of course there are robust evaluations that can be used to make such conclusions. They are just examples of the variety of programs that are being implemented and some details on participation and progress. The fact that there are only a few programs for which we have been able to access quite detailed evaluations highlights the difficulties in reaching a good understanding of what works and does not work.

In many cases, the cross-sectional data we have employed have been useful to understand the gaps in outcomes. The inability to track students through the different stages of schooling and into further training and employment remains a challenge for the system and for researchers.

Demographics

In the 2011 Census of Population and Housing, 3.0% of the estimated resident population reported themselves as Indigenous Australians (Table 1), compared with 2.5% in the 2006 Census. The highest numbers of Indigenous Australians live in New South Wales, followed by Queensland, Western Australia and the Northern Territory.

The highest proportions of Indigenous Australians are found in the Northern Territory, Tasmania, Queensland and Western Australia. Almost 30% of the Northern Territory population is Indigenous.

Table 1: Estimated resident population by Indigenous status by state, 30 June 2011

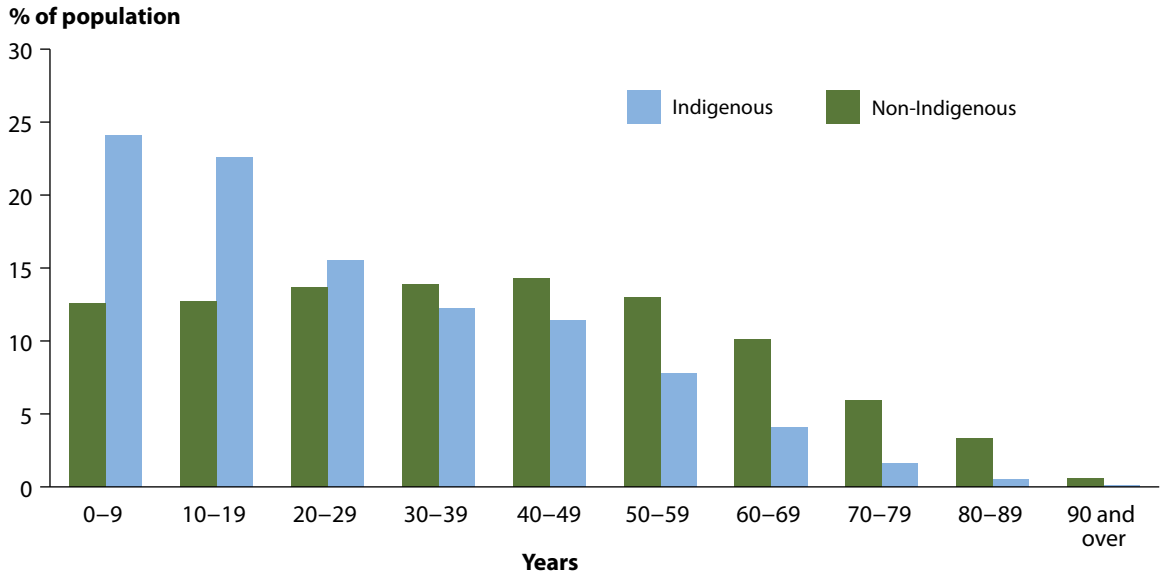
State/Territory	Indigenous persons	Total persons	% of state/territory population who are Indigenous
New South Wales	208,476	7,010,053	2.9
Victoria	47,333	5,490,484	0.9
Queensland	188,954	4,287,824	4.2
South Australia	37,408	1,602,206	2.3
Western Australia	88,270	2,265,139	3.8
Tasmania	24,165	487,318	4.7
Northern Territory	68,850	162,442	29.8
Australian Capital Territory	6,160	361,825	1.7
Total[(a)]	**669,881**	**21,670,143**	**3.0**

(a) Columns do not add to the total because persons from 'other territories' are not shown separately in the table but are included in the total.

Source: ABS 2013.

In 2011, the vast majority of Indigenous Australians lived in cities and towns. Compared with non-Indigenous Australians, however, a greater percentage of Indigenous Australians lived in regional or remote or very remote areas (ABS 2013). This urban/non-urban split is important for our purposes because employment and education and training participation outcomes for Indigenous Australians are poorer the further away they live from urban areas. Lack of access in remote areas to labour markets in both the public and private sectors, and lack of access to centres of secondary and post-secondary education, means that opportunities to study and/or work are less plentiful.

The Indigenous population is much younger than the non-Indigenous population (Figure 1), with a median age at 30 June 2011 of 22 compared with 38 for non-Indigenous Australians. Around 47% of the Indigenous population are 19 years old or younger compared with only 25% of the non-Indigenous population. Only 6% of the Indigenous population were aged 60 or over in 2011, compared with 20% of the non-Indigenous population.



Source: ABS 2013.

Figure 1: Age structure of the Indigenous and non-Indigenous population, 30 June 2011

Participation and outcomes from post-compulsory schooling

Although this paper is concerned with pathways for adults, we cannot ignore the fact that the most obvious marker of education is completing secondary school—that is, completing Year 12. Participation and achievement in secondary school will determine if and how effectively students make the transition to post-compulsory further education and training and the labour market.

Year 12 completion

Indigenous students experience a major exit from schooling before the completion of Year 12 (Table 2). Between 2006 and 2011, the proportion who reported Year 12 as their highest year of school completed increased by almost 5 percentage points. This is about the same increase as experienced by non-Indigenous Australians over the same period. There were slight increases for those completing Year 11 and Year 10. At the same time, we also saw decreases in the proportion of those leaving school before completing Year 10 and in those who do not go to school.

Table 2: Persons aged 15–64 by Indigenous status and highest year of school completed, 2006 and 2011 (%)

	Indigenous		Non-Indigenous	
Education level	**2006**	**2011**	**2006**	**2011**
Year 12 or equivalent	20.2	24.9	49.5	55.5
Year 11 or equivalent	11.3	12.5	11.5	11.0
Year 10 or equivalent	29.0	29.7	24.4	21.7
Year 9 or equivalent	13.4	12.4	6.4	5.4
Year 8 or below	12.7	9.2	4.0	2.9
Did not go to school	1.6	1.1	0.6	0.6
Not stated	11.9	10.3	3.6	3.0
Total	**100.0**	**100.0**	**100.0**	**100.0**

Note: Based on counts that are not adjusted to estimated resident population.

Source: Derived from 2006 Census of Population and Housing (ABS 2006) 2011 Census of Population and Housing (ABS 2011).

School completions differ by state or territory, with the Australian Capital Territory showing the highest rate of Year 12 completion among Indigenous Australians aged 20–24 (57%), followed by Queensland (48%) (Table 3). This is well above the national average Year 12 completion rate of (37%) for Indigenous Australians aged 20–24. Later in the report, we find that there are also regional differences in the destinations of Year 12 completers.

Table 3: Year 12 completion rates by Indigenous status, age group and state or territory, 2011 (%)

	Indigenous				Non-Indigenous			
State or territory	**15–19 years**	**20–24 years**	**25–64 years**	**15–64 years**	**15–19 years**	**20–24 years**	**25–64 years**	**15–64 years**
New South Wales	16.9	36.7	22.6	23.5	30.7	74.0	56.8	55.9
Victoria	16.6	41.8	28.9	28.6	29.6	77.9	58.4	57.7
Queensland	26.8	48.1	29.5	31.6	38.9	75.4	53.7	54.4
South Australia	16.5	34.0	20.7	21.9	30.3	70.5	50.5	50.5
Western Australia	20.5	29.0	20.0	21.4	37.9	70.8	55.4	55.3
Tasmania	13.3	36.4	22.7	22.9	20.8	60.8	40.7	40.5
Northern Territory	9.4	17.8	14.2	14.0	26.5	64.9	54.5	53.4
Australian Capital Territory	24.2	56.6	46.0	43.9	35.5	85.4	75.3	72.8
Total[(a)]	**19.3**	**37.1**	**23.8**	**24.9**	**32.7**	**74.6**	**55.9**	**55.5**

(a) Persons from 'other territories' are not shown separately in the table but are included in the total.

Note: Based on counts that are not adjusted to estimated resident population.

Source: ABS 2013.

The gap in completions is greatest in the capital cities 'where issues related to physical access to schooling and schooling support services should be the least problematic' (Hill 2009:23).

Biddle (2010a) looked at the rate of return to Year 12 completion for Indigenous and non-Indigenous Australians. He found that the economic returns from completing Year 12 are very substantial for both groups. The point is that low rates of Year 12 completion for Indigenous Australians cannot be explained by differential economic returns.

A recent report on youth transitions by Deloitte Access Economics (2012b) found that transition outcomes are much better for those Indigenous youth who complete Year 12 than for those Indigenous youth who leave school early.

Apparent retention rates and school attendance

Apparent retention rates from Years 7/8 to Year 12 for Indigenous students have improved considerably over the last decade, but they still lag substantially behind those for other students (ABS 2012c).

As Table 4 shows, there is now virtually no gap in apparent retention rates between Indigenous and other students for Year 9 and Year 10, and the gaps for Year 11 and 12 have decreased substantially.

Table 4: Apparent retention rates[(a),(b),(c)], full-time students by Indigenous status, 2002 and 2012

	Indigenous students	Other students	Indigenous students	Other students	Percentage point difference between the two groups	
Years	2002	2002	2012	2012	2002	2012
7/8 to 9	97.8	99.8	100.3	100.8	–2.0	–0.5
7/8 to 10	86.4	98.5	98.4	101.4	–12.1	–3.0
7/8 to 11	58.9	88.7	77.2	94.8	–29.8	–17.6
7/8 to 12	38.0	76.3	51.1	81.3	–38.3	–30.2

(a) Apparent retention rates are the percentage of full-time students of a given cohort group who continue from the start of secondary schooling to a specified year level. The term 'apparent' is used because the retention rate does not account for students repeating a year of school or migrating in or out of the Australian school student population or between states/territories.

(b) Relatively small changes in student numbers can create large movements in apparent retention rates calculated for small populations.

(c) In 2008, Year 7 became the last year of primary school in Queensland, South Australia and Western Australia. It is the first year of secondary school in New South Wales, Victoria, Tasmania, Northern Territory and the Australian Capital Territory.

Source: ABS 2013.

Staying on at school is only part of the learning story. Students also need to attend regularly and to achieve while they are in school. Indigenous students enrolled in school are less likely than their non-Indigenous counterparts to have regular attendance patterns (Biddle 2010a). Biddle reported that across states and territories Indigenous students have a lower median rate of attendance at preschool than non-Indigenous students (83% and 88%, respectively). In secondary school, over 20% of Indigenous students are absent 'on any given day' (Biddle 2010a:27). Attendance rates vary considerably, with most students attending more or less regularly and a sizeable minority having very low attendance rates (Taylor 2010, cited in Biddle 2010a). Year 12 completion rates cannot increase in isolation from school attendance and the development of literacy and numeracy skills to enable Year 12 completion. Purdie and Buckley (2010) cited studies by Zubrick et al. (2005, 2006) that highlight the positive relationship between school attendance and academic achievement. They also cited studies by Wheatley and Spillane (2001), Beresford and Omaji (1996) and Chapman et al. (2002) which look at the effects of high rates of non-attendance on leaving school early, truancy and crime, and on completing high school and criminal activity.

No doubt low school attendance is one of the reasons why Indigenous students lag behind in National Assessment Program—Literacy and Numeracy (NAPLAN) tests at years 3, 5, 7 and 9, and in tests conducted in the Programme for International Student Assessment system at Year 9 or at age 15 (SCRGSP 2013). The percentage of Indigenous students performing at or above the minimum standard for reading from Year 3 to Year 7 has improved as has numeracy for Year 3 and Year 5. There seems to have been no improvement in the percentage of Year 9 students performing at or above the minimum standard for all 3 areas (Table 5).

Table 5: Proportion of students performing at or above minimum standards in reading, writing and numeracy in NAPLAN tests for Indigenous and non-Indigenous Australians, 2008–2010[(a),(b)](%)

	Indigenous			Non-Indigenous		
	Reading	Writing	Numeracy	Reading	Writing	Numeracy
			Year 3			
2008	68.3 ± 2.0	78.8 ± 1.8	78.6 ± 1.7	93.5 ± 0.2	96.4 ± 0.2	96.0 ± 0.2
2009	75.1 ± 3.7	79.9 ± 1.8	74.0 ± 4.5	94.8 ± 0.9	96.6 ± 0.1	95.2 ± 1.1
2010	75.1 ± 3.9	79.0 ± 1.9	76.6 ± 3.9	95.0 ± 0.9	96.6 ± 0.2	95.3 ± 0.9
2011	76.3 ± 1.7	79.9 ± 1.6	83.6 ± 1.3	94.9 ± 0.2	96.2 ± 0.2	96.4 ± 0.1
			Year 5			
2008	63.4 ± 1.8	69.7 ± 1.7	69.2 ± 1.7	92.6 ± 0.2	93.9 ± 0.2	94.0 ± 0.2
2009	66.7 ± 3.8	70.1 ± 1.7	74.2 ± 4.5	93.1 ± 1.2	94.2 ± 0.2	95.3 ± 1.1
2010	66.2 ± 4.1	70.5 ± 1.9	71.4 ± 4.2	92.7 ± 1.3	94.4 ± 0.2	95.0 ± 1.0
2011	66.4 ± 1.7	68.9 ± 1.8	75.2 ± 1.5	92.9 ± 0.2	93.9 ± 0.2	95.5 ± 0.2
			Year 7			
2008	71.9 ± 2.0	67.9 ± 2.0	78.6 ± 1.7	95.4 ± 0.2	93.2 ± 0.2	96.4 ± 0.2
2009	73.2 ± 3.8	69.9 ± 1.8	75.8 ± 4.0	95.0 ± 1.0	93.7 ± 0.2	95.8 ± 0.9
2010	76.6 ± 3.2	69.8 ± 1.8	77.0 ± 2.9	95.9 ± 0.7	93.9 ± 0.2	96.1 ± 0.6
2011	77.1 ± 1.4	66.9 ± 1.6	76.5 ± 1.4	95.7 ± 0.2	92.6 ± 0.3	95.5 ± 0.2
			Year 9			
2008	70.7 ± 2.1	59.7 ± 2.0	72.5 ± 2.0	94.2 ± 0.3	88.8 ± 0.4	94.8 ± 0.3
2009	67.0 ± 4.1	59.0 ± 1.9	75.0 ± 3.8	93.5 ± 1.3	89.2 ± 0.4	96.0 ± 0.8
2010	64.2 ± 4.0	59.0 ± 1.8	70.4 ± 3.7	92.2 ± 1.3	88.7 ± 0.4	94.3 ± 1.0
2011	71.9 ± 1.6	55.0 ± 1.7	72.0 ± 1.6	93.5 ± 0.3	86.5 ± 0.5	94.1 ± 0.3

(a) The achievement percentages reported in this table include 95% confidence intervals (for example, 80.0% ± 2.7%). Confidence intervals for 2009 and 2010 in this table are equated to 2008 data to enable comparisons to be made.

(b) Does not include exempt students. Exempt students are deemed not to have met the minimum standard.

Source: SCRGSP 2013.

A program that has had some success in improving the outcomes in school (including attendance and performance in NAPLAN literacy and numeracy tests) is the What Works. The Work Program: Improving Aboriginal and Torres Strait Islander student outcomes in remote school settings (Box 1).

Box 1: Success in remote schools: 'What Works. The Work Program'

Government school systems in New South Wales, Queensland, South Australia, Western Australia and the Northern Territory were asked to identify remote or very remote schools in their jurisdictions that had shown increased and sustained improvement in NAPLAN literacy and numeracy outcomes and attendance rates. They identified 11 schools, all of which had almost all students from Aboriginal and Torres Strait Islander backgrounds and which showed average results in NAPLAN tests and greater gains in average scores than similar schools. The schools also showed an increase in the proportion of students at or above the National Minimum Standards.

What Works researchers visited these schools to look at reasons for this success, and found it was explained by some common (high-frequency) factors. Critical to the success was the strong leadership provided by the school principal, supported by 'a coherent and comprehensive strategic thinking and planning framework…to achieve improved… student outcomes' (National Curriculum Services 2012:7). Other essential factors were having core beliefs in the potential of Indigenous students to succeed (supplemented by high expectations of students) and targeted interventions to improve school attendance and student health and wellbeing.

The pedagogy adopted in the schools was based on teachers adopting a common instructional approach to teach and assess literacy and numeracy, and to ensure that learning content was engaging, accessible and culturally appropriate. The results of assessments were used to inform further teaching. School–family–community partnerships that respected the learning that each group brought to the partnership, and the importance of two-way dialogue (and Indigenous ways of thinking, learning and communicating) were other features. In addition, the common instructional model applied across classrooms within and across schools provided support for teachers and acted as an accountability mechanism.

The schools also have a keen focus on 'building and sustaining' the capacity of teachers to apply these school-wide approaches. To this end they have implemented programs for induction, recruitment and retention, and for mentoring and coaching.

This study adopts a case study approach to investigate what it is that these schools are doing to improve student literacy and numeracy as indicated by their sustained improvements in NAPLAN tests. As such, it is not an evaluation but it can be used to highlight the practices that seem to work. Such practices are given as examples for what can work in mainly Indigenous schools but they represent good teaching practice for mainstream students who have issues with literacy and numeracy.

Source: National Curriculum Services 2012.

Destinations of Year 12 completers in Queensland and Victoria

Students who complete Year 12 in a certain year and gain a Senior Statement from government and non-government schools across Queensland are asked to participate in the *Next Step* survey. Around one-third of Indigenous students in Queensland who completed Year 12 in 2011—compared with around half of non-Indigenous completers—were in some form of education and training program, excluding traineeships. They were twice as likely to be found in VET certificate courses at levels I, II and III (Department of Education, Training and Employment, Queensland 2012). The *Next step* report also indicates that Indigenous completers were more likely to be undertaking a traineeship than non-Indigenous completers (7.8% and 3.5%, respectively). The proportion of completers who had found part time or full-time work did not differ much between the two groups; however, Indigenous completers were more than twice as likely not to be in the labour force or in training than their non-Indigenous counterparts.

In 2012, the gap between Indigenous and non-Indigenous groups had increased slightly over the equivalent figure for 2008 for university and higher VET qualifications, with Indigenous completers lagging slightly behind non-Indigenous completers (Table 6).

However, the gap between the totals of students going on to further education has experienced no real change. The gap between Indigenous and non-Indigenous groups has narrowed for those moving into part-time or full-time employment directly from school. Although for ease of reporting we combine those who are not seeking employment and those who are not in work or further training, Indigenous and non-Indigenous completers who are not in work (but seeking work) increased, with increases being greatest for Indigenous completers. We must note, however, that there are only small numbers of Indigenous Australians in the sample of Year 12 completers.

Table 6: Destinations of Year 12 completers (or equivalent) in Queensland for Indigenous and non-Indigenous students, 2008 and 2012 (%)

	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Percentage point difference between Indigenous and non-Indigenous Year 12 completers	
Destination	**2008**	**2008**	**2012**	**2012**	**2008**	**2012**
Bachelor degree	14.0	34.9	15.5	39.1	–20.9	–23.6
Certificate IV and above	4.2	6.2	4.9	7.5	–2.0	–2.6
Certificate I–III	8.9	5.1	10.6	5.6	3.8	5.0
Apprenticeship/traineeship	18.9	14.8	16.9	11.4	4.1	5.5
Total going on to further education	*46.0*	*61.0*	*47.9*	*63.6*	*–15.0*	*–15.7*
Employed full-time or part time	36.1	32.0	27.2	26.2	4.1	1.0
Looking for work or not in work or education and training	17.9	7.1	24.9	10.4	10.8	14.5
Total	**100.0**	**100.0**	**100.0**	**100.0**		

Sources: Department of Education and Training, Queensland 2008, 2012.

The pattern for gender differences was similar, with females from both groups being more likely than males to go to university, and males being more likely than females to enter apprenticeships. There were gender differences between the proportion of Indigenous completers who chose to move into the labour market directly from school. The rate for males seeking work was 23.5%, while that for females was 18.9%. Females were also more likely to be in part-time work. Where students live is relevant to the pathway they take when they complete Year 12. A greater proportion of these completers from South East Queensland went on to university than those in regional Queensland (22.3% and 10.3%, respectively). Where South East Queensland completers were more likely to move into training, regional Queensland completers were more likely to move into full-time work and do no further education and training (12.9% and 6.7%, respectively) and to be seeking work (22.9% and 18.7%, respectively). Across the two regions, there were little regional differences between transition to apprenticeships (7.9% and 10.0%, respectively) or to traineeships (7.5% and 8.0%, respectively).

Of the 2011 Year 12 completers identifying as Indigenous in the Victorian On-Track Survey (DEECD 2012), 66.7% went on to some form of education and training, compared with 78.6% of non-Indigenous completers (Table 7). This is a slight increase on 2008 figures where 64.6% of Indigenous completers and 73.4% of non-Indigenous completers went on to education and training. Between 2008 and 2012, we find a drop in the proportions going on to employment for both groups (a drop of 4.6% for Indigenous completers and 7.2% for non-Indigenous completers) and an increase in the percentage going on to bachelor degree programs. The remainder were not looking for work and not in training. In 2012, about equal proportions were looking for work or not in work or training.

The gap has changed very little for the various destinations but there has been a large increase in the percentage of Indigenous completers going on to university.

Table 7: Destinations of Year 12 completers (or equivalent) in Victoria for Indigenous and non-Indigenous completers, 2008 and 2012 (%)

	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Percentage point difference between Indigenous and non-Indigenous Year 12 completers	
Destination	**2008**	**2008**	**2012**	**2012**	**2008**	**2012**
Bachelor degree	22.4	45.2	37.7	53.0	–22.8	–15.3
Certificate IV and above	22.4	14.7	9.2	13.8	7.7	–4.6
Certificate I–III	8.3	3.7	6.2	3.9	4.6	2.3
Apprenticeship/traineeship	11.5	9.8	13.6	7.9	1.7	5.7
Total going on to further education and training	*64.6*	*73.4*	*66.7*	*78.6*	*–8.8*	*–11.9*
Employed full-time or part-time[(a)]	31.4	24.0	26.8	16.8	7.4	10.0
Looking for work or not in work or education and training[(b)]	5.1	3.8	6.6	4.6	1.3	2.0
Total	**100.0**	**100.0**	**100.0**	**100.0**		

(a) In 2008, details are not broken down into full-time and part-time employment; in 2012, they are, and it shows that Indigenous completers are more likely to be in part-time employment.

(b) The figures for 2012 include those who are not looking for work or in education and training. These are absent from the analysed sample in 2008, but we know that there was a total of 361 completers not in education, training and the labour market who were not included in the 2008 analysis.

Source: DEECD 2012.

Importance of attendance and literacy and numeracy

Poor attendance patterns and low literacy and numeracy skills combine to affect school retention and therefore completion of the different milestones of secondary education, including Year 12 completion. This, in turn, affects transition into further education and employment. These effects are studied more closely by Biddle and Cameron (2012), who found that regular attendance plays a major part in improving educational outcomes for Indigenous students. They found that Indigenous children who attended preschool had better literacy and numeracy outcomes than those who did not.

Biddle and Cameron (2012) also explored the role of student expectations in completing Year 12 and found that Indigenous students had lower expectations than non-Indigenous students. However, there were no differences in completion rates among the two groups when students did well in test scores, underscoring the role that academic ability and achievement play as a driving force for completing Year 12. Academic achievement at age 15 was a key predictor of non-completion and in differences in Tertiary Entrance Rank scores between Indigenous and non-Indigenous students. Going to university is also less likely for Indigenous students than non-Indigenous students. However, these differences disappear once an Indigenous student gets a TER score.

Biddle and Cameron (2012) found that Indigenous students report higher levels of happiness with school than non-Indigenous students. Despite this, they experience lower completion rates. Biddle and Cameron consider that there is a need to focus on why Indigenous Australians do so badly (on average) in school. In this regard, it is not too far-fetched to look at the effect of attendance on achievement, and at the concentrated time Indigenous students spend on specific tasks related to improving and developing their proficiency in literacy and numeracy, as well as at the type of support available to them at home or in the community.

Programs to address educational issues for school students

A range of programs have been implemented to address educational issues for school students. A detailed list of these programs—and information about participation, evaluations (if they exist) and progress to date—is at Appendix B.

Here we take a selection of these programs and present their aims, progress to date and any evaluations about their effectiveness where they exist. These programs include the Improving School Enrolment and Attendance through Welfare Reform Measure (SEAM) program, the Parental and Community Engagement Program, the Sporting Chance Program, the Youth in Communities measure, and What Works. The latter (Box 1) seems to provide the most specific advice about the importance of having a whole-of-school approach to improving literacy and numeracy outcomes. That said, it also is based only on the experiences of a small sample of schools.

We included the Sporting Chance Program because it has been evaluated by the Office of Evaluation and Audit (Indigenous Programs) (DoFD 2009b).

Box 2: Selected programs for improving school participation and outcomes for Indigenous Australians

Name of program targeted at young people and their parents	Participation and progress
Improving School Enrolment and Attendance through Welfare Reform Measure SEAM helps identify enrolment and attendance issues and puts in place assistance—such as Department of Human Services (Centrelink) social work support—to help parents resolve these issues. The new model of SEAM establishes more effective processes for parents to engage with schools, and provides parents with extra support systems to ensure that children are enrolled at school and attending every day. These include conferences between parents and the Northern Territory Department of Education, the development of attendance plans, and ongoing support. Every attempt will be made to assist and support parents to get their child to school. As a last resort, if parents do not comply with their requirements and no special circumstances apply, a parent's income support payment may be suspended. The trial ran from January 2009 to July 2012 across 6 sites in the Northern Territory, and an additional 6 trial sites began in selected Queensland locations during October 2009. The new model of SEAM incorporates changes made to the program based on findings from the trial. The model is strengthened by its alignment with the Northern Territory's Every Child Every Day attendance strategy. The new model of SEAM is being rolled out to 23 communities in the Northern Territory as part of the Stronger Futures in the Northern Territory package. Since Term One in 2013, SEAM has begun in 15 communities. Funding: $107 million over 10 years (2012 to 2022). Timeline: Trial 2009–2012. Ongoing. <http://www.dss.gov.au/our-responsibilities/families-and-children/programs-services/welfare-payments-reform/improving-school-enrolment-and-attendance-through-welfare-reform-measure-seam>	The 2010 evaluation of the SEAM trial showed that SEAM had a positive impact on school attendance. School attendance by in scope SEAM students increased by 4 percentage points in Queensland and 5 percentage points in the Northern Territory – and that is just from 2009 to 2010. There was a consistent compliance rate of around 95% for the enrolment component in both the Northern Territory and Queensland throughout the trial. The SEAM trial evaluation showed that social workers played a vital role in improving school attendance. For this reason, the role of the Department of Human Services social workers has been strengthened in the new model of SEAM in the Northern Territory. SEAM is a targeted response at the family level, and is designed to support individual families in improving the school enrolment and attendance of their school-age children. Overall, SEAM has been shown to have a positive influence on encouraging parental responsibility, ensuring that children are enrolled in school and attending every day. *(Information provided by government agency with responsibility for SEAM)*
Parental and Community Engagement Program The program focuses on developing and implementing approaches aimed at improving the outcomes of Indigenous students by increasing parental engagement with schools. The program supports families and communities to develop partnerships with schools and education providers. Target groups: Students, families, communities, schools. Funding: $84.332 million (plus additional funding in 2013 as part of Extending the Indigenous Education). Timeline: 2009–2012.	The Prime Minister's Closing the Gap Report (Australian Government 2013) noted that since 2009 the program consisted of 495 different projects aimed at 53,000 parents and carers and 28,000 community members. <http://www.dss.gov.au/our-responsibilities/Indigenous-australians/programs-services/closing-the-gap/closing-the-gap-prime-ministers-report-2013>

Continued

Box 2 (continued): Selected programs for improving school participation and outcomes for Indigenous Australians

Name of program targeted at young people and their parents	Participation and progress
Sporting Chance Program The program includes 59 school-based sports academies that provide sports-focused learning and development opportunities to Indigenous secondary school students, and 5 education engagement strategies that provide a range of sport, recreation and education activities for Indigenous secondary and primary school students. Target groups: Students and schools. Funding: $32 million over 4 years. Timeline: 2007 to 2012 and ongoing. <http://www.dss.gov.au/our-responsibilities/Indigenous-australians/publications-articles/Indigenous-budget/closing-the-gap-sporting-chance-program>	In July 2009, a performance audit of the program conducted by the Office of Evaluation and Audit (Indigenous Programs) (DoFD 2009b) found that the program should develop more specific objectives which can be measured and attributed to the efforts of the academies. The audit recommended that the Department of Employment, Education and Workplace Relations (DEEWR) set meaningful and measurable indicators of performance, baselines and targets and make more specific reporting requirements and monitoring mechanisms. In 2013, the Prime Minister's Closing the Gap Report (Australian Government 2013) indicated that there were 70 projects, with 13,500 participants (70% boys). Some new projects for girls had been introduced and now there are 604 female participants.
Youth in Communities This initiative provides diversionary activities for Indigenous youth aged 10–20 in the Northern Territory from at-risk behaviours of substance abuse, suicide or self-harm, or entering/re-entering the justice system. The initiative aims to improve their engagement with school, work and community life. Target groups: Individuals, families and communities. Funding: Approximately $114 million is allocated for Youth in Communities over 10 years from 2012–13 to 2021–22. <http://www.dss.gov.au/our-responsibilities/Indigenous-australians/programs-services/families-children/youth-in-communities>	Nineteen organisations are currently funded to deliver youth activities in about 60 communities across the Northern Territory. A range of programs and activities are being delivered by service providers, including case management, youth camps, peer mentoring, music, art, sport and cultural activities and alternative education programs. More than 18,800 young people participated in early intervention, prevention or diversionary activities between 1 January and 30 June 2013. Approximately 116 full-time and part-time youth workers and Indigenous youth worker trainees are employed through the program. *(Information provided by government agency with program responsibility)* <http://www.dss.gov.au/sites/default/files/documents/02_2013/youth_in_communities_final_evaluation_report.pdf>

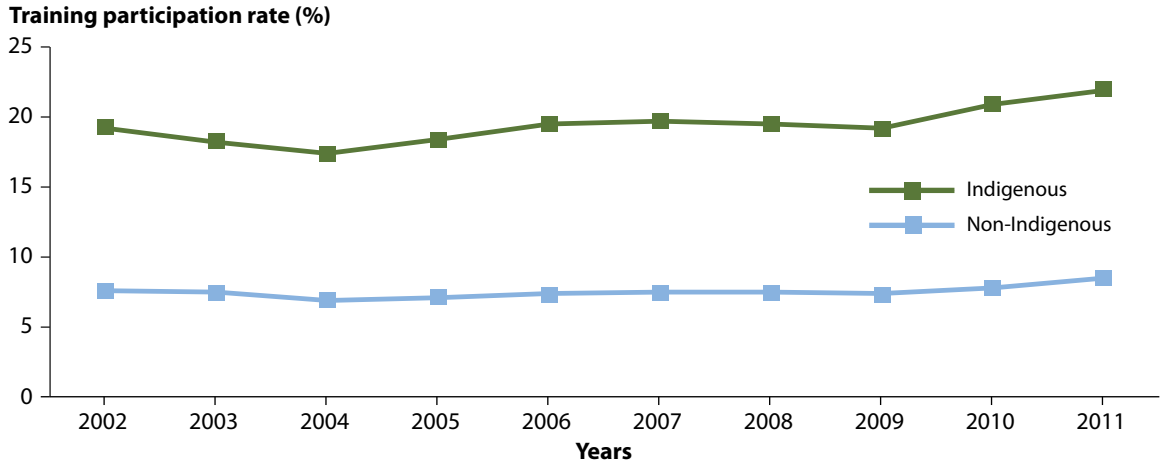
Continued

Box 2 (continued): Selected programs for improving school participation and outcomes for Indigenous Australians

Name of program targeted at young people and their parents	Participation and progress
What Works. The Work program The program provides a set of materials for school, teachers and students to employ as part of a transition to increased participation in learning and improved education outcomes. The materials include a guidebook, a workbook and a CD-Rom. Target groups: Students, teachers and schools. Timeline: 2001–ongoing.	Eleven (11) schools in remote and very remote Aboriginal and Torres Strait Islander communities in 4 states and territories were selected because of their increased improvement in NAPLAN literacy and numeracy outcomes and attendance rates. What Works researchers visited schools to look at the reasons for this success. They found that it was explained by some common factors. These comprised the strong leadership provided by the school principal, supported by a 'coherent and comprehensive strategic thinking and planning framework to achieve student outcomes'. This included teachers adopting a common instructional approach to teach and assess literacy and numeracy, and to ensure that learning content was engaging, accessible and culturally appropriate. Core beliefs in the potential of Aboriginal and Torres Strait Islander students to succeed (supplemented by high expectations of students) and targeted interventions when required were other key success factors. School-family-community partnerships that respected the learning each group brought to the partnership (and Indigenous ways of thinking, learning and communicating) were other features. Also contributing to the success was the common instructional model applied across classrooms within and across schools to support teachers and act as an accountability mechanism. The schools also had a keen focus on 'building and sustaining' the capacity of teachers to apply these school-wide approaches. <http://www.whatworks.edu.au/upload/1341805220784_file_SuccessinRemoteSchools2012.pdf>
Queensland Aboriginal and Torres Strait Islanders Foundation The Foundation aims to increase the number of Indigenous children who complete their Queensland Certificate of Education. It provides a 2-year scholarship to complete Years 11 and 12. It was established in 2008 using unspent funds ($36 million) from the former Queensland Government's reparation scheme to address historical government controls of wages and savings. In 2013, Arrow Energy contributed around $100,000 to help 69 Indigenous students in years 11 and 12 from areas in which this company operates.	Since 2009, Foundation scholarships valued at $7.2 million in total have been awarded to 2,429 students in 131 Queensland schools. In 2011, 79 scholarship recipients graduated from Year 12, and 432 students graduated in 2012. An additional 575 students are expected to graduate in 2013. *(Information provided by Queensland government agency with program responsibility)*
Student Education Trust (SET) SETs are a voluntary self-help measure in Queensland intended to rebuild parental responsibility for a child's education. SETs support parents in saving for educational and development related expenses. Parents and carers make regular contributions to the trust account which can be used to meet immediate education-related expenses as well as to save for future costs (such as sending a child to boarding school). When a child no longer requires a SET, unspent funds can be transferred only to a SET held by a sibling, child, spouse or other close relative, or another SET with similar objectives.	There are currently 891 donors contributing to the trust of 781 children in the welfare reform communities. *(Information provided by government agency with program responsibility).*

Vocational education and training

From 2002 to 2011, the VET participation rate for both Indigenous and non-Indigenous Australians remained relatively stable (Figure 2). For Indigenous Australians aged 15–64, it remained at around the 20% mark and for their non-Indigenous counterparts at the 8% mark (SCRGSP 2013). In 2011, almost three-quarters of the VET students lived in regional or remote or very remote areas. Just a quarter lived in the major cities.

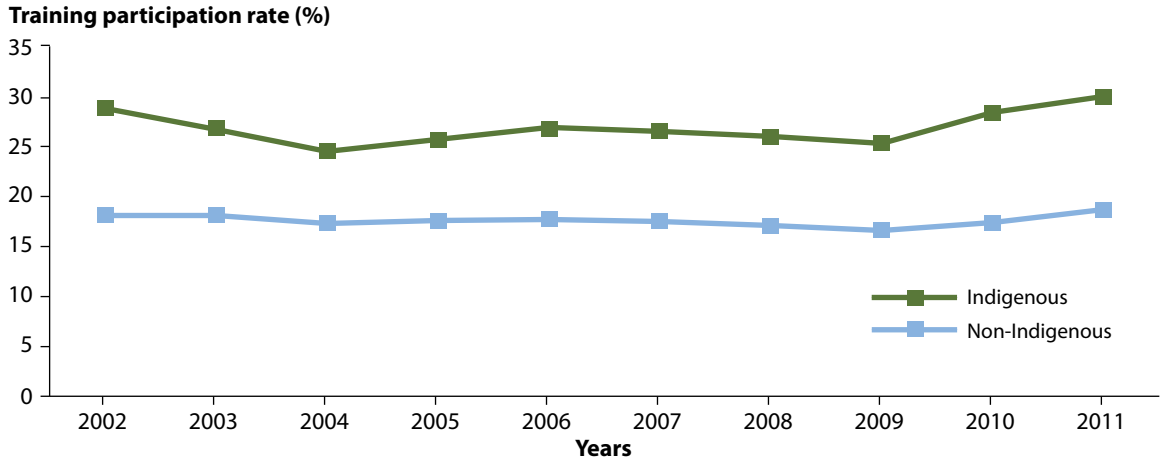


(a) The training participation rate for those aged 15–64 is the number of individuals in this age group participating in VET as a proportion of the population of this age group.

Source: National VET Provider Collection, unpublished data reported in SCRGSP 2013.

Figure 2: Training participation rates (%) for those aged 15–64 by Indigenous status, 2002–2011[(a)]

Between 2002 and 2011, the participation rates for Indigenous Australians aged 18–24 continued to be greater than those for non-Indigenous Australians (Figure 3). In 2011, just under one-third of Indigenous Australians in this age group were in VET compared with just under one-fifth of non-Indigenous Australians. Across the time period, the participation rate for the two groups does not vary greatly.



(a) The training participation rate for those aged 18–24 is the number of individuals in this age group participating in VET as a proportion of the population of this age group.

Source: National VET Provider Collection, unpublished data as reported in SCRGSP 2013.

Figure 3: Training participation rate (%) for those aged 18–24 by Indigenous status, 2002–2011[(a)]

In 2011, the load pass rate for Indigenous students (at 73.2%) was lower than that for non-Indigenous students (86.0%). Between 2002 and 2011, the load pass rates had increased for all students by 6.4 percentage points (SCRGSP 2013). For Indigenous and non-Indigenous students, they had increased by around 10 percentage points (9.7% and 10.0%, respectively). Satisfaction of Indigenous graduates was similar to that of non-Indigenous graduates (91.8% and 88.7%, respectively).

Indigenous students are far more likely to gain a certificate qualification than a diploma qualification, with their likelihood of gaining a certificate I or II qualification being slightly greater than for a certificate III or IV qualification (Table 8). In this, they lag considerably behind non-Indigenous students. They are, however, over represented in certificate I and II qualifications.

Table 8: Australian Qualifications Framework VET qualifications completed by qualification level, 2011 (%)

Qualification	Indigenous	Non-Indigenous
Diploma or above	6.5	16.5
Certificate III or IV	45.4	61.3
Certificate I or II	48.1	22.2
Total	**100.0**	**100.0**

Source: National VET Provider Collection 2012.

The Student Outcomes Survey conducted by the National Centre for Vocational Education Research collects information from VET graduates and module completers 6 months after they have completed their courses. In 2008, over two-thirds of Indigenous VET graduates were in employment after training, compared with four-fifths of all graduates (Table 9). By 2012, the employment rates were similar for Indigenous VET graduates, but lower for all VET graduates. Similar proportions of Indigenous and all VET graduates were enrolled in further study after training in 2008 and 2012.

Table 9: Employment and further training outcomes for VET graduates, 2008 and 2012 (%)

	Indigenous graduates	All graduates	Indigenous graduates	All graduates	Percentage point difference between Indigenous graduates and all graduates	
Destination	**2008**	**2008**	**2012**	**2012**	**2008**	**2012**
Employed after training	67.4	82.4	67.1	77.8	–15.0	–10.7
Enrolled in further study after training	32.6	35.9	38.4	36.1	–3.3	2.3
Employed or in further study after training	77.2	91.3	80.1	88.0	–14.1	–7.9

Source: National Centre for Vocational Education Research 2012, Student Outcomes Survey, unpublished data.

In 2008, almost four-tenths of Indigenous graduates who were not employed before their training were in a job 6 months after graduation (Table 10). In contrast, this was the case for just over half of all VET graduates. In 2012, these figures had decreased for all VET graduates, narrowing the gap between the two groups.

Table 10: Employment outcomes for VET graduates not employed before training, 2008 and 2012 (%)

	Indigenous graduates	All graduates	Indigenous graduates	All graduates	Percentage point difference between Indigenous graduates and all graduates	
Transition	**2008**	**2008**	**2012**	**2012**	**2008**	**2012**
Of those not employed before training, employed after training	39.4	53.6	37.4	46.8	–14.2	–9.4

Source: National Centre for Vocational Education Research 2012, Student Outcomes Survey, unpublished data.

In 2008, around one-quarter of Indigenous and all VET graduates reported that they were employed at a higher skill level 6 months after their training than before their training (Table 11). By 2012, the figure had decreased for all VET graduates, but was similar for Indigenous graduates.

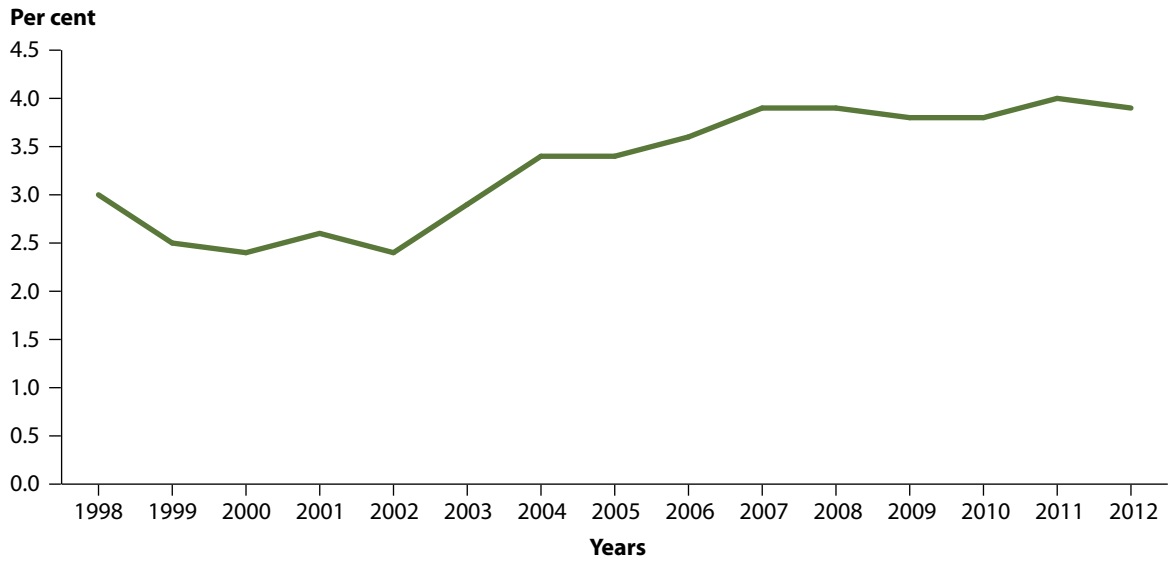
Table 11: VET graduates employed at a higher skill level after training, 2008 and 2012 (%)

	Indigenous graduates	All graduates	Indigenous graduates	All graduates	Percentage point difference between Indigenous graduates and all graduates	
Destination	**2008**	**2008**	**2012**	**2012**	**2008**	**2012**
Of those employed before training, employed at a higher skill level after training	23.8	24.2	16.3	18.8	–0.4	–2.5

Source: National Centre for Vocational Education Research 2012, Student Outcomes Survey, unpublished data.

Apprenticeships and traineeships

In the year ending December 2012, there were 12,971 Indigenous apprentices and trainees who had started a contract of training (Figure 4). This represents almost a three-fold increase on the equivalent figure for 1998 of 4,574. In 2012, Indigenous commencements represented 3.9% of all commencements for that year.



Source: National Apprentice and Trainee Collection, March 2013 estimates.

Figure 4: Indigenous apprentices and trainees as a proportion of all commencements, 1998–2012

As at December 2012, Indigenous apprentices and trainees in a contract of training live mostly outside *Major cities* (Table 12). Just under half live in the *Inner regional* or *Outer regional* areas, while almost one-fifth live in *Remote* or *Very remote* areas.

Table 12: Apprentices and trainees by client remoteness, in-training as at December 2012 (%)

Client postcode region	Indigenous	Non-Indigenous
Major cities	38.7	61.9
Inner regional and *Outer regional*	45.7	35.2
Remote and *Very remote*	15.4	2.7
Not known	0.1	0.2
Total	**100.0**	**100.0**

Source: National Apprentice and Trainee Collection, March 2013 estimates.

Indigenous apprentices are more likely than non-Indigenous apprentices not to complete their training in all occupations, and especially for technicians and trade workers (Table 13). The disparity between completion rates for Indigenous and non-Indigenous Australians is greatest for labourers, machinery operators and drivers, clerical and administrative workers, and technicians and trade workers. An econometrics analysis (Deloitte Access Economics 2012a) found similar results.

Table 13: Apprentice and trainee contract completion and attrition rates[(a),(b)] by occupation (ANZSCO* group), for contracts commencing in 2008

	Completion rates %	Attrition rates %	Continuing or outcome not known %	Number of contracts ('000)
Indigenous				
Managers	40.0	52.7	7.3	0.2
Professionals	51.3	38.2	10.5	0.2
Technicians and trades workers	32.6	63.9	3.5	3.3
Community and personal service workers	45.5	48.6	5.9	1.9
Clerical and administrative workers	45.8	48.5	5.7	2.6
Sales workers	38.5	57.4	4.1	1.0
Machinery operators and drivers	46.7	47.4	5.9	0.8
Labourers	36.2	60.2	3.6	2.1
All occupations	**39.9**	**55.4**	**4.7**	**12.1**
Non-Indigenous				
Managers	52.2	39.9	7.9	5.7
Professionals	61.9	29.1	9.0	4.8
Technicians and trades workers	45.8	49.8	4.4	103.6
Community and personal service workers	56.9	38.1	5.0	42.5
Clerical and administrative workers	59.1	33.7	7.2	52.0
Sales workers	50.9	43.9	5.2	43.5
Machinery operators and drivers	60.3	33.9	5.8	25.4
Labourers	52.5	43.1	4.4	23.1
All occupations	**52.5**	**42.1**	**5.4**	**300.6**

* Australian and New Zealand Standard Classification of Occupations

(a) Contract completion rates are derived for contracts of training for apprentices and trainees. If an individual commenced 2 or more contracts in the same year, each is counted separately. Contract completion rates do not take into account continuing contracts or expired contracts where the outcome is unknown.

(b) Contract attrition rates are derived for contracts of training for apprentices and trainees. If an individual started 2 or more contracts in the same year, each is counted separately. Contract attrition rates do not take into account continuing contracts or expired contracts where the outcome is unknown.

Source: National Apprentice and Trainee Collection, March 2013 estimates.

Box 3: Case study—The Way Ahead program

The Way Ahead for Aboriginal People program was implemented in the New South Wales Public Service in 2004. It provides Aboriginals undertaking an apprenticeship or traineeship with structured support to encourage retention and completion. A mentor is allocated to a trainee and helps to solve any potential problems.

Between 2007 and 2010, there were 226 apprentices and trainees who participated in The Way Ahead program, representing 2% of the total New South Wales Aboriginal apprenticeship and traineeship commencements for that period (Powers 2011). These reviewers compared information on in-training, completions and cancellations for Aboriginal participants in The Way Ahead program with that for other New South Wales Aboriginal apprentices and trainees who had not participated in the program.

It was found that:

- Cancellation rates were considerably higher for The Way Ahead apprentices and new entrant trainees than for non-participants. Existing worker trainees in The Way Ahead program, however, had cancellation rates that were much lower and similar to those of other Aboriginal learners.
- Of the 3,269 Aboriginal apprentices and trainees who had begun an apprenticeship or traineeship between 2007 and 2010, 36% had cancelled, withdrawn or been suspended from the program by the end of October 2010. Just over 40% had dropped out in the first 3 months of their training. Those in the 20–24 year age group were found to be most at risk of not completing.

Continued

Box 3 (continued): Case study—The Way Ahead program

Powers 2011 concluded that any program wanting to improve retention for Indigenous apprentices and trainees would need to focus its efforts on this age group (that is, 20–24). Between 2007 and 2010, just over one-third (34.5%) of The Way Ahead participants had completed their contracts of training, with the remainder evenly divided by those still in training and those who had cancelled their contracts of training. Interviews with mentors and The Way Ahead learners who had had their contracts cancelled indicated that the most frequent issues were related to poor attendance, punctuality, difficulties with off-the-job training (including literacy and numeracy issues) and poor work performance and productivity. Delays in allocating mentors to learners well before the employment experience starts were suggested as a key reason for the cancellation of contracts of training.

The reviewers concluded that if the program were to be successful, mentor support needed to be timely; that is, mentors needed to be allocated to learners well before the start of employment. It also required that The Way Ahead participants be screened for suitability. State Training Services should also ensure equitable access to services across New South Wales, with adequate funding and promotional arrangements.

An earlier evaluation was conducted by the NSW Board of Vocational Education and Training (Davies 2009) which included surveys of employers, employees and mentors participating in The Way Ahead for Aboriginal People program. The results of these surveys indicated strong support among participants, with 94% of employers agreeing that it was useful to have an external person (the mentor) with whom to discuss issues related to the apprentice or trainee. It was agreed by 82% of employers that the mentor needed to be an Aboriginal person, and 69% would recommend mentoring to other employers. These views were also strongly supported by mentors (100%, 92% and 92%, respectively) as well as the employee, apprentice or trainee (67%, 76% and 88%, respectively).

Davies 2009 also identified a number of issues related to lack of basic literacy and numeracy skills, and to apprentices and trainees falling behind in their formal training. Another issue was the confusion experienced by learners when the content taught in the formal learning program did not directly match up with the work then being done by the apprentice and trainee at the workplace.

Factors that reduced the ability of the trainee to stay in training and employment included inadequate attendance; poor work ethic; lack of reliable transport arrangements (including no licence or legal loss of licence); and negative pressures from family, community members and peers. These factors were not always under the control of the individual. The evaluation also pointed to the confusion created by having a range of players in the labour market hoping to improve the lot of Aboriginal job seekers and workers (and cites JSA, Indigenous Employment Panel, and Indigenous employment specialist providers). The program has faced some preliminary reluctance from group training companies and from Aboriginal employers (including Aboriginal Medical Services, Aboriginal Land Councils or Company).

Another review of The Way Ahead program conducted by the Allen Consulting Group concluded that an impact evaluation 'would assist in verifying, if not realising, the strong potential of this program' (ACG 2011b:58).

Sources: ACG 2011b; Davies 2009; Powers 2011.

Programs implemented to address VET issues

A range of programs have been implemented to address challenges experienced in raising the participation and outcomes for Indigenous Australians in VET, including apprenticeships and traineeships. A description of the aims of key programs, progress to date and the findings of any existing evaluations is provided at Appendix C.

We present a selection of these programs here; they include Indigenous Australian Apprenticeships, Indigenous Away From Base (AFB) Funding Program—Mixed-mode AFB, Indigenous Ranger Cadetships, and the Indigenous Youth Mobility Program. Information has been gleaned from program websites, available evaluations and from advice provided by relevant government agencies with program responsibility.

Box 4: Selected programs aimed at improving VET participation and outcomes

Name of program	Participation or progress to date
Indigenous Australian Apprenticeships The Indigenous Australian Apprenticeships program aims to encourage employers and service providers to create special situations where prospective Indigenous apprentices can compete successfully for available employment and training places. Activities include developing links to sources of potential trainees; attracting trainees; developing transition-to-work plans; assessing literacy and numeracy skills and trainees' interests and skills; designing and delivering pre-apprenticeship programs; providing career counselling, support and tutoring assistance; and monitoring progress and barriers to completion. Target groups: Employers and service providers. Timeline: Ongoing. <http://www.australianapprenticeships.gov.au/publications/making-Indigenous-australian-apprenticeships-your-business>	A guide and resource kit has been developed to help employers and providers. This kit sets out how to do more to support Aboriginal and Torres Strait Islander people to succeed in Australian apprenticeships. It also offers practical advice on how to review and build the understanding and capability of an organisation to meet the service needs of Indigenous Australians, on how to engage with one's local Indigenous community to get better Indigenous Australian apprenticeship outcomes, and on how to implement fresh approaches to service delivery that have been shown to improve results.
Indigenous AFB Funding Program— Mixed-mode AFB The primary function of mixed mode AFB funding is to allow education providers to assist students (and trainers) with travel and accommodation costs associated with undertaking mixed-mode study, including attending residential schools, student placements, field trips and reverse block release. Target group: Tertiary students; before 2001 it was funded under the Aboriginal Study Assistance Scheme (ABSTUDY) and based on individual applications. Timeline: 2009–2014. <http://www.innovation.gov.au/HIGHEREDUCATION/INDIGENOUSHIGHEREDUCATION/Pages/AwayFromBase.aspx>	In 2004, the Department of Education, Science and Training provided supplementary funding of $28 million to 32 tertiary institutions to meet the costs of accommodation and travel. Between 2000 and 2004, there more than 29,000 enrolments. In 2006, the Office of Evaluation and Audit (Indigenous programs) evaluated the program. It found that mixed mode was effective in getting older people in rural and remote areas to access education and contribute to their communities. Enrolments increased between 2001 and 2004 by 6% per year while enrolments in the ABSTUDY declined. Students valued the mixed mode approach, and educational outcomes were marginally better than for other Indigenous students. Although participation in and access to higher education had increased, findings about other educational outcomes were mixed. The evaluation found that successful outcomes were mediated by student ability to balance studies with family, community and work commitments. The funding arrangements encouraged providers to focus more on getting student enrolments than on completions, and on enrolling students in courses for which they were not suitable. Providers were often encouraged to cross-subsidise interstate students by increasing enrolments of local students. They had also not generally promoted the use of more flexible learning approaches, including information technology and distance education.

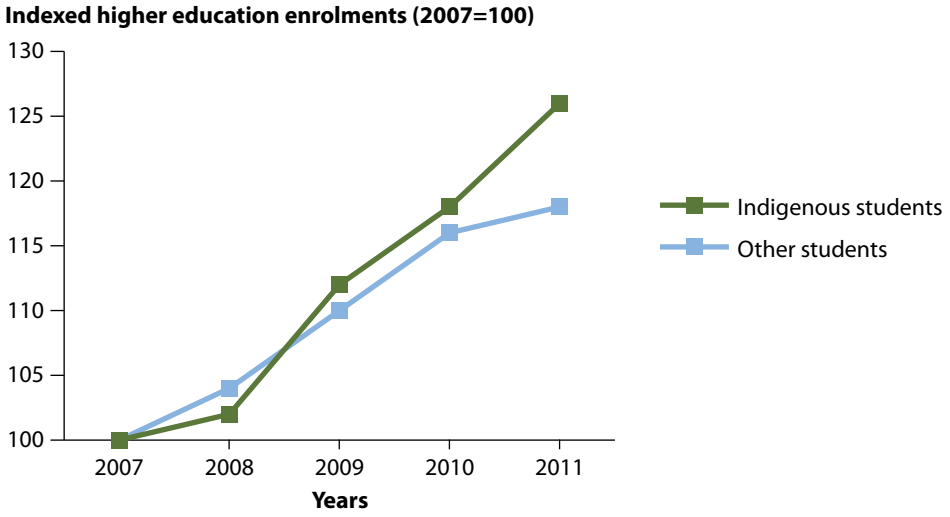
Continued

Box 4 (continued): Selected programs aimed at improving VET participation and outcomes

Name of program	Participation or progress to date
Indigenous Ranger Cadetships: The aim of these cadetships is to encourage Indigenous students to complete school by providing them with culturally relevant training. It is hoped the qualification will help them to gain jobs in local land management projects. Students will undertake a Certificate II that is linked to natural resource management and cultural studies, in a school-setting. Target group: School students and communities. Funding: $4.1 million. Timeline: 2011–12 to 2013–14.	In 2012 and 2013, there were 12 schools that participated in the Indigenous Ranger Cadetship pilots. They each received $500,000. Four schools in the Northern Territory, 3 from Queensland, 3 from Western Australia, and 1 each from New South Wales and South Australia participated in the pilots. There has not been any evaluation of this program.
Indigenous Youth Mobility Program: This program helps young Indigenous people to move away from home to gain the skills and qualifications (Certificate III or above) they need to get a job in their community or elsewhere. It aims to build literacy, numeracy and financial literacy skills, as well as independent living and other life skills. The program funds the cost of accommodation and education and training. It also provides mentoring and other types of support. Training options include Australian Apprenticeships, VET qualifications and higher education. Target group: Students. Funding: A proportion of $133.5 million in 2013 from the Extending the Indigenous Education. Timeline: 2006 to 2012 and ongoing.	This program has not yet been formally evaluated. Programs are delivered by Auswide Projects (Canberra), Career Employment Australia (Adelaide, Cairns, Coffs Harbour, Darwin, Rockhampton, Toowoomba, Townsville), Nyarla (Perth), University of Melbourne (Shepparton) and Yarnteen (Newcastle). Participant and provider stories have been made into a video to help promote the program as well as to highlight key issues faced by Indigenous students when they are planning to (or do) move away from home for studies. Before starting their journey, they will undertake a career planning assessment which lets them come down and experience where they will be moving to. In this way, the student can 'get a taste' of what it will be like. The key is to look at each individual's needs and then provide the support best suited to those needs. In the main, students want to feel safe, welcomed and supported in their accommodation, and have an environment that will help them to 'stay on track' to achieve their career aims. One issue is dealing with homesickness, and students are encouraged to use phones to call home, and to speak to residential youth workers. Some of the key issues are about letting students stay connected with their own people and their country, and to include breaks that will enable students to stay connected. <http://www.anao.gov.au/uploads/documents/Evaluation_of_the_Indigenous_Youth_Mobility_Program.pdf>

Higher education

The number of Indigenous students in higher education has increased over the last few years. In 2011, there were 11,807 students who identified as Indigenous (DIISRTE 2012). This comprised around 1.0 per cent of all enrolments (Figure 5).



Source: Derived from the Higher Education Statistics Collection (DIISRTE 2012).

Figure 5: Indexed enrolments in higher education by Indigenous status, 2007–2011 (2007=100)

In 2011, the main fields of education in which Indigenous students were enrolled were society and culture, health, and education (Table 14).

Table 14: Percentage of Indigenous higher education students by broad field of education, 2007 and 2011 (%)

Broad field of education	2007	2011
Natural and physical sciences	3.9	4.5
Information technology	1.3	1.2
Engineering and related technologies	2.0	2.5
Architecture and building	1.0	1.3
Agriculture, environmental and related studies	1.5	1.6
Health	16.5	19.9
Education	21.3	17.6
Management and commerce	9.5	11.1
Society and culture	33.7	32.1
Creative arts	6.5	7.0
Food, hospitality and personal services	0.0	0.0
Mixed field programs	5.7	4.4
Non-award courses	0.7	0.5
Total[(a)]	**100.0**	**100.0**

(a) The data take into account the coding of Combined Courses to 2 fields of education. As a consequence, counting both fields of education for Combined Courses means that the totals may be less than the sum of all broad fields of education.

Source: Derived from the Higher Education Statistics Collection.

The field of study with the largest proportion of enrolments was Health followed by Education. While the share of enrolments for Health increased, the share for Education declined at about the same rate.

An annual survey of student engagement with their university studies—the Australasian Survey of Student Engagement—is conducted by the Australian Council for Educational Research (ACER). Findings from this survey (ACER 2011) enable us to get a closer glimpse of the university experience of Indigenous students. We found that Indigenous students, although quite positive about their university studies, tended to disconnect from their courses at a greater rate than their non-Indigenous counterparts. We found a similar pattern in surveys of Indigenous students in other levels of schooling (Biddle & Cameron 2012). Indigenous students say good things about their engagement with their studies and their happiness with school but this does not translate into better completion rates. This suggests that we must not put too much store on 'satisfaction with schooling' data if we want to help increase completion rates.

The ACER matched the responses of non-Indigenous respondents to the survey with those of Indigenous respondents on some key characteristics, including socioeconomic status and education, to find out if it could isolate factors that were directly related to Indigenous status (ACER 2011). They found that Indigenous university students are more likely to come from regional and remote areas than non-Indigenous students, and are often the first from their families to attend university. They are 2 times more likely to be caring for dependants than non-Indigenous students. They are also more likely to be receiving government and university financial assistance, to be in paid work and to be working more hours per week. Indigenous students were far more likely to blend academic learning and work experience (presumably because many of them are in full-time work and are undertaking university studies directly related to their work). In addition, substantial numbers of Indigenous students are undertaking studies via Block Mode which enables them to maintain their full-time jobs and undertake some short intensive and residential on-campus studies with off-campus studies. Indigenous students said that their university experience enabled them to acquire some general skills and to use the learning to contribute to their own communities. They also reported high expectations of university, and higher levels of commitment to their studies. However, these positive sentiments do not keep them in university in greater numbers. Fewer than 50% will complete the courses they start compared with almost 72% of non-Indigenous Australians.

The report also notes that despite their access to government and university assistance, and their involvement in paid work during their studies, Indigenous students are also much more likely than non-Indigenous students to consider dropping out for financial reasons. This higher propensity to drop out may signal the extra financial stress experienced by students having to care for dependants. It may also reflect the fact that combining studies with full-time work may itself be stressful and lead to higher rates of drop-out.

Box 5: Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People

This review (Behrendt et al. 2012) found that Indigenous students in higher education said positive things about their experience in respect of Indigenous Education Units, and the Indigenous Tutorial Assistance Scheme—Tertiary Tuition. The Review Panel commends the role of these units but it concludes that they cannot continue to shoulder the responsibility for this support because 'they simply do not have the reach, resources or discipline-specific knowledge to do so' (Behrendt et al. 2012:xii). The review recommends a whole-of-university approach where faculties deliver assistance, mentoring and industry connections with professional bodies. The review panel also suggested that government Indigenous-specific funding (including the Indigenous Tutorial Assistance Scheme—Tertiary Tuition, and the Commonwealth Scholarships Program) should deliver more 'flexible, simplified, student-focused support' (Behrendt et al. 2012:xiii). A rewards based accountability framework is suggested to help encourage senior management and universities meet targets for raising the levels of Indigenous staff and students. Universities are also recommended to help regional and remote area students who have to leave their homes for university to access affordable and adequate accommodation, including on-campus.

Review Panel: Larissa Behrendt (Chair), Steven Larkin, Robert Griew and Patricia Kelly.

Source: Behrendt et al. 2012.

Economic participation: employment outcomes

In 2011, the employment rate for Indigenous workers aged 15 to 64 was 44.1% compared with 71.4% for non-Indigenous Australians (Table 15). Indigenous Australians were more likely than non-Indigenous Australians to be unemployed (that is, looking for work), and they were out of the labour force at a greater rate. Employment rates also deteriorated for Indigenous Australians between 2006 and 2011, more so than for non-Indigenous Australians. This employment rate is based on counts rather than estimated resident population and is slightly lower than that referred to in the COAG Reform Council's publication on Indigenous reform (COAG Reform Council 2013).

Table 15: Persons aged 15 to 64 by labour force status and Indigenous status, 2006 and 2011 (%)

	2006		2011	
Labour force status	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**
Employed	45.2	70.8	44.1	71.4
Unemployed	8.4	3.8	9.2	4.2
Not in the labour force	40.7	24.2	42.1	23.4
Not stated	5.7	1.2	4.6	1.0
Total	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	*15.6*	*5.1*	*17.2*	*5.5*
Labour force participation rate	*56.8*	*75.5*	*55.9*	*76.4*

Note: Based on counts that are not adjusted to estimated resident population.

Sources: Derived from 2006 Census of Population and Housing (ABS 2006) and 2011 Census of Population and Housing (ABS 2011).

Indigenous Australians are slightly more likely to be in part-time employment and slightly less likely to be in full-time employment that non-Indigenous Australians (Table 16).

One of the aims of the building block for economic participation is to halve the gap in employment outcomes by 2018. The COAG National Partnership Agreement on Indigenous Economic Participation (2008) notes that, on 2008 figures, halving the gap would require 'employment growth of another 100,000 jobs for Indigenous people' (COAG 2008:7). The challenge, however, is to ensure that Indigenous people achieve the same educational levels as the rest of the population.

Table 16: Employed persons aged 15 to 64 by employment type and Indigenous status, 2011 (%)

Labour force status	**Indigenous**	**Non-Indigenous**
Employed full-time	58.9	64.2
Employed part-time	31.7	29.8
Unknown hours or away from work	9.4	6.1
Total	**100.0**	**100.0**

Note: Based on counts that are not adjusted to estimated resident population.

Source: Derived from the 2011 Census of Population and Housing (ABS 2011).

Our employment figures do not separate out employment in Community Development and Employment Programs (CDEP), mainly because Census figures do not completely capture this participation. However, information that is available indicates that the numbers of Indigenous Australians reporting as CDEP participants declined from 14,497 in 2006 to 5,005 in 2011 (ABS 2012d). This is considerably less than the 35,089 participating in CDEP programs 10 years ago (Misko 2004). The decline in the employment of Indigenous Australians in CDEP schemes (especially since 2004) was also captured graphically by Hunter and Gray (2012) when they tracked the movement of CDEP employment to population rates for males and females from 1997 to 2010. Later in the report, we find that mainstream employment for Indigenous Australians had also increased across this time period.

Indigenous Australians are much more likely than non-Indigenous Australians to be employed in the public sector. This was the case in 2006 and continues to be the case in 2011 (Table 17).

Table 17: Employed persons by public/private sector of employment by Indigenous status, 2006 and 2011 (%)[(a)]

	2006		2011	
Sector	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**
Government	24.7	14.3	22.6	15.6
Private	71.2	84.4	74.8	83.4
Not stated	4.1	1.3	2.6	1.0
Total	**100.0**	**100.0**	**100.0**	**100.0**

(a) Based on counts that are not adjusted to estimated resident population.

Sources: Derived from 2006 Census of Population and Housing (ABS 2006) and 2011 Census of Population and Housing (ABS 2011).

A recent New South Wales review, *NSW Government employment and economic development programs for Aboriginal people: review of programs and broader considerations* (ACG 2011b), found that between 2005 and 2010 there was an increased number of individuals identifying as Aboriginal in the New South Wales public service (1.9% and 2.5%, respectively). A total of 20.6% of Aboriginal and non-Aboriginal public servants in New South Wales had been in their jobs between 10 and 20 years. Aboriginal workers were far less likely than non-Aboriginal workers to have worked for the service for over 20 years (9.6% and 18.6%, respectively). There was also a variation in salaries with just over one-third of Aboriginal workers, and just under one-quarter of non-Aboriginal workers, earning less than $50,100 (36% versus 24%, respectively). Non-Aboriginal workers were twice as likely as Aboriginal workers to earn salary levels above $91,653 (16% and 8%, respectively).

Job seeker and employment programs

The Indigenous Employment Policy (comprising a range of programs) was established by the Australian Government in its 1999–2000 budget to increase employment for Indigenous Australians in the private sector and to improve outcomes for Indigenous job seekers through Job Network, which was replaced by JSA in 2009 as the primary national employment services program. The Indigenous Employment Program also encouraged CDEP sponsors to move work-ready participants into open employment, and to support the development of small business. It is discussed here because it provides an example of a program that was formally evaluated using before and after program participation measures, that compared outcomes for participants in the program versus those of non-participants, and that attempted to measure net impact of the program.

Box 6: Effectiveness of Wage Assistance, Structured Employment and Training (STEP) and the Corporate Leaders for Indigenous Employment Project (CLIEP)

The Indigenous Employment Policy aimed to improve employment outcomes via a range of programs, which included financial incentives for employers and for project sponsors. For example, the Wage Assistance program provided subsidies for employers who employed eligible Indigenous job seekers after 13 weeks or 26 weeks of employment; the STEP offered sponsors flexible funding incentives to provide employment and structured and accredited training. If they placed job seekers on traineeships, they would also receive additional funding. The CLIEP encouraged private sector employers to partner with the Australian Government to make jobs available.

The evaluation found that job seekers would stay with their employment services provider if they felt they had a good relationship with them, received specialist help and if the environment was welcoming. They preferred communicating face-to-face, and for providers to have a good understanding of Indigenous issues. Local contacts with the Indigenous community, active engagement with employers (including providing post placement support) and suitable selection of candidates were also seen to keep Indigenous job seekers in employment once they found a job. In addition, outcomes were better when Indigenous job seekers were placed in jobs or in training with other Indigenous people.

The evaluation found that 40% of the employers were aware of the Wage Assistance program, and that job seekers were reluctant to indicate they had a Wage Assistance card in interviews with prospective employers. Considering that many jobs were not obtained via the Job Network, the evaluators concluded that it was important for job seekers to be able to use the fact that they had a Wage Assistance card in searching for jobs. They recommended the use of in-person explanations with job seekers about the benefits of the card. They also suggested that employer associations could play a better role in promoting the availability of the Wage Assistance program to employers. The subsidy, however, was found to facilitate the employment of Indigenous job seekers in 33% of cases. When Wage Assistance participants were followed up 12 months after their placements and compared with their control group counterparts (that is, those not participating in the scheme in the previous 6 months), 50.8% were still in employment compared with 39.6% of the control group. When the evaluators looked at the net impact of income earned from employment, they found that it was stronger in the regional and remote locations, and that after 12 months participants earned $13.00 per week more than those in the control group. This suggests that the Wage Assistance program makes a difference and that individual job seekers should be encouraged to use the Wage Assistance card to canvas for jobs.

Most employer sponsors in the STEP and CLIEP initiatives had employed Indigenous people in the last 3 years, and had personally taken the initiative to become involved. They were mostly from agriculture and mining industries, and rarely from wholesale, communication services, finance and insurance and retail industries. This indicated room for expanding awareness of the programs among new industries, and a role for the government to identify industry-specific intermediaries to promote the programs to employers. The use of Indigenous networks and organisations was also suggested.

The key reasons employers gave for not providing jobs or placements to Indigenous job seekers were lack of skills and confidence, and perceived or actual lack of motivation and interest in the job. Difficulties in getting CDEP sponsors to move participants into open employment were often associated with lack of skills that were relevant to available jobs, suggesting the need to increase job relevant training to prepare these job seekers for work in the open labour market.

Employers who said that they had employed a less experienced worker than they would normally also had a formal Indigenous Employment Strategy, a mentoring program and higher retention rates. The review also found that it was important to provide support to Indigenous job seekers placed into a job with Wage Assistance subsidies, or in education and training, because their ability to gain future employment depended on their completing their placement and their training. It noted that many did not complete their training programs.

The evaluators concluded from their 'net impact' calculations and from the number of new jobs for Indigenous workers generated by Wage Assistance, that the assistance the Indigenous Employment Policy provided had led to improved employment prospects for Indigenous workers. However, they were also of the view that because most employers in the Indigenous Employment Program had employed Indigenous workers in the past, one could not always rely on financial incentives or on the 'good intentions' of employers to increase recruitment of new employers. They speculated whether more formal methods were required.

Sources: DEWR 2003, 2010.

In 2009, the Indigenous Employment Program was reformed to support the government's commitment to halve the gap between the employment outcomes of Indigenous and non-Indigenous people by 2018. These reforms aimed to make the program more flexible, expand the range of activities, introduce some new initiatives (including voluntary mobility assistance, language, literacy and numeracy and aspiration building), reduce red-tape and become more accessible. It is still too early to tell how effective these strategies have been.

Job Services Australia

The Job Services Australia program (JSA) is a mainstream employment program which also assists job seekers (including a large number of eligible Indigenous Australians) access employment or further training by customising assistance to the needs of job seekers. JSA services may include referral to support services to help job seekers to deal with both vocational and non-vocational barriers. Job seekers are placed into 4 streams (Stream 1, 2, 3 and 4) with streams 3 and 4 capturing job seekers facing the greatest disadvantage.

A recent review of JSA (Australian Government 2012) reports that where 25% of non-Indigenous job seekers were classified to Stream 3 in 2009, the figure for Indigenous job seekers was 60%. By the end of November 2011, the proportion of Indigenous job seekers in Stream 3 had declined to 47%. However, the proportion of Indigenous job seekers in Stream 4 had doubled from 17% to 34%. Non-Indigenous job seekers were more evenly found across the streams; however, slightly more of them were found in streams 1 and 2. Indigenous job seekers living in very remote areas were also far more likely to be listed as Stream 3 than city dwellers (68% and 27%, respectively) while city dwellers were far more likely to be listed as Stream 4 than those in remote areas (44% and less than 26%, respectively). The proportions of non-Indigenous Australians across the streams remained similar across locations.

The entry of a JSA job seeker into Stream 4 depends on the results of assessments that measure vocational and non-vocational barriers to finding and maintaining employment. The review noted that it would be difficult for people in remote areas to access the same types of services that could provide adequate documentation on their non-vocational barriers for the purpose of these assessments. These factors have limited access for people in remote areas to Stream 4. Today the Remote Jobs and Community Program (RJCP) operates in remote areas and does not have separate service streams.

The JSA job seeker participation and compliance framework applies to job seekers who are in receipt of activity-tested income support payments, such as Newstart Allowance, Youth Allowance and sometimes Parenting Payment. The same framework applies across all employment services—RJCP, JSA and Disability Employment Services. All job seekers with requirements must attend appointments and participate in activities as negotiated with their provider, such as looking for work, taking up a job where offered, or possibly participating in work for the dole in exchange for receiving income support. A participation failure, which can include a financial penalty, may be applied where a job seeker does not participate as required. Where a job seeker is unable to or does not attend an appointment or activity, providers must attempt to establish whether the job seeker has a reasonable excuse for non-attendance. A participation failure can be applied only where the job seeker has no reasonable excuse for non-attendance. Indigenous JSA participants (with activity test requirements) are subject to these same compliance arrangements with regard to non-attendance at appointments and activities.

To begin receiving services in JSA, job seekers must attend an initial appointment with a JSA provider. The review found that Indigenous job seekers are 21% less likely to attend initial appointments and 26% less likely to attend engagement appointments than non-Indigenous counterparts when other job seeker characteristics are considered. Lack of access to reliable transport and telephone services were key barriers to complying with JSA attendance, with job search activities and with getting or maintaining a work placement. In rural areas, access to reliable transport is crucial because employers may require job seekers to have a car for a particular job. Indigenous job seekers with their own cars were 48% more likely to attend their initial interview compared with 26% for all job seekers. Indigenous job seekers contactable by telephone were 24% more likely to attend initial interviews, compared with 16% for all job seekers. These findings can be explained by the higher percentages of Indigenous job seekers who live in remote or very remote areas.

The review found Indigenous job seekers were more likely to remain engaged with JSA providers who make them feel welcome as Indigenous people, and recommended that JSA providers can create a welcoming environment in their offices by displaying posters, stickers, flags, artwork or service commitments. Also important was to have staff who were well respected and well known in the community, especially Indigenous staff. Job seekers reported that having an Indigenous person on staff made them feel more welcome. It was suggested that JSA providers improve both their links with the local community and the cultural awareness of their staff. These were also findings from the evaluation of the Indigenous Employment Policy programs in 2003. The JSA Service Guarantee, which is part of the JSA contract, requires providers to ensure that staff are trained to deliver services to Indigenous job seekers in culturally sensitive ways.

Improving services for Indigenous job seekers has been a priority for the JSA. The Access to Mentoring Support for Indigenous Job Seekers Pilot is to operate under the JSA from 1 July 2012 to 30 June 2015. It requires JSA providers participating in the pilot to deliver one-on-one intensive and culturally appropriate mentoring support to Indigenous job seekers who want to participate. The pilot operates in 20 Employment Service Areas across mainland Australia. Priority is afforded to job seekers in JSA service streams 3 and 4. Mentoring support includes appropriate support before and after job placement for up to 26 weeks. The aim is to develop an evidence base for determining whether providing job seekers with intensive mentoring support leads to increased and sustained employment outcomes for participating Indigenous Australians. This evidence base will help to inform further policy development and program delivery.

Evaluating government employment and economic development programs for Indigenous Australians in New South Wales

A review of the New South Wales Government employment and economic development programs for Indigenous Australians (ACG 2011b) indicates what needs to be streamlined, simplified and improved to avoid duplication and complexity (Box 7).

Box 7: Review of New South Wales Government employment and economic development programs

A review of 14 New South Wales Government programs and initiatives aimed at improving employment and economic development for Aboriginal People (ACG 2011b) recommended reducing duplication and complexity and improving evaluation processes.

Consolidate functional duplication: There is considerable duplication across programs and initiatives. 'Functional duplication' should be consolidated to improve the efficiency of fund allocation, and effective delivery. It would also reduce confusion among participants. This would mean looking at which initiatives could be discontinued and which could be combined or re-aligned. The review highlights the Job Compacts program as one requiring closer attention. The Way Ahead program is also cited as one that could benefit from re scoping so that mentors are allocated to learners earlier and access to funding becomes more widespread.

Strengthen monitoring and evaluation of outcomes: The review found a need to build a central repository to provide system or state-wide data on outcomes from these programs to avoid both differences in the availability and specificity of data, and variability in the consistency, accuracy and currency of data. There are also difficulties in accessing data when it is administered by different sections of departments or by different personnel. Program design and program budgets should include adequate resources for data collection and systematic approaches to evaluating outcomes and processes.

Streamline administrative arrangements: This includes allocating resources efficiently so that the administration of one program is confined to one department. Creating an over arching coordination and oversight role is suggested. This would help to identify where linkages and overlaps between programs occur; to maintain a databank of program experiences and evaluation results; and to establish websites for job seekers, employers, business owners and stakeholders. The evaluators suggest that such a role could be fulfilled by Aboriginal Affairs NSW.

Continued

Box 7 (continued): Review of New South Wales Government employment and economic development programs

Improve and sustain career development pathways through connected programs: The reviewers found it important to maintain a balance between supply and demand for skills to ensure the efficient use of resources. They advocate a life course approach, starting from early childhood, through school and post-secondary education, and into employment; they advise against one-off solutions. It 'would involve assisting Aboriginal people in, first, finishing school; then gaining access to, and completing, cadetships or traineeships or otherwise achieving the skills and qualifications required for a particular position' (ACG 2011b:77). This would be supplemented by on-the-job training and professional development.

Broader implications for government: Formal and joint responsibility between the New South Wales and Australian governments under the National Agreements for Indigenous Economic Participation, and for Skills and Workforce Development, are felt to increase duplication and overlap. Although governments are asked to work together to help reach milestones and avoid replication, the reviewers consider that the amount of collaboration and communication required to ensure this leads to the 'creation of complex administrative processes' (ACG 2011b:79). Research into the importance of healthy brain development in early life to explain later success in school and work is used by the reviewers to advise increased investment into antenatal care and care for children (aged 0–3) and their families. Strengthening partnerships with the private sector (including non government organisations) and with key industry and community organisations, and developing a master plan for New South Wales aimed at enhancing employment and economic development for Aboriginal people are felt to be necessary steps. The report cites the New South Wales Ombudsman as saying in 2011:

> The absence of a body with overall responsibility for Aboriginal employment and economic capacity in NSW creates a high risk of a 'piecemeal' approach to addressing one of the major underlying causes of Aboriginal disadvantage (ACG 2011b:90).

Source: ACG 2011b.

Regional differences

Between 2006 and 2011, there was a minimal increase in the employment rates in major cities of Indigenous and non-Indigenous Australians. Regional and remote areas have seen a decline in the employment rate for Indigenous Australians (Table 18). The decline has been greater for remote areas than for regional areas. The gap has increased considerably for remote areas.

Table 18: Employed persons as a percentage of the population, persons aged 15–64, 2006 and 2011 (%)

	2006		2011		Percentage point difference between Indigenous and non-Indigenous	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	2006	2011
Major cities	49.5	71.4	50.5	71.7	–21.9	–21.2
Regional	43.4	69.1	42.6	70.4	–25.7	–27.8
Remote/very remote	42.8	78.5	37.6	79.7	–35.7	–42.1
Total	**45.3**	**70.9**	**44.3**	**71.5**	**–25.6**	**–27.2**

Note: Based on counts that are not adjusted to estimated resident population.

Sources: Derived from 2006 Census of Population and Housing (ABS 2006) and 2011 Census of Population and Housing (AS 2011), using data for ARIA.

Finding work in strong and weak economies

An issue is whether Indigenous Australians are particularly affected by the economic cycle. Gray et al. (2012) used the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) 1994 and NATSISS 2008 data to investigate how Indigenous Australians fare in good economic times. They found that, on average, their non-CDEP employment rate increased from 31.1% to 50.5%. For men, it increased from 37.9% to 58.8%; for women, it increased from 25.0% to 42.9%. This increase was far greater than for all Australians (5% for men and 10% for women). Employment rates for Indigenous Australians still lag behind those for non-Indigenous Australians (84.8% for males and 69.4% for females in 2008). A key finding of the analysis is that male employment is becoming the norm for Indigenous Australians in non-remote areas where two-thirds of males are employed. They conclude that this increase in Indigenous employment in non-remote areas has been driven by strong conditions in the economy, which have lifted the availability of jobs for everyone. Other changes that have worked to increase Indigenous employment in unsubsidised labour markets include policy changes in income support legislation, Indigenous labour market programs, and wage assistance. An increase of jobs in the mainstream economy for Indigenous Australians not only makes them more financially secure but also means more opportunities for children and other family members to experience positive male role models in the household. Non-CDEP employment has also increased in remote areas but nowhere near the same extent.

Hunter (2007) looked at how Indigenous Australians fared in the 'adverse economic conditions' following the global financial crisis. He concluded: 'The ongoing mismatch between the skills demanded by employers and the skill sets that Indigenous people possess means that Indigenous workers are likely to be at the back of the job queue in the current economic downturn' (Hunter 2009:8).

Implementing effective community engagement processes

Diversity Council Australia, in conjunction with Lend Lease Corporation and Reconciliation Australia, consulted Indigenous 'thought leaders and engagement and employment practitioners' (Constable et al. 2013:4) to investigate how private companies can better engage with Indigenous communities to help improve mainstream employment outcomes for Indigenous Australians. The respondents noted some improvement in private company engagement with Indigenous communities in the last 5 to 10 years; however, they concluded there was considerable room for further improvement. Eight key characteristics were identified for effective engagement between private sector corporations and Indigenous communities:

- appointing Indigenous Australian staff to liaise with community stakeholders
- being clear about which communities are to be involved
- respecting geographical boundaries and locating the right people in these communities to speak to
- setting up strategic plans that allocate responsibility and accountability
- having joint approaches to capacity building with benefits for communities and corporations
- implementing culturally safe work practices where Indigenous Australians feel comfortable
- communicating with communities in straightforward and transparent ways
- developing relationships that are ongoing and built on trust
- developing metrics to measure the long-term sustainability of employment outcomes, and the relationship and respect between Indigenous and non-Indigenous Australians.

Creating opportunities in the visual arts

Opportunities for Indigenous Australians to participate in the paid workforce are provided by the visual arts sector as well as by specific Working on Country projects. The visual arts sector provides Indigenous artists with opportunities to make a regular income from creating original pieces of art work (ORIC 2012). This is especially important in those locations where there are few or no opportunities for other forms of paid employment. For instance, while 16% of Indigenous Australians in non-remote areas are engaged in visual arts activities, this figure increases to 22% in remote areas. In addition, females are more likely than males to be so involved (20% and 14%, respectively).

A case study evaluation of a regional Aboriginal art centre (the Wirnda Barna Art Centre, in Western Australia) (Cooper et al. 2012) found that involvement with the centre provided a range of social and economic benefits for both individual artists and the community in general. Positive employment and income outcomes have also been found for the Working on Country program (ACG 2011a). This evaluation found the cost of the program was 23% lower than the budget cost because, as well as reducing government welfare payments, it contributed to increased government revenue from taxes. The median gross income for participants was at levels above the gross median income for all non-Indigenous Australians. The program was also found to compare well with other environmental programs because it, too, is concentrated in high unemployment areas.

It is important to note that although it is commonly accepted that paid employment is a good thing and diminishes social exclusion, it is also true that there are positive roles other than a 'paid job' that can benefit individuals and their communities (for example, volunteering activities, cultural activities and cultural roles).

Valuing cultural attachment

Outcomes for VET participation, educational achievement and labour market participation have been found to be higher for those individuals with high cultural attachment (Dockery 2013). Cultural attachment is categorised by using a 4-dimensional model of cultural engagement (that is, participation in cultural events, cultural identity, language, and participation in traditional economic activities). Dockery found that the probability of being in the labour force increases by about 50% for each additional year of education completed. Dockery cannot say whether strong cultural attachment leads to better outcomes or whether better outcomes leads to high cultural attachment, as individuals committed to one area of their lives might very well carry this motivation to other areas. Nevertheless, such positive findings should be used to support the need for flexibility in training delivery so that Indigenous students can have time to attend to some of their cultural obligations.

Dockery also found that in urban areas Indigenous Australians who participate in cultural events are more likely to have better labour market outcomes and educational achievement. Motivation to access the resources that these cultural networks bring may also contribute to successful outcomes. Individuals with strong cultural identity (more strongly observed in remote areas) are more likely to have higher VET participation and qualification completions if they have taken courses in numeracy and literacy, and trade and labouring skills. These courses may better enable them to find a job.

Dockery also found that if Indigenous people speak an Indigenous language at home they will experience lower training participation and poorer education and labour market participation. This seems to contradict his earlier findings that those who participate in cultural events are more likely to have better labour market and educational outcomes. A possible explanation (suggested by Dockery) is that the speaking of an Indigenous language at home may act as a proxy for poor English language skills, and that it is poor English language skills that interfere with success in education and training and participation in the labour market, and not the speaking of the Indigenous language.

Biddle (2010a) confirms these insights when he finds that those with poor English language skills are less likely to be attending high school. He notes: 'It is not speaking an Indigenous language that is associated with lower attendance at high school but rather English language skills themselves' (Biddle 2010a:19). He also concluded that higher levels of education seemed to facilitate rather than hinder maintaining Indigenous culture and language.

Biddle (2011) found that participation in cultural events, ceremonies and organisations has a strong association with mainstream employment. Individuals who completed Year 12 had a higher probability than those who had completed Year 9 or less, Year 10 or Year 11. Those with a higher post-school qualification (a degree or a diploma) also had a stronger probability than those without. Biddle also found an association between post-school qualifications and speaking, understanding and learning an Indigenous language. Hunter (2007) found that Indigenous youth aged 13 to 17 were more likely to attend school if they speak an Indigenous language.

Migrating to other labour markets

Biddle (2010b) looked at what happens to Indigenous Australians when they migrate to other labour markets. He found that migrants to urban areas do not do as well in finding jobs as those who are left behind. Migrants from smaller remote, scattered settlements into the remote towns or centres also do poorly. Such findings should not surprise. First, it could be that in moving from a remote area to an urban area these migrants free up more employment opportunities for those left behind by decreasing the competition for available jobs. Why those who move do not do better in urban areas may have far more to do with the skills and experience they bring with them than to the fact that they have migrated. It could also be that they have not established the networks they require to get a job. Nevertheless, it is important that such options remain open for Indigenous Australians through government voluntary re-settlement programs that have some in-built strategies to help them navigate the new labour markets.

Box 8: Community Development and Employment Programs

The CDEP provide services and projects through two streams: Community Development, which focuses on supporting and developing Indigenous communities and organisations to ensure community work is consistent with local job opportunities, and Work Readiness, which provides training and work experience opportunities to help job seekers to develop their skills and find work outside of the CDEP.

The results of the review of the CDEP (DofD 2009a) found that, in view of the fact that CDEP operated in 'economies substantially characterised by the recirculation of public income and the consumption of public goods and services' (DofD 2009a:6), it had produced 'modest outcomes'. Here the CDEP often acted as an internal labour market which tended to limit the opportunities for participants to be adequately prepared for employment in the open and unsubsidised sector.

The aim of the 2009 reforms to the CDEP was for the Work Readiness stream to take priority over the Community Development stream. However, the review found that placements tended to be in the Community Development rather than the Work Readiness stream. The review suggested that this needed to be addressed as there were no differences in incentives for a provider by placing a participant in a Community Development project or a non-CDEP job.

It concluded that as a labour market program CDEP should focus on preparing participants for real jobs in the open labour market (wherever they are found), being strong enough to combat 'entrenched poor behaviour', and in remote communities assisting participants to experience workplaces outside of the communities in which they live. This would address the negative influences of inter-generational unemployment. The review also noted that the CDEP was not adequately suited to addressing community development and economic development and should concentrate on labour market preparation for their participants. To address the fact that for some CDEP became a 'destination rather than a stepping stone', the government has limited CDEP attachment to 12 months.

The Australian Government recently undertook a review of Indigenous employment services in remote regions and found that while market-driven employment services suited urban and regional locations, they did not adequately address unemployment issues in remote Australia. Existing services provided short-term rather than long-term results. The review led to the introduction of the RJCP, in July 2013. The RJCP replaces the JSA, Indigenous Employment Program, CDEP and Disability Employment Services in remote communities. The program aims to adopt a more tailored approach for individuals as well as for each remote region. It also aims to simplify service delivery by having all employment services under one umbrella program and relying on one service provider for each remote region.

CDEP providers for non-remote communities outside the RJCP remote locations will have their funding agreements extended for up to 12 months, to 30 June 2014. The government will consult with the 8 CDEP providers and their communities about ways to deliver employment and participation services <http://www.dss.gov.au/our-responsibilities/Indigenous-australians/programs-services/communities-regions/community-development-employment-projects-cdep-program> viewed November 2013.

Sources: Australian Government 2011; DoFD 2009a.

Occupational differences

There is a close link between educational attainment and entry into occupations. In 2011, Indigenous Australians were more likely to work in occupations requiring lower levels of educational attainment (Table 19).

Table 19: Employed persons aged 15 to 64 by occupation and Indigenous status, 2006 and 2011 (%)

	2006		2011	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Managers	5.5	13.0	6.3	12.7
Professionals	11.2	20.0	13.0	21.5
Technicians and trades workers	12.0	14.5	12.9	14.3
Community and personal service workers	15.3	8.8	16.6	9.7
Clerical and administrative workers	12.5	15.1	13.1	14.8
Sales workers	6.8	10.0	7.5	9.5
Machinery operators and drivers	8.2	6.6	9.2	6.5
Labourers	23.7	10.2	17.5	9.2
Occupation not known	4.8	1.7	3.8	1.7
Total	**100.0**	**100.0**	**100.0**	**100.0**

Note: Based on counts that are not adjusted to estimated resident population.

Sources: Derived from 2006 Census of Population and Housing (ABS 2006) and 2011 Census of Population and Housing (ABS 2011).

Compared with their non-Indigenous counterparts, Indigenous Australians with diploma and above qualifications are under-represented across all ANZSCO occupational categories, especially in professionals, and technicians and trades workers categories. This under representation at the diploma and above level is balanced by over-representation by Indigenous Australians with a certificate and those without any non-school qualifications (Table 20).

Table 20: Employed persons aged 15 to 64 by Indigenous status, occupation and highest qualification level, 2011 (%)[(a),(b)]

	Diploma or higher	Certificate	No non-school qualification	Not known	Total
Indigenous					
Managers	30.5	25.2	39.9	4.3	100.0
Professionals	52.2	18.2	24.8	4.8	100.0
Technicians and trades workers	4.1	51.9	40.1	3.8	100.0
Community and personal service workers	16.0	31.5	45.7	6.8	100.0
Clerical and administrative workers	16.1	29.4	49.8	4.7	100.0
Sales workers	5.3	18.0	71.9	4.8	100.0
Machinery operators and drivers	2.4	22.9	68.3	6.3	100.0
Labourers	2.0	18.1	72.9	7.0	100.0
Occupation not known	9.9	17.0	56.3	16.8	100.0
Total	**15.4**	**27.0**	**51.6**	**5.9**	**100.0**
Non-Indigenous					
Managers	45.1	19.6	32.2	3.1	100.0
Professionals	82.1	6.3	9.2	2.5	100.0
Technicians and trades workers	13.9	56.3	26.8	3.0	100.0
Community and personal service workers	30.1	27.1	37.6	5.2	100.0
Clerical and administrative workers	30.6	19.4	46.0	4.0	100.0
Sales workers	17.7	16.2	62.1	4.0	100.0
Machinery operators and drivers	8.5	24.8	61.5	5.1	100.0
Labourers	10.1	19.7	64.8	5.4	100.0
Occupation not known	27.5	18.6	42.0	12.0	100.0
Total	**36.5**	**22.7**	**37.0**	**3.9**	**100.0**

(a) 'Occupation not known' includes level of education inadequately described and level of education not stated.

(b) Based on counts that are not adjusted to estimated resident population.

Source: Derived from the 2011 Census of Population and Housing (ABS 2011).

Box 9: Review of the Aboriginal Environmental Health Officer Training Program

The Aboriginal Environmental Health Officer Training Program aims to increase the proportion of Aboriginal Environmental Health workers in the New South Wales Environmental Health sector (RPR Consulting 2010). This program provides university studies and support for Indigenous people to become Environmental Health Officers. It is a 6-year work integrated program where trainees are employed while undertaking their university studies with Area Health Services (which must then employ these trainees on completion for 2 years).

A review of this program (RPR Consulting 2010) found that one-third of a total of 24 trainees had completed their programs to qualify as Environmental Officers. Of these, only 2 were in permanent positions.

Having an Aboriginal Environmental Health Officer Training Program has provided the government with some benefits including an increased concentration on the environmental health of Indigenous communities, and increased partnerships with local councils. The key barriers to completion for trainees were related to academic difficulties (especially the science and maths components) and to pressures created by family commitments and by inadequate on-the-job supervision. The length of the course also provided some challenges as maintaining the commitment and motivation to persist with it for 6 years provided its own pressures. Other pressures included living on a trainee wage for such an extended time.

Earlier completion was not felt to be the solution as that meant trainee attachment to the program, including the 2-year permanent position on completion, would cease much earlier. Lack of employment permanency once trainee attachment to the program ceased was another major concern. The review concluded that the program was much more expensive than other health programs such as the nursing cadetship program. It recommended better support be given to trainees in terms of role clarification, and information before the program began on the type of commitment required to complete the program.

Source: RPR Consulting 2010.

Importance of educational attainment in closing the employment disparity gap

We have seen in previous sections large disparities in both educational and employment levels between Indigenous and non-Indigenous Australians. In this section, we quantify the relationship between the two. That is, we seek to determine the extent to which the disparity in employment outcomes can be attributed to the disparity in educational attainment. The technical details are at Appendix A.

A standard decomposition methodology is used, based on cross-tabulations of educational attainment and employment. To make the analysis somewhat richer, the calculations are done within age groups and separately for males and females. In addition, a fine educational classification is used that interacts certificates with Year 12 completion; this is important because individuals who complete Year 12 tend to do different types of certificates (typically ones that pay better).

It is stressed that this type of analysis is an accounting approach—it does not tell us anything about causality or behavioural relationships between employment, education and other factors.

The relationship at an aggregate level is shown in Table 21.

Table 21: Employment rate[(a),(b)] by educational attainment, Indigenous status and sex, persons aged 15–64, 2011 (percentage points)

	Males		Females	
	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous
Postgraduate degree	0.89	0.86	0.81	0.84
Graduate diploma and graduate certificate level	0.90	0.90	0.84	0.83
Bachelor degree	0.89	0.84	0.80	0.82
Diploma	0.86	0.80	0.76	0.72
Certificate III and IV, Year 12	0.89	0.82	0.77	0.70
Certificate III and IV, no Year 12	0.86	0.73	0.73	0.63
Certificate III and IV, highest school level not known	0.79	0.63	0.64	0.48
Certificate I and II and level not known, Year 12	0.79	0.62	0.69	0.56
Certificate I and II and level not known, no Year 12	0.68	0.45	0.61	0.39
Certificate I and II and certificate not further defined, highest school level not known	0.30	0.09	0.31	0.11
No non-school qualification, Year 12	0.74	0.61	0.65	0.51
No non-school qualification, no Year 12	0.61	0.39	0.50	0.28
No non-school qualification, highest school level not known	0.51	0.27	0.42	0.19
Overall	**0.77**	**0.47**	**0.66**	**0.41**

(a) Employment rates refer to the number of people in a category who are employed divided by the number of people in the category.

(b) Based on counts that are not adjusted to estimated resident population.

Source: Derived from the 2011 Census of Population and Housing (ABS 2011).

We see that the employment rates for Indigenous males are 30 percentage points lower than for non-Indigenous males (0.47 and 0.77, respectively). The corresponding figure for females is 25 percentage points, but on a lower base. Table 21 also shows the relationship between educational attainment and employment. The non-Indigenous female rates illustrate this well, particularly if we ignore the categories in which educational attainment is unknown (the numbers are small and the groups potentially quite heterogeneous). We see that those with a degree have an employment rate of 80% or higher and those with a diploma or certificate III/IV between 70% and 80%. Of the remaining groups, we see an interplay between having a certificate I/II and Year 12. So women with Year 12 completion have higher employment rates than those without it but with a certificate I/II. On the other hand, those with a certificate I/II and Year 12 completion have a higher employment rate than those with a certificate I/II but not a Year 12 completion. Similarly, women with a certificate III/IV have an employment rate higher than those with a certificate III/IV but not Year 12 completion. Early school leavers without a post-school qualification have the lowest employment rate at 50%, which is 34 percentage points less than the category with the highest employment rate.

The decomposition splits the difference in employment rates into three components:

- the 'net' difference in employment rates, after taking into account differences in education and the age structure. Essentially, it represents the difference between Indigenous and non-Indigenous employment rates within each age by sex by educational qualification cell
- the 'education effect'—that part of the overall difference that can be attributed to differences in educational attainment
- the 'demographic effect'—that part of the overall difference that can be attributed to differences in the age distribution.

In addition, there is a residual (the formula is only exact for small differences).

Tables 22 and 23 show the decomposition for males and females, respectively. To avoid being too confusing, we express the employment rates as decimal fractions (for example, the non-Indigenous employment rate for males is 0.77) but the decomposition is expressed as percentages. So the Indigenous employment rate is 47.4% of the non-Indigenous rate for males. As noted in Appendix A, the percentages are calculated at the midpoint of the Indigenous and non-Indigenous values.

As explained earlier, the percentage difference between the Indigenous and non-Indigenous employment rates are decomposed. This means that the 'education effect', the 'demographic effect', the 'net difference' and the 'residual' add up exactly to the percentage difference between the Indigenous and non-Indigenous employment rates. What is of interest is the variation in magnitudes of these components and, in particular, the importance of the education effect relative to the other components.

Table 22: Differences between Indigenous and non-Indigenous employment rates[(a)], males aged 15–64, 2011

	Employment rates						
Age group (years)	Non-Indigenous	Indigenous	Percentage difference[(b)]	Net difference (%)	Education effect (%)	Demographic effect	Residual (%)
15–24	0.57	0.36	45.1	19.0	34.7		–8.6
25–34	0.86	0.54	45.6	14.0	54.0		–22.4
35–44	0.87	0.55	44.7	19.9	42.1		–17.4
45–54	0.84	0.55	42.9	23.9	34.4		–15.4
55–64	0.67	0.44	41.8	24.0	34.9		–17.2
Total	**0.77**	**0.47**	**47.4**	**20.0**	40.9	8.3	–21.7

(a) Based on counts that are not adjusted to estimated resident population.

(b) The percentage difference is the difference between two values divided by the average of the two values expressed as a percentage.

Source: Derived from the 2011 Census of Population and Housing (ABS 2011).

Table 23: Differences between Indigenous and non-Indigenous employment rates[(a)], females aged 15–64, 2011

	Employment rates						
Age group (years)	Non-Indigenous	Indigenous	Percentage difference[(b)]	Net difference (%)	Education effect (%)	Demographic effect	Residual (%)
15–24	0.57	0.32	57.0	27.9	37.8		–8.7
25–34	0.71	0.41	53.1	12.2	61.5		–20.6
35–44	0.72	0.49	38.0	13.6	37.1		–12.7
45–54	0.75	0.51	38.1	22.5	23.8		–8.2
55–64	0.53	0.35	40.7	23.1	24.9		–7.3
Total	**0.66**	**0.41**	**47.0**	**19.1**	37.7	5.1	–14.9

(a) Based on counts that are not adjusted to estimated resident population.

(b) The percentage difference is the difference between two values divided by the average of the two values expressed as a percentage.

Source: Derived from the 2011 Census of Population and Housing (ABS 2011).

We see that for males the 'education effect' is 40.9 percentage points (Table 22). That is, 40.9 percentage points of the overall difference of 47.4% between the Indigenous and non-Indigenous employment rates can be attributed to differences in education. Similarly, for females, the 'education effect' is 37.7 percentage points of the 47.0% difference between Indigenous and non-Indigenous employment rates.

The clear message from tables 22 and 23 is that the 'education effect'—that is, the differences in employment attributable to differences in educational attainment between the Indigenous and non-Indigenous populations—is a critical factor in the differences in the employment rates. The implication is that addressing the educational disparity between the two populations would go a long way toward reducing the gap in employment rates. However, it would not completely reduce the gap; the 'net difference' effects are quite large (20.0% for males and 19.1% for females), indicating that Indigenous employment rates are typically poorer, even after we take education into account.

The size of the residual is noted. This suggests that there is an interaction between the differences in employment rates and educational attainment. Table 24 shows how the differences vary by educational attainment.

Table 24: Percentage difference between Indigenous and non-Indigenous employment rates[(a)], by educational attainment, 2011

	Males	Females
Postgraduate degree	3.7	–3.8
Graduate diploma and graduate certificate level	0.1	1.7
Bachelor degree	5.2	–2.5
Diploma	7.9	4.9
Certificate III and IV, Year 12	8.5	10.0
Certificate III and IV, no Year 12	15.6	15.4
Certificate III and IV, highest school level not known	22.8	29.1
Certificate I and II and level not known, Year 12	23.6	20.9
Certificate I and II and level not known, no Year 12	41.4	43.6
Certificate I and II and certificate not further defined, highest school level not known	110.2	91.9
No non-school qualification, Year 12	18.8	24.3
No non-school qualification, no Year 12	45.1	56.0
No non-school qualification, highest school level not known	60.0	76.3

(a) Based on counts that are not adjusted to estimated resident population.

Source: Derived from the 2011 Census of Population and Housing (ABS 2011).

The entries in Table 24 represent the differences in the employment rates of Indigenous and non-Indigenous people. For example, taking the penultimate row, we see that for males the Indigenous employment rate is 45.1 of the non-Indigenous rate. That is, among those who have no non-school qualification and did not complete Year 12, the proportion of Indigenous males who are employed is less than half the corresponding proportion of non-Indigenous males.

We see that at the highest levels of educational attainment there is little difference between the employment rates of the Indigenous and non-Indigenous populations. Indeed, in the degree and post-graduate degree groups, the female Indigenous individuals have higher employment rates than their non-Indigenous counterparts. At the other end of the educational attainment scale, particularly those groups that have not completed Year 12, the differences are largest. This means that increasing educational attainment levels of the Indigenous population will have a 'double whammy' effect. First, it reduces the difference between the employment rates by virtue of increasing the size of groups with higher employment rates. Second, it gives more weight to the higher level of attainment categories where the differences between the employment rates of the Indigenous and non-Indigenous populations are relatively small.

Of course, this analysis is completely descriptive. It does not explain why there are differences between the two populations or how those differences could be reduced. Nevertheless, the analysis makes it clear that education is a key element if the gap between Indigenous and non-Indigenous employment rates is to be closed.

Multiple barriers to economic participation

It is clear that key factors driving economic participation (especially labour force status) are similar for both Indigenous and non-Indigenous Australians. However, Indigenous Australians experience a range of barriers. For example, in addition to lower levels of education, they have poorer health and more difficulties with English, the latter more so in remote areas than urban areas (Kalb et al. 2012). Indigenous Australians are more likely to have higher rates of incarceration, and inadequate housing and accommodation than non-Indigenous Australians. They also lack access to those social networks (social capital) which may help to facilitate employment.

Poorer health

Indigenous Australians have higher rates of hospitalisation and death due to the use of alcohol and other drugs (Gray & Wilkes 2010). Gray and Wilkes cite studies by Allsop (2008) to report that many of these users have mental and other behavioural issues that can have negative impacts on family and community members, and can contribute to inter-generational influences on unborn children, other children and adolescents. They conclude that 'whether they use them or not, all Indigenous Australians are impacted upon by alcohol and other drugs in some way' (Gray & Wilkes 2010:3). Such harmful behaviours contribute to family dysfunction, which in turn acts as a key barrier to participation in education and training and in employment.

Prior involvement with the criminal justice system

Having been arrested reduces the probability of employment. This is especially pertinent for Indigenous Australians who are more likely to be arrested than non-Indigenous Australians (Borland & Hunter 2000, cited in Graffam & Shinkfield 2012). Indigenous Australians also represented 27% of the prison population in 2012, with 92.5% of them male (ABS 2012b). Where the age-standardised imprisonment rate for Indigenous Australians was 1,914 prisoners per 100,000 of the adult Indigenous population, the rate for non-Indigenous prisoners was 129 per 100,000 of the adult non-Indigenous population. The highest Indigenous/non-Indigenous ratio was in Western Australian (20 times higher), followed by South Australia (16 times higher); the lowest was Tasmania (4 times higher). Hospitalisation rates of Indigenous ex-prisoners for health and mental disorders are also greater than those for non-Indigenous ex-prisoners. These compound the difficulties faced by Indigenous ex prisoners in engaging in education and training and the labour market (Graffam & Shinkfield 2012).

Inadequate housing and accommodation

Indigenous Australians experience disproportionate levels of inadequate housing and accommodation. The ABS (2012a) reports that on Census night 2011 one-quarter of all those who reported as homeless were Indigenous Australians. Of these, 75% were living in 'severely' crowded dwellings (similar to the situation in 2006); 12% were in supported accommodation for the homeless; and 6% were in improvised dwellings, tents or sleeping out. In contrast, 30% of non-Indigenous Australians were living in 'severely' crowded dwellings; 20% in supported accommodation; and 7% were in improvised dwellings, tents or sleeping out.

Limited access to employment networks

An individual's access to social and family networks and resources is commonly seen to help individuals look for or get a job. Such networks and resources come under the umbrella term of social capital. The role of social capital in promoting increased attachment to the labour force has been explored by Vurens van Es and Dockery (2008). Using the 2002 NATSISS data and results from their multivariate analyses of these data, these researchers found that Indigenous Australians with a large number of diverse social networks were far more likely to participate in mainstream employment than those who did not have these networks. The findings are mixed, however. For men, access to Indigenous cultural networks is found not to be substantial for labour market participation. Access to sporting networks was found to be substantial for females (across urban and remote locations) and for males in regional areas, while involvement in volunteer networks has a positive effect for labour market participation despite urban or remote location. Access to support networks improves attachment to the labour market in urban areas but not for regional labour markets, while it has a positive effect for women across locations.

Racial discrimination and negative employer perceptions

There are other factors not under the control of individuals that affect their success in the labour market, but they are harder to prove. This is the case with claims of discrimination. What might be perceived as discrimination might in fact be inadequate level of skills for specific jobs or organisational fit. Nevertheless, the results of some recruitment experiments are telling. This question (although only for entry-level workers) has been investigated by Booth et al. (2012). These researchers used a technique used by sociologists to measure discrimination (including for gender, age, obesity, facial attractiveness and sexual orientation) to see the extent to which individuals from different ethnic groups suffer discrimination in the Australian labour market. Other discrimination studies may use actors to turn up for job interviews, apply to rent accommodation and to negotiate to buy a car.

The researchers applied online for 5,000 entry-level jobs (comprising waiting, data entry, customer service and sales jobs). They forwarded 'fictional' applications, which differed only by the 'racially or ethnically identifiable' name written in large bold letters at the top of the application. The mean call-back rate for names that sounded Anglo-Saxon was 35% of the time. The researchers found that an Indigenous job seeker would require 35% more applications to get the same call back rate, but considerably fewer than Chinese or Middle Eastern job seekers. The state of the labour market also had an impact on differences between the 'Anglo-Saxon' group and the 'ethnic' group. Booth et al. concluded that 'in a stark reminder of how far our country has yet to go, we have found clear evidence of discrimination against ethnic minorities…at the initial stage of the job-finding process' (Booth et al. 2012:567).

That the attitudes of employers influence the extent to which organisations recruit and hire Indigenous staff is also illustrated by findings from the DEEWR 2010 Employer Survey (cited in the Evaluation of Job Services Australia 2009–2012 (Australian Government 2011). This survey found that of the 1000 or so responding employers, 42% currently employed or had in the past employed Indigenous staff. Around 13% of respondents had a written or unwritten policy to employ Indigenous workers. Those with organisations having a formal policy in place were more likely to report an increase in the number of Indigenous staff (in the previous 12 months) compared with those without a formal policy in place (40% and 30%, respectively). Over two-thirds of employers replied that they did not see any specific challenges in employing Indigenous staff. Challenges identified by those who felt there were some specific challenges were mainly to do with the perceived lack of required skills and qualifications, and perceptions about unreliability and inconsistency. In addition, around one-fifth of the employers cited the difficulty of retaining Indigenous staff. Although employers were generally positive about employing Indigenous staff, the fact that between 12% and 15% of respondents agreed or strongly agreed that Indigenous staff would face issues to do with fitting into the workplace, with cultural commitments and with requirements for extra flexibility underscores the reality of continued negative perceptions among employers.

Gray and Hunter's analysis of the Indigenous Job Seeker Survey data collected in 1996 and 1997 (Gray & Hunter 2005) indicated that Indigenous job seekers had lower rates of job retention. Why this is so is difficult to know without better data on reasons individuals leave their employment. A study by Campbell and Burgess (2001, cited in Gray et al. 2012) suggests that another explanation for these higher attrition rates is that Indigenous Australians are more likely to be in casual and seasonal work compared with other workers. These lower job retention figures may also account for employer perceptions about the lack of persistency of Indigenous workers in jobs.

A survey conducted by AUSPOLL (GenerationOne & AUSPOLL 2011) investigated perceived barriers to Indigenous employment. Respondents from general community and Indigenous groups were in general agreement about the major factors that contribute to Indigenous unemployment. Both groups indicated that Indigenous people lack 'the basic literacy and numeracy skills necessary to get jobs' (61% and 57%, respectively), and the 'job specific training that allows them to get jobs' (48% and 52%, respectively). They also belived that a key factor in Indigenous unemployment is that Indigenous people are 'living in areas where there are no jobs' (58% and 57%, respectively), and that they are not 'healthy enough to work' (20% and 24%, respectively).

Box 10: Labour force status is affected by multiple factors

Labour force status for Indigenous Australians and non-Indigenous Australians is affected by a combination of factors (Kalb et al. 2012). The researchers used information from 4 data sets: the 2004 National Aboriginal and Torres Strait Islander Health Survey, the 2008 NATSISS, the Household Income and Labour Dynamics Australia Survey 2004 and 2008 waves, and the Census of Population and Housing 2006. They used descriptive information as well as multivariate analyses to compare Indigenous and non Indigenous Australians and the factors that drive differences in participation and outcomes in employment and education and training. Decomposition methods are used to compare Indigenous and non Indigenous groups.

Indigenous males and females with similar characteristics to their non-Indigenous counterparts tend to have poorer labour force outcomes. That is, they are less likely to be in full-time employment, and have higher rates of unemployment and non-participation. Those with a post-graduate degree (96 Indigenous Australians were in this group), however, are marginally more likely than non-Indigenous Australians to be in full-time employment.

Kalb et al. note that the gap in labour market attachment between Indigenous and non Indigenous females can be attributed to observable behaviours and characteristics. However, there is less of the labour market attachment gap between Indigenous and non Indigenous men that can be explained in this way. The researchers speculate that some of the unexplained gap for men could be due to discrimination, or lack of good job-related family networks. Other factors could be reduced motivation to look for jobs or stay in jobs because of actual or perceived discrimination, and also because of the constant effort involved in persisting with the job search process. The lack of local job opportunities and/or access to good opportunities for secondary or higher education, especially in remote areas, must also be considered.

Source: Kalb et al. 2012.

Outcomes from key employment and labour market programs

Indigenous Australians have access to mainstream employment and labour market programs—for example, JSA (already discussed) and Disability Employment Services.

Here we present a selection of these programs. Information has been gleaned from available websites for different programs, available evaluations and information provided by government agencies with responsibility for the various programs. At Appendix B, we present a greater selection of programs aimed at improving employment outcomes.

Box 11: Selected programs aiming to improve employment outcomes

Program targeted at improving employment outcomes	Participation and progress to date
Australian Employment Covenant This is a national industry-led initiative which aims to provide employment opportunities for Indigenous people. It provides job-ready training, job-specific training, job-placement and post-placement mentoring support. Target groups: Individuals, employers, non-government organisations. Timeline: From 2008. <http://www.Indigenousjobsaustralia.com.au/index.php?option=com_content&view=article&id=11&Itemid=32>	Not fully evaluated at time of writing. The website reports that by 2012 there were 334 employers committing 60,061 jobs. At the same time, there were 12,000 jobs that were actually filled by employers. A total of 71% of workers were retained by 6 months. At the end of 2012, the Australian Employment Covenant joined with GenerationOne to support other employers providing jobs to Indigenous Australians under the Reconciliation Action Plans. <http://generationone.org.au/employers/covenant-journey>
Indigenous Employment Program The program aims to increase opportunities for Aboriginal and Torres Strait Islander people, their communities and employers through employment, business support and economic development activities. Employers and other organisations may receive assistance to support sustainable employment. This may include to engage with Indigenous communities and develop local and regional strategies to assist people into jobs and business; to encourage Indigenous Australians to take up employment opportunities such as work familiarisation courses; to provide on-the-job training and up-skilling for potential and current employees; to provide complementary support for traineeships, cadetships and apprenticeships; to provide accredited language, literacy and numeracy training; to offer work exposure opportunities and work experience; to deliver cross-cultural awareness training; to provide and receive mentoring support and career guidance; to recruit, commence and retain Indigenous Australians; to contribute to the costs of employment through a wage subsidy; to provide work experience to Indigenous Australians undertaking tertiary qualifications; to train personnel in culturally appropriate recruitment and workplace practices and in training Indigenous Australians in human resource management; to develop marketing information sessions via local Indigenous newspapers, circulars or radio stations; or to establish employer networks to promote business-to-business support, leadership, mentoring and business, philanthropic or community partnerships. Target groups: Job seekers, employers, service providers. Funding: $778.8 million over 5 years from 2009–10. <http://employment.gov.au/Indigenous-employment-program-iep>	*Remote areas:* From 1 July 2013, program eligibility requirements will change to reflect the Australian Government's introduction of the RJCP in remote areas. In 60 remote regions across Australia, the program has transitioned into the RJCP along with JSA, Disability Employment Services and the CDEP program. *Non-remote areas (including large towns in remote areas):* From 1 July 2013, the Indigenous Employment Program will focus on supporting activities that promote employment outcomes and participation in economic activities for Indigenous Australians living in urban and regional areas, including Alice Springs, Broken Hill, Broome, Esperance, Geraldton, Kalgoorlie, Mt Isa, Port Augusta, Port Lincoln and Whyalla. <http://www.bulletpoint.com.au/wp-content/uploads/2013/03/Remote-Jobs-and-Communities-Program-Frequently-Asked-Questions.pdf>

Continued

Box 11 (continued): Selected programs aiming to improve employment outcomes

Program targeted at improving employment outcomes	Participation and progress to date
Remote Jobs and Communities Program The Australian Government is introducing reforms to employment, participation and community development services in remote Australia. From 1 July 2013, the JSA, Disability Employment Services, the CDEP and the Indigenous Employment Program in remote Australia will transition to the new RJCP. The RJCP aims to build on the strengths of the existing programs, providing a more streamlined and flexible employment and participation service in remote Australia. The RJCP will operate in 60 remote regions across Australia. The JSA, Disability Employment Services and the Indigenous Employment Program will continue to operate in non-remote locations, including in a number of large towns in remote areas where mainstream services provide an appropriate level of support and assistance for job seekers. Key features of the new program are employment and participation activities, strategies and resources including personalised support for job seekers ($1.1million); the Remote Youth Leadership and Development Corps (Youth Corps), which has been allocated $89 million, providing 12,000 places over 5 years to help young people move successfully from school to work; and the Community Development Fund, which has been allocated $237.5 million to strengthen community capacity by building strong social and economic foundations. The development of Community Action Plans has also been identified as a means to help communities to identify the actions needed to overcome barriers to employment and participation. <http://www.dss.gov.au/our-responsibilities/Indigenous-australians/programs-services/communities-regions/community-development-employment-projects-cdep-program/remote-jobs-and-communities-program-rjcp>	RJCP providers need to adhere to the Service Guarantee and to comply with the Code of Practice. These have been developed in consultation with stakeholders. There is a code of practice for the program itself, and service guarantees for communities, job seekers and employers. A resources kit and video have been developed to help implement the program. Successful providers began to be announced in April 2013. The 60 remote regions also included the Aurukun–Coen region under the Cape York Welfare Reform communities. <http://www.humanservices.gov.au/customer/services/centrelink/remote-jobs-and-communities-program>
Working on Country This program aims to support Indigenous aspirations in caring for country. Program activities include site management, and nationally accredited training and career pathways in land and sea management in partnership with others. Target groups: Individuals, communities and service organisations. Funding: $243.1 million until July 2013; $320 million from July 2013 for 5 years.	The *Reporting back to you* publication noted that in 2007 there were 100 rangers appointed but by May 2012 there were 690 rangers in 95 ranger teams nationwide (DSEWPaC 2013). An independent assessment of the social outcomes of the program (Urbis 2012) noted that it had a range of economic, social, cultural and environmental benefits. Rangers saw the jobs as real jobs and compared with CDEP employment they received better income and conditions, more interesting work and ongoing employment. The key benefit of being a ranger was the income because of the benefits it provided in terms of buying power, and in meeting living expenses. Project managers reported that what contributed to the success of the program was balancing flexibility with accountability and responsibility. Working on Country programs also provided communities the ability to manage natural and cultural resources. It encourages positive role modelling that brings 'hope to future generations'. However, the high demand for the program means that there are limited opportunities to satisfy the demand. It concluded with a range of measures that could be used to measure social outcomes with respect to future employment, financial security, educational participation and outcomes, health and wellbeing, and culture and community. An evaluation of the program in 2009 found that it suffered from multiple funding complexities that often limited the effectiveness of program administration. In addition, the lack of a centralised database that could be used to monitor effectiveness made it difficult to evaluate success or otherwise. <http://www.environment.gov.au/indigenous/workingoncountry/publications/pubs/woc-report-card.pdf>

Continued

Box 11 (continued): Selected programs aiming to improve employment outcomes

Name of program targeted at young people and their parents	Participation and progress
Indigenous Employment Initiative (IEI) This program provides employment opportunities for Aboriginal and Torres Strait Islander people in the Indigenous arts and culture sectors, with mainstream employment conditions. It provides on-the-job training; funding for accredited training including Technical and Further Education; and flexibility in employment, supporting both full-time and part-time positions. The program supports jobs in Indigenous arts, culture, language and broadcasting organisations in regional and remote areas, with employees engaged in roles such as community media officers, arts workers, mentors, gallery assistants, broadcasting technicians and language assistants. These jobs provide important social and economic benefits to individuals and communities in a culturally meaningful way. For example, art centres, particularly in remote communities, are often a major source of income. The jobs provide Aboriginal and Torres Strait Islander people with increased economic independence and meaningful career pathways—engendering pride in themselves, their workplaces and their culture. The jobs are directly helping to link Aboriginal and Torres Strait Islander culture to the mainstream economy and society. Target groups: Individuals, communities and Indigenous arts, culture, language and broadcasting organisations. Funding: Around $21 million per annum. Timeline: Ongoing. <http://arts.gov.au/Indigenous/iei>	The IEI continues to support around 585 positions in the arts and cultural sectors involving arts, culture, language and broadcasting organisations. In 2013–14, the IEI will support: • 307 positions working in Indigenous art centres in roles such as arts workers and gallery assistants • 148 positions working in the broadcasting sector, in roles such as broadcasting assistants and technicians • 91 positions working on Indigenous culture projects in roles such as culture administrators and support officers • 39 positions working on Indigenous languages activities in roles such as language assistants and mentors. The roll-out of the IEI jobs has been highly successful, with the number of arts and culture positions increasing from 82 positions funded in 2007–08 to around 585 positions in 2013–14. The number of full-time positions is continuing to increase, with opportunities to transition from part-time to full-time employment in some organisations. *(Information provided by government department with program responsibility).*

Lessons from overseas

Governments in other countries with substantial indigenous populations have also been driven by the need to improve education and training outcomes for such disadvantaged groups, and have had similar experiences to Australia. Here we discuss some of the interventions and activities that have been applied with Indigenous groups in Canada and New Zealand.

Canada

Canada has had a longer history of social, economic and political reforms to create better opportunities to recognise and integrate Indigenous people into mainstream economic life and to encourage their participation. Although the labour market outcomes of Indigenous people have seen some improvement (Howard et al. 2012), they continue to be a key disadvantaged group.

One key recent initiative is for the Canadian Government to collaborate with First Nations partners to develop legislation (The First Nation Education Act) to establish structures and standards to support strong and accountable K–12 education systems on reserves, and to commit to sufficient funding and resources to enable successful implementation. Another key priority is to investigate practical initiatives to help 'unlock the economic potential' of First Nations.

Surveys and interviews with Canadian businesses, industry associations and Aboriginal workers have been used by Howard et al. (2012) to investigate the role of Aboriginal workers in the Canadian economy. The report notes that between June 2011 and 2012 there were some slight improvements in the labour market outcomes of Indigenous people in Canada. The unemployment rates declined by almost 2%, the employment rate increased from 55.1% to 58% and the participation rate increased from 64.1% to 66.1%. Nevertheless, employers continued to be challenged by recruiting and maintaining workers from the aboriginal population. Some of the key difficulties (especially in relation to inadequate skills and qualifications and the operation of social stereotypes) are not dissimilar to the challenges faced by employers in Australia.

Box 12: Improving employment opportunities for Indigenous people in Canada

Employers participating in the Conference Board of Canada's (Howard et al. 2012) study were asked to identify their key challenges in employing Aboriginal workers. These challenges were mainly seen to be a lack of specific skills and qualifications required for jobs, differences in employer and Aboriginal worker expectations, and a reluctance of workers to move away from home for jobs. Employers hiring Aboriginal workers reported experiencing issues with their work performance and retention, dissatisfaction with career or job chosen, and cultural issues related to racism and misunderstanding between Aboriginal and non-Aboriginal Indigenous workers. Absenteeism due to the wish of Aboriginal workers to attend to traditional or seasonal activities (including hunting and fishing, and funerals) was another major challenge.

The study found that businesses that 'actively' recruited and hired Aboriginal workers also had in place policies and strategies aimed at helping to retain Aboriginal workers. These included flexible arrangements to enable the workers to engage in seasonal and traditional activities, opportunities for training and development, and formal mentoring programs.

The study concluded that it was critical to improve the secondary and post-secondary educational attainment of the Aboriginal population to improve labour market outcomes. It was also important to provide Aboriginal organisations with opportunities to come together to share knowledge and practices about how best to help Aboriginal workers find jobs, and to coordinate information and services emanating from these organisations to make it easier for employers to hire Aboriginal workers. There was a need to implement cultural awareness programs in workplaces to reduce racism and improve understanding between workers. The media, governments and industry could also improve cultural understanding in the wider society by promoting positive stories about Aboriginal people. 'Aboriginal people want to work, they want to contribute, they want to be financially independent, and they need opportunity' (Crawshaw 2010, cited in Howard et al 2012:2). ...'Businesses must commit to learning the culture, goals, history, and experiences of their Aboriginal and Northern workforce... Northerners and Aboriginal people must also learn the business culture of their employers and understand the organization's goals' (Martin 2011, cited in Howard et al. 2012:2).

Source: Howard et al. 2012.

New Zealand

Like Indigenous Australians, Māori workers in New Zealand have a younger age profile than the New Zealand working age population. They also have lower educational attainment and weaker labour market outcomes. For example, they are over-represented in low-skill jobs and industries, and are more susceptible to downturns in the economy as employers are most likely to lay off those with low skills and least experience (Department of Labour, New Zealand 2010). Between June 2008 and 2010 (covering the global financial crisis period), Māori employment fell at a greater rate in those industries in which the Māoris are most highly represented (including utilities and construction, wholesale and retail, hospitality, transport and storage, and health and community services). These industries account for 42% of Māori employment. Between 2008 and 2010, the employment growth of Māoris has been greatest in agriculture and mining and in finance and insurance but these industries account for just 11% of Māori employment. Where 62% of Māori were in employment in 2008, this figure had fallen to 56.2% in 2013. The rate in 2013 for the total population is 63.4% (Ministry of Business, Innovation and Employment, New Zealand 2013). Māori youth (aged between 15 and 24) also have higher rates of not being in education, employment or training.

The New Zealand Government has implemented school-to-work transition programs to help Māori youth improve their transitions to work or further education. The Gateway Program supports students in Years 11 to 13 to engage in workplace learning to achieve credits towards their National Certificate of Educational Achievement (NCEA). Taiohi Tū, Taiohi Ora, facilitated by Careers New Zealand, is a career planning workshop for Māori students in Years 11 to 13. The Youth Transition Service provides assistance to those aged 15–19 who have either left school, or are thinking of leaving school to move into work or further education or training or other meaningful activities.

Reviews of these programs noted the importance of involving the extended family (whānau) in supporting their children in learning as well as helping them to set career and training goals. It also noted the importance of providing these families with the necessary knowledge to be able to help their children set goals for careers and training. Families that participated in the career planning workshop (Taiohi Tū, Taiohi Ora) noted that workshops had enabled them to learn about the NCEA and the careers and subject choices available to their children. They also reported that this learning had been made easier by facilitators using language that was easy to understand and inclusive. In the words of one whānau member participating in the workshop:

> The information is there and the school has fantastic information but the delivery is awful. So it wasn't until Year 12 when I went to the workshop [Taiohi Tū, Taiohi Ora] that I actually understood NCEA. X [the facilitator] has such a different style. There is no class structure [socio-economic class], it is not classroom language; it's whānau language. (Te Puni Kōkiri 2012).

The review also found that funding needed to be flexible and adequate so that whānau could participate alongside their children, and youth could access the programs without incurring costs and fees. Whānau appreciated staff who had an 'engaging and warm manner', were knowledgeable about the careers and workplaces available in the region, had good interpersonal skills and were available for consultation. Face-to-face meetings were preferred to written communication. Valuing the Māori culture by acknowledging that Māori youth had knowledge and skills to share was especially appreciated. In addition, the review found that there was an increase in Māori youth who participated in these programs or services transitioning from secondary to tertiary education. An average of 22.3% of Maori Gateway participants continued to tertiary education between 2006 and 2009, while 57.9% of them were going into employment or returning to school. Between 2006 and 2010, there were 32.9% of Māori participants in Youth Transitions Services who returned to school.

Box 13: New Zealand: the Māori Future Makers website initiative

An initiative that aims to help Maori youth consider what they would like to do is the Māori Future Makers website, launched in February 2013. This is an interactive website aimed at providing inspirational role models for young Māori. It comprises films of 30 high achievers who are either in studies, in employment or self-employment. The Māori Future Makers website profiles 30 inspirational Māori with specialist skills and capabilities who are studying, employed or self-employed in primary, knowledge-intensive and growth industries such as sciences, engineering, construction, communications, architecture and agriculture.

Visitors to the site can select from a set of choices what they are good at, what they would like to do and what subject or discipline areas they prefer. The choice will lead them to a set of videos of selected individuals in these occupations discussing the study pathways, educational achievement, skills, work experiences and professional opportunities they have experienced in their particular areas.

- The first set of choices are about the things that they are good at—for example, communication, working with my hands, thinking outside the square, getting creative or artistic, planning and analysing, people skills, working independently, and working with animals.
- The second set of choices is about what they would like to be—for example, be my own boss, work outdoors, make a difference, work with whānau or iwi (extended families or tribes), discover something new, travel and work overseas, work for a powerful company, use te reo me ona tikanga (the Māori language and its customs).
- The third set of choices is about subject or knowledge areas they are interested in—for example, health and science, law and planning, engineering, business management, art, design and architecture, media and communications, computers and technology, Māori and iwi (tribes) development). It is too early to tell how effective this has been.

Source: Te Puni Kōkiri 2013.

Conclusion

We have known for a long time that throughout schooling years, attendance and academic achievement are keys to the successful completion of secondary school and Year 12. We know also that Year 12 completion helps in the transition to both further education and employment. Our findings in this paper underscore the critical importance of educational achievement to economic participation. Our simple decomposition analysis suggests that the gap between the employment rates of Indigenous and non-Indigenous Australians would be drastically reduced if the educational attainment levels of Indigenous Australians increased to the levels of the non-Indigenous population. While this simple analysis does not give any help in how this could be achieved, it does make it clear that education is a key element of any strategy to close the gap between Indigenous and non-Indigenous employment rates.

Proficiency in basic and advanced literacy and numeracy skills, and in other areas of practical and academic knowledge, is essential for continued participation in education and training, for academic achievement and for success in the labour market—key features of economic participation. Adult basic literacy and numeracy training courses or support can do only so much to help patch up deficiencies that have accumulated throughout the various years of schooling. This is not to say that foundation skills development for adults is not to be encouraged. Foundation skills are essential for effective participation in civil and work life.

There have been a range of studies that underscore the key reasons for lack of success in the mainstream labour market for Indigenous Australians. These highlight the critical importance of educational attainment in employment disparities. It implies that an important policy aspect will be to concentrate on early childhood education, and improved school attendance, retention and skills development, to give Indigenous Australians the best opportunity to complete Year 12 and go on to further education and training. The low participation rates in education and employment have led to the ongoing development of specific targets, strategies and programs to improve outcomes for Indigenous people.

This paper has highlighted some key findings from specific programs which indicate different ways for redressing some of the disparity in both education and employment outcomes. At the school level, there is some evidence to suggest that strong leadership by school principals (supported by high expectations of Indigenous students), targeted interventions (with students and their parents) to improve student attendance and learning, and common instructional approaches used by teachers across the school have helped to improve literacy and numeracy outcomes. In apprenticeships and traineeships, the allocation of mentors early on in programs has helped to retain apprentices and trainees. In higher education, Indigenous Education Units have been found to provide valuable support to university students; however, faculties have been encouraged to increase their responsibility for assisting and mentoring Indigenous students. This is because it is the faculties that have the subject-matter expertise and connections with professional networks.

Employers who have formal policies in place to employ Indigenous workers, and those who have a history of employing Indigenous workers, are more likely than those who do not have such policies or 'track record', to make jobs available for this group. In addition, programs that have specific objectives about what is to be achieved and support mechanisms directly aligned to these objectives have been shown to have more chance of success. For example, wage assistance or subsidies given to employers to make jobs available for job seekers help to increase employment outcomes at local levels. It is important, however, to ensure that available support mechanisms are widely promoted both to employers and to job seekers.

Research evidence from both Canada and Australia tells us that flexible employment arrangements that enable Indigenous workers to be involved in traditional and cultural activities (including seasonal fishing and hunting, funerals and other cultural obligations) can help improve the engagement and retention of Indigenous workers, especially in regional and remote locations. Cultural awareness programs for non-Indigenous workers and managers have also been suggested as important mechanisms for integrating Indigenous workers into the modern workplace. These programs can go some way in clearing up misunderstandings or issues of racism between Indigenous workers and other workers and employers. They may be more successful, however, if they are also supported by mutual respect for obligations from both sides. Employers should be prepared to commit to understanding the cultural needs and goals of Indigenous workers; Indigenous workers and communities need to appreciate the business culture and goals of employers. Racism and negative stereotypes about Indigenous Australians held by the mainstream culture may be more difficult to shift, and may require the continued enforcement of formal programs of equal education and employment opportunity.

Personal connections between education and training providers and individual clients and communities, based on trust and mutual respect, have been shown to improve engagement in education and training and employment initiatives and programs. Similar connections between service providers, job seekers and communities have also contributed to better outcomes from labour market and employment programs. Whatever strategies are adopted for improving teaching and learning, or job seeking outcomes, it is also important to be specific about the obligations and responsibilities of students and job seekers. In the long run, success in education rarely happens unless the student devotes adequate time to learning. Success in the labour market and the workplace rarely happens unless the job seeker is prepared to persist with job searching or unless workers are prepared to adapt to the culture of the workplace. Research findings from the teaching and learning field, and from areas such as organisational behaviour, can be used to better understand how best students learn, and how best to improve work productivity and retention.

The Australian landscape continues to be filled with multiple and diverse strategies and programs aimed at addressing educational and employment disadvantage for Indigenous Australians. They cross a range of governments (Australian, state and territory), government departments, and sectors (education providers, industry, and non-government organisations). The lack of any centralised repository or coordination of all the different types of programs that are aiming to improve Indigenous training and employment pathways (including for states and territories) makes it a complex and overwhelming task to identify programs, funding regimes and associated evaluations or research studies. This complexity and duplication can also confuse employers, service providers and clients. It makes it difficult to set up comprehensive and robust evaluations

(including the use of control groups) to come to any definitive conclusions about the things that do or do not work. Without such good information about the impact of interventions, there is the risk of continuing with programs that are not worth the funds expended on them, or cutting short programs that have the best chance of success.

In this paper, we have reported on some positive outcomes from individual programs but there continues to be a 'disconnect' between success reported by program level assessments and outcomes from population-level education and employment metrics. The key challenge is to take learning from these individual programs or interventions, and embed these into practice in mainstream program delivery. Systematic evaluations, or controlled research studies, and investigating the impact of such interventions over time are required to determine whether outcomes can be sustained once the funding or support structures are removed.

The need for more coherent, integrated and simplified policy frameworks and programs; for commitment by senior management in institutions and workplaces; and for collaboration with Indigenous stakeholders have been strongly recommended as a way forward (ACER 2011).

Appendix A: Methodology for decomposition

The purpose of the decomposition is to understand the extent to which educational disadvantage contributes to lower employment rates among Indigenous Australian. At the same time, demographics are taken into account, and the decomposition is done for males and females separately.

Let *E* represent employment, *N* population, *j* age group and *k* educational attainment. We also use the convention of dots to represent an aggregation over an index. Thus *E*.. represents total employment.

We write

$$E.. = \sum_{j,k} E_{jk} \quad (1)$$

$$\frac{E..}{N..} = \sum_{j,k} \frac{E_{jk}}{N_{jk}} \frac{N_{jk}}{N_{j.}} \frac{N_{j.}}{N..} \quad (2)$$

Taking percentage changes we obtain

$$\%\Delta\left(\frac{E..}{N..}\right) = \sum_{j,k} w_{jk} \left\{ \%\Delta\left(\frac{E_{jk}}{N_{jk}}\right) + \%\Delta\left(\frac{N_{jk}}{N_{j.}}\right) + \%\Delta\left(\frac{N_{j.}}{N..}\right) \right\} \quad (3)$$

Where $w_{jk} = E_{jk}/E..$

The calculation is only precise if the changes are relatively small. This means that there is a residual which represents the interaction between educational attainment and the employment rate. To improve the accuracy, we calculate the percentage changes at the midpoint, but this does not eliminate the residual.

Equation (3) gives us 3 effects, corresponding to the 3 terms on the right hand side:

- the 'net' difference in employment rates, after taking into account differences in education and the age structure
- the 'education effect'—that part of the overall difference that can be attributed to differences in educational attainment
- the 'demographic effect'—that part of the overall difference that can be attributed to differences in the age distribution.

Appendix B: Selected programs aimed at young people and their parents by participation or progress to date

Table B1: Selected programs aimed at young people and their parents by participation or progress to date

Name of program	Participation and progress
Australian Indigenous Education Foundation Scholarship Program This program aims to close the gap in Aboriginal and Torres Strait Islander educational outcomes by improving the education and career pathways opportunities for disadvantaged Aboriginal and Torres Strait Islander youth. It offers scholarships to help students to attend the Foundation's partner schools and to graduate at Year 12 level. Some tertiary scholarships may also be available. Target group: School students. Funding: $44 million over 20 years ($22 million from the DEEWR, $22 million from the AIEF). Timeline: 2009–10 to ongoing.	In 2011, the Foundation reported that it had placed 311 students. The 16 partner schools are assisted to support their Indigenous students. The Foundation also seeks corporate donations. <http://www.aief.com.au/scholarships>
Closing the Gap: expansion of intensive literacy and numeracy programs The aim of these programs was to deliver innovative projects to improve the literacy and numeracy outcomes of Aboriginal and Torres Strait Islander students. Target group: Indigenous Australian students across every education sector Australia wide. Funding: $51.5 million over 2008–09 to 2011–12 for Closing the Gap— Expansion of Literacy and Numeracy Initiatives component. Timeline: 2008–2012. < http://www.dss.gov.au/about-fahcsia/publications-articles/corporate-publications/budget-and-additional-estimates-statements/indigenous-budget-fact-sheets/closing-the-gap-for-indigenous-australians-expansion-of-intensive-literacy-and-numeracy-programs-and-individual-learning>	A total of 33 projects were funded under the intensive literacy and numeracy initiative across Australia over 2009–12, engaging more than 20,000 Indigenous students in more than 503 schools.

Continued

Table B1 (continued): Selected programs aimed at young people and their parents by participation or progress to date

Name of program	Participation and progress
Focus School Next Steps This initiative provides specially selected schools with additional funding to help improve attendance, engagement and educational achievement of Indigenous students. Queensland University of Technology will work with education providers, participating schools and the local community to devise a school-level plan detailing actions and strategies to improve outcomes for students. Each plan will be tailored to specific schools and communities. Target groups: School students, early childhood learning. Funding: $30 million over 2 years to 2014. Timeline: 2012 to 2014.	A total of 101 specially selected schools across Australia are participating in the Focus School Next Steps initiative. By 30 June 2014, the Department will have received a final report, which will provide a consolidated overview of the activities and performance of the initiative over the full funding period. Analysis of data and information will enable successful strategies and key findings to be identified. This information will be a valuable resource to contribute to the evidence base of what works to lift the education outcomes of Aboriginal and Torres Strait Islander children and young people.
Project Agreement Investing in Focus Schools The Investing in Focus Schools program, implemented by the previous Australian Government, supports government and non government education providers to complement and accelerate implementation of local level actions in the 'Engagement and Connections', 'Attendance' and 'Literacy and Numeracy' domains of the Aboriginal and Torres Strait Islander Education Action Plan 2010–2014 (the Action Plan). Using criteria to identify those schools in greatest need, states and territories have selected approximately 300 Focus Schools to participate in this initiative. Target groups: School students, early childhood learning. Funding: $40 million over 2 years. Timeline: 2012 to 2014.	Annual reporting is required under the program, providing school-level data for each participating school. The reports will indicate the strategies that school communities are using to implement local level actions under the Action Plan as well as any gains recorded as a result of introducing these strategies. The final report for the program is due in April 2014.
Indigenous Youth Careers Pathways Program The program began at the start of 2012 school year in selected high schools. It provides school-based traineeships and support activities to Year 11 and 12 Indigenous students, and some Year 10 students. It provides young people with personal mentoring and case management to help them transition from school to work. Target group: Students and schools. Funding: $50.7 million. Timeline: 2011–12 to 2014–15.	Not fully evaluated yet; but there have been 1060 commencements. <http://www.grantslink.gov.au/grants/Indigenous-Youth-Career-Pathways-Program.aspx>

Continued

Table B1 (continued): Selected programs aimed at young people and their parents by participation or progress to date

Name of program	Participation and progress
Indigenous Youth Leadership Program This program supports a number of students in attending high-performing secondary schools and/or universities to complete Year 12 and/or an undergraduate degree. The scholarships provide financial support in addition to any ABSTUDY entitlements, and may cover the costs of school fees and tuition, boarding and accommodation, practical leadership experiences, and other educational costs (such as uniforms, textbooks, study excursions and tutors). Each scholarship is for up to 3 years. Target groups: Students, schools and universities. Funding: A proportion of $133.5 million in 2013 from the Extending the Indigenous Education.	<http://jafoundation.com.au/iylp/2010>
Learn Earn Legend! This initiative supports young Aboriginal and Torres Strait Islander people to stay at school and get a job and be a legend for themselves, their family and community. The activities assist with promoting the importance of education, training and employment to young Aboriginal and Torres Strait Islander people. The Learn Earn Legend! program supports many events and programs throughout Australia including National Rugby League (NRL) Indigenous All Stars including former Origin greats, Employment and Careers Expos, Tennis Australia's National Indigenous Program, partnerships with sporting associations including Australian Football League (AFL) NSW/ACT, Local Legends!, and work exposure with government programs. Target group: Students.	Not fully evaluated at time of writing. The program has had NRL All Stars matches (including former Origin greats), Employment and Careers Expos, and AFLmatches. <http://employment.gov.au/learn-earn-legend-activities>
Parental and Community Engagement Program The program focuses on developing and implementing approaches aimed at improving the outcomes of Indigenous students by increasing parental engagement with schools. The program supports families and communities to develop partnerships with schools and education providers. Target groups: Students, families, communities, schools. Funding: $84.332 million (plus additional funding in 2013 as part of the Extending the Indigenous Education. Timeline: 2009–2012.	The Prime Minister's Closing the Gap Report (Australian Government 2013) noted that since 2009 the program comprised 495 schools, 53,000 parents and carers and 28,000 community members.
Personalised learning plans Personalised learning plans involve each student working with their teacher, in partnership with students and carers, to develop a plan that reflects learning goals, current capabilities and learning targets. Target groups: Students, families and schools. Timeline: 2010–2014.	A total of 35 projects and 20,000 Aboriginal and Torres Strait Islander students in more the 670 schools have been involved. Guides for developing personalised learning plans and case studies of implementation in practice have been developed.

Continued

Table B1 (continued): Selected programs aimed at young people and their parents by participation or progress to date

Name of program	Participation and progress
Individuals and communities Individuals and communities aim to implement the Australian Government's education reform agenda that, in an equitable society, the attainment of Year 12 or equivalent by Indigenous young people must improve to match the efforts of other students.	In 2010–11, 5,750 Indigenous young people benefited from the Youth Connections element (18% of the total caseload). During that period, 35% of Indigenous participants recorded a sustained improvement in their engagement with school, training or employment; a further 23% were assessed as making substantial progress.
Youth Connections This initiative provides a safety net for young people at risk of not attaining a Year 12 or equivalent qualification. Youth Connections provides flexible and individualised case management to assist young people to remain engaged or to re-engage with education and to improve their ability to make positive life choices. Target group: Young people at risk of not attaining a Year 12 or equivalent qualification. Funding: $366.9 million over 5 years. Timeline: 1 January 2010 to 31 December 2014.	More than 12,500 Indigenous young people participated in Youth Connections between January 2010 and June 2013. Fifty-one per cent (51%) of these young people achieved a final outcome that represents re-engagement with education, training or employment. A further 21% made substantial progress in addressing their barriers to engagement. *(Information provided by government agency with program responsibility).*
School Business Community Partnership Brokers Program The program aims to build partnerships between schools, businesses and communities to help young people to achieve Year 12 or equivalent qualifications and reach their full potential. Target group: The program involves a whole-of-community approach to improving education and transition outcomes for all young people. Funding: $229.8 million over 5 years. Timeline: 2009–10 to 2014–15.	Partnership Brokers are helping to build the capacity of communities to support Indigenous young people to engage in their learning and make a successful transition through school to further education or training and work. Approximately 20% of the 2000 partnerships supported by Partnership Brokers have an Indigenous focus. *(Information provided by government agency with program responsibility).*

Continued

Table B1 (continued): Selected programs aimed at young people and their parents by participation or progress to date

Name of program	Participation and progress
Stronger Futures in the Northern Territory (SFNT) National Partnership Agreement—Schooling Implementation Plan The SFNT package is the Australian Government's program response to the Stronger Futures consultation process which took place during 2011. It responds directly to what Aboriginal people told the government was important to them. The $3.4 billion investment is designed to build stronger futures for Indigenous people in the Northern Territory including addressing the substantial challenges to closing the gap on Aboriginal disadvantage. The SFNT package will continue the reforms under the Closing the Gap in the Northern Territory National Partnership, through investing $583 million over 10 years in education in the Northern Territory. The education component of the SFNT includes three measures: • Building a Quality School Workforce. This measure is comprised of three sub-elements: – Quality Teaching Initiative – Additional Teachers— 200 maintained – Teacher Housing – up to 103 houses constructed • Improving School Enrolment and Attendance through Welfare Reform Measures • (SEAM) School Nutrition Program. These measures will ensure the continued provision of access to quality education for Northern Territory Aboriginal students in remote communities.	Six-monthly progress and annual reporting is required from the Northern Territory Government and the Northern Territory Block Grant Authority (non-Government sector). In March 2013, the annual reports from both sectors reported reaching Building a Quality School Workforce and SEAM measure targets. This included maintaining the 200 Additional Teachers, providing performance and reporting arrangements for Teacher Housing, and providing baseline and 2015 performance targets for 2015. The Northern Territory has continued to support the implementation of SEAM with commencement in all Phase 1 and 2 communities according to schedule. The School Nutrition Program provides meals to around 4,770 children daily across 67 schools and has created 267 jobs for local people across the Northern Territory. *(Information provided by government agency with program responsibility).*

Appendix C: Selected programs aimed at VET and higher education by participation or progress to date

Table C1: Selected programs aimed at VET and higher education by participation or progress to date

Name of program	Participation or progress to date
Indigenous Higher Education Units (IEUs) IEUs are located in universities around Australia. These units support Indigenous students, create a network of Indigenous students and academics, further Indigenous academic studies and increase the Indigenous presence on campuses. The various IEUs provide different types of support. Core requirements include supporting Indigenous students by providing places for study, information and assistance on available scholarships and bursaries; and acting as a resource centre for Indigenous students and staff. Target groups: Tertiary education students and providers. Timeline: 2011–12 to 2013–14. **Indigenous Support Program** The Indigenous Support Program provides grants to higher education providers to assist them to meet the needs of their Indigenous students. It includes the establishment of IEUs as well as additional support and assistance for Indigenous students. Target groups: Tertiary education students and providers. Funding: $26.5 million. Timeline: 2005 to ongoing. **Indigenous Tutorial Assistance Scheme Tertiary Tuition** This program is available to higher education institutions and provides funding for supplementary tuition to Indigenous students. The aim of the program is to accelerate education outcomes for Indigenous students. The funding and activities include engaging tutors and independent assessors, and meeting travel costs for some students and tutors. Target group: Tertiary education students. Timeline: 2009 to 2012.	A review of IEUs concluded that they continue to play an important role in supporting Aboriginal and Torres Strait Islander students. However, discipline-specific support—such as tutoring, mentoring or linkages to professions and employment—should be provided through the faculties. The review noted the importance of primary and secondary education in acting as pathways for higher education and for providing mentoring support for areas such as science and mathematics. VET students also needed support to enrol in higher level courses that would enable them to proceed to higher education (for example, Certificate IV courses). Options for special entry arrangements and credit transfer for courses completed needed to be further developed. As support provided through the Indigenous Tutorial Assistance Scheme—Tertiary Tuition program was highly valued by students, the panel suggested that it could be further strengthened. Scholarships, mentoring, cadetships and work experience were also suggested as mechanisms by which professional associations could increase the take-up of professions by Indigenous students. Contracts between universities and governments for raising outcomes for Indigenous Australians, which would include targets and rewards for exceeding targets, were considered to be the most effective. Evidence-based evaluation requires good data to identify critical factors explaining the higher education success of Indigenous Australians.

Continued

Table C1 (continued): Selected programs aimed at VET and higher education by participation or progress to date

Name of program	Participation or progress to date
Indigenous Remote Service Delivery Traineeships These are traineeships for Indigenous people in remote areas in the schools and childcare services. The aim of these traineeships is to provide work experience and a qualification for Indigenous people. The DEEWR will provide a 100% subsidy for trainees' wages and on-costs and group training organisations will source existing funding for training costs. There will be no direct costs to schools and childcare services. Traineeships will be in essential childcare roles only. Qualifications in children's services can be at the Certificate III or IV or Diploma level. Target groups: Individuals and schools. Funding: $23 million. Timeline 2010 to 2013.	Not yet fully evaluated at time of writing.
Indigenous Tutorial Assistance Scheme for VET This program is available to VET institutions and provides funding for supplementary tuition to Indigenous VET students. The objective of the program is to accelerate education outcomes for Indigenous students, and it aims to increase VET module and course completion rates. Students may be assisted if they are studying for a Certificate I and II level qualification if those units are being undertaken as prerequisites and will lead to attaining a Certificate III level or above qualification. Eligible students may receive up to 2 hours tuition per week for up to 34 weeks per academic year. Target groups: VET students and VET providers. Timeline: 2009 to 2012.	Not yet fully evaluated at time of writing.
Indigenous Cadetship Program The cadetships are open to Indigenous Australians who are currently studying an undergraduate degree. The cadetships can provide a salary while cadets complete their study, books and an equipment allowance to help with the costs of study, the chance to avoid having to pay a Higher Education Loan Program debt (as the department pays tuition fees), practical work experience, and ongoing employment opportunity. Target group: Individuals.	Not yet fully evaluated at time of writing.

Appendix D: Selected programs aimed at improving employment outcomes by participation or progress to date

Table D1: Selected programs aimed at improving employment outcomes by participation or progress to date

Programs	Participation and progress to date
Aboriginal Employment Strategy This is an Indigenous owned and managed program that aims to place Indigenous people in sustainable employment. Activities include job placements, school-based traineeships, and mentoring support for employees and employers. It also links employers and employees to other programs. Target groups: Individuals, employers, non-government organisations. Timeline: 1997–ongoing.	The Strategy reports that over the last 16 years it has secured 11,000 placements for participants.
Indigenous Wage Assistance/Wage Subsidy This is an incentive for employers when they employ eligible Indigenous Australians on a continuous basis. The aim is to increase Indigenous employment in mainstream jobs. Subsidies are paid after the new employee has been in the job for 13 and 26 weeks. The amount paid is up to $4,400 (including GST) for ongoing full-time positions of 35 hours or more per week, and up to $2,200 (including GST) for ongoing part-time positions of 15 hours or more per week. An additional retention bonus (if eligible) may also be available: $1,100 for full-time positions or $550 for part-time positions where the employee is employed for 13 weeks or more, and $1,100 for full-time positions or $550 for part-time positions where the employee is employed for 26 weeks or more. Employers may also claim reimbursement of up to $550 in Career Development Assistance for eligible employees who enrol in an accredited training course, or obtain a ticket or a licence, within their first 26 weeks in a job. Target groups: Individual employees, employers and employment agencies. Timeline: Ongoing.	The evaluation of the Indigenous Employment Policy (which included investigating the Wage Assistance program) found that just 40% of the employers were aware of the Wage Assistance Program, and that job seekers were reluctant to refer to the fact they had a Wage Assistance card in interviews with prospective employers. Considering that many jobs were not obtained via the Job Network, the evaluators concluded that it was important for job seekers to be able to use the fact that they had a Wage Assistance card in searching for jobs. They recommended the use of in-person explanations with job seekers about the benefits of the card. They also suggested that employer associations could play a better role in promoting the availability of Wage Assistance to employers. The subsidy, however, was found to facilitate the employment of Indigenous job seekers in 33% of cases. When Wage Assistance participants were followed up 12 months after their placements and compared with their control group counterparts (that is, those not participating in the scheme in the previous 6 months), 50.8% were still in employment compared with 39.6% of the control group. When the evaluators looked at the net impact of income earned from employment, they found that it was stronger in the regional and remote locations and that, after 12 months, participants earned $13.00 per week more than those in the control group. This suggests that wage assistance makes a difference and that individual job seekers should be encouraged to use the Wage Assistance card to canvas for jobs. The Wage Assistance program is called the Indigenous Wage Subsidy program. <http://docs.employment.gov.au/node/7882>

Continued

Table D1 (continued): Selected programs aimed at improving employment outcomes by participation or progress to date

Programs	Participation and progress to date
JSA— Indigenous Australians JSA is a mainstream program that provides individually tailored employment services including to a substantial number of Indigenous job seekers. JSA also works with other programs including Indigenous Employment Services and CDEP to help Indigenous people enter the labour market. JSA services may include referral to support services to help job seekers to deal with both vocational and non-vocational barriers. While most services are not specifically for Indigenous job seekers, some strategies have been developed for Indigenous job seekers and there are a number of high-performing Indigenous organisations and Indigenous specialists providing employment services through JSA. Target groups: People seeking employment, employers, employment agencies, training providers. Timeline: Ongoing.	*Remote areas:* On 1 July 2013, JSA, Indigenous Employment Services, Disability Employment Services and CDEP transitioned to the RJCP. Key activities include helping with creating or refining a résumé; providing access to, and help with, job search facilities; assessing job seekers' current skills; providing access to training; referring job seekers to support services; arranging regular face-to-face meetings with the JSA provider and conducting regular reviews; facilitating placements with employers, on-the-job training, apprenticeships and traineeships (including school-based), diploma level or above study opportunities, business start-up assistance, relocation assistance, literacy and numeracy programs. *Non-remote areas:* An amount of $3.9 billion has been granted to JSA to deliver employment services for the period 2012–2015. A 3-year contract extension until 30 June 2015 was offered to well-performing JSA providers (those achieving a Star Rating of 3-Stars or above), while the business share of below-average performing providers was re-allocated to high-performing providers as part of a business review process, or, where required, re-allocated through an open tender process. **Access to Mentoring Support for Indigenous Job Seekers Pilot:** In the 2011–2012 Budget, $6.1 million was allocated for a pilot program under JSA to operate from 1 July 2012 to 30 June 2015 to provide voluntarily participating Aboriginal and Torres Strait Islander job seekers access to one-on-one intensive and culturally appropriate mentoring support before job placement and, for up to 26 weeks, after job placement in 20 Employment Service Areas across mainland Australia (from 1 July 2013) in 21 Employment Service Areas. *(Information provided by government agency with program responsibility).*
Community Development Employment Projects The CDEP program assists Indigenous job seekers to increase the skills and training needed to find ongoing employment. The CDEP has undergone a number of reforms over the last decade, most recently in 2008. CDEP programs provide services and projects through two streams: Work Readiness, and Community Development. Work Readiness services help job seekers to develop their skills, improve their chances of getting a job, and find work outside of the CDEP program. These services include pre-vocational and vocational training and work experience. The Community Development stream focuses on supporting and developing Indigenous communities and organisations. To ensure community work is consistent with local job opportunities and builds the appropriate skills, CDEP providers develop Community Action Plans to support the priorities of the communities. Target group: Individuals, communities, service organisations. Timeline: 1977 to ongoing. Reformed in 2008.	*Remote areas:* On 1 July 2013 JSA, Indigenous Employment Services, Disability Employment Services and CDEP transitioned to the RJCP. *Non-remote areas:* CDEP participants living in 8 selected non-remote locations and currently participating in CDEP will continue to take part in their CDEP activities until June 2014 when they transition to their new provider. <http://www.dss.gov.au/our-responsibilities/Indigenous-australians/programs-services/communities-regions/community-development-employment-projects-cdep-program>

Continued

Table D1 (continued): Selected programs aimed at improving employment outcomes by participation or progress to date

Program	Participation and progress to date
Indigenous Heritage Program The program is an ongoing, competitive annual grants program aimed at supporting the identification, conservation and promotion of heritage places important to Indigenous people. The program supports projects which provide education, training, employment, and business opportunities. Target groups: Individuals, communities and service organisations. Funding: Since 2004, the program has provided more than $30 million to support more than 500 Indigenous heritage projects across Australia.	In 2012–13, the Indigenous Heritage Program allocated funding for: • 9 projects in New South Wales (including coastal erosion, unrecorded bushland reserve sites, rock engraving sites, traditional stories, rock art records, conservation of Captain's Cottage, interpretative signage for murals and specific sites, and youth projects) • 5 projects in Victoria (including consultation with Indigenous groups about Indigenous heritage, survey of selected sites, research and conservation of cultural sites, fencing signage and specialist workshops, preservation of Aboriginal shell middens) • 13 projects in Queensland (including heritage site survey, heritage site and rock art documentation, burial site restoration, cultural heritage management, management and interpretation of cultural heritage sites, conservation works, management of cultural heritage data, world heritage cultural interpretation, survey and mapping of significant sites, fencing off areas under threat, implementing cultural class, preventing degradation of specific sites, employing rangers and traditional owners to protect cultural heritage values, conducting survey of cultural heritage sites) • 7 projects in South Australia (including recording of men and women's Dreaming stories, interpretative trail, field surveys of significant sites, conservation and management for significant burial sites, preservation of old mission building for use as overnight tourist accommodation, development of cultural heritage plan) • 15 projects in Western Australia (including signage and interpretation, history research, recording of stone arrangement sites, road access to significant sites, mapping and documenting waterholes and significant sites, keeping places for storing items, recording and documenting rock art and managing cultural sites, developing and maintaining a cultural heritage database including heritage stories, recording sites of significance and records of elder cultural knowledge of remote desert areas, recording and conserving Dreaming stories, mapping and recording of sites for inclusion into a database to train young people, raising awareness of heritage values and conservation of sites, using GPS coordinates for mapping sites of significance, and linking these to stories, film and audio recordings • 4 projects in the Northern Territory (including management of cultural heritage values, documentation of significant heritage sites, documenting stories of past lives, identification and mapping of rock art sites). <http://www.environment.gov.au/heritage/programs/ihp/funded.html>

Continued

Table D1 (continued): Selected programs aimed at improving employment outcomes by participation or progress to date

Program	Participation and progress to date
Working in Partnerships These programs aim to build partnerships with the mining industry, with the aim of increasing opportunities for Indigenous Australians. Another feature of the programs are case studies describing partnerships and workshops that aim to provide forums for Aboriginal communities to discuss with mining/exploration/tourism companies, opportunities for Indigenous participation—employment and business—in the mining and tourism sectors. Target groups: Individuals, communities and employers. Timeline: Ongoing. <http://www.innovation.gov.au/resource/Programs/WorkingInPartnership/Pages/default.aspx>	Case studies have been developed to provide descriptions of the partnership arrangements between Indigenous communities and 13 mining companies. Partnerships have been based on extensive consultation between communities and mining companies concerning the roles and responsibilities of the partners. The mines include Alcan, Anglo Coal Australia, Anglo Gold Ashanti Australia, Argyle Diamonds, Barrick Gold Australia, BHP Billiton Nickel West, Carey Mining Pty Ltd, Indigenous Business Australia, Laverton Leonora Cross Cultural Association, Newmont Australia, Rio Tinto Ltd, Woodside Energy Ltd, and Yunaga Mine Services. At Alcan, the ALERT program implemented can take up to 36 months to complete. It embeds intensive English and numeracy training with on-the job training. It aims to give Indigenous Australians the skills required to formalise Indigenous language for its preservation. It is specific to the Yolngu people. It also aims to provide skills and training leading to long-term jobs including via arrangements and other partnerships with local businesses. Using a buddy system between existing workers and new Indigenous workers is another feature. <http://www.innovation.gov.au/resource/Documents/Programs/Working-in-Partnerships/2008%20Alcan.pdf> At Argyle Diamond Mine, an Argyle Participation Agreement between the mine and the traditional owners (the Mirriuwung and Gija people) was signed in 2004. As well as clauses related to site protection and heritage clearances, the agreement was concerned with providing opportunities for the employment and training of Aboriginal workers. A work readiness program (including mentoring, school-based enrichment programs, and feedback to unsuccessful applicants) are key elements. Other features include face-to-face application processes, intensive workshops, drug and alcohol mentoring, and individual case management. The development of individual training plans, allocation of workplace mentors and the delivery of life skills and family support are used to customise support to individual needs. The mine developed some targeted selection methodologies which saw the employment of Aboriginal workers increase from 4.6% in 2000 to 26% in April 2008. It set an increased target for 2010. <http://www.innovation.gov.au/resource/Documents/Programs/Working-in-Partnerships/2008%20Argyle.pdf> Between 2001 and 2013, a total of 22 workshops have been held in regional Australia. These aim to provide a forum for Aboriginal communities to discuss with mining/exploration/tourism companies, opportunities for Indigenous participation—employment and business—in the mining and tourism sectors.

Continued

Table D1 (continued): Selected programs aimed at improving employment outcomes by participation or progress to date

Program	Participation and progress to date
The Indigenous Australian Government Development Program This program provides employment opportunities for Aboriginal and Torres Strait Islander people within the Australian Public Service. The program combines ongoing employment with structured learning and aims to increase representation of Aboriginal and Torres Strait Islander people working in government. The program is managed by the DEEWR and includes 3 main components: a diploma-level qualification, full-time work experience and on-the-job-training as well as learning and development opportunities. Target group: Individuals. Timeline: Ongoing. <http://employment.gov.au/Indigenous-australian-government-development-program-iagdp>	In 2010, there were 77 Indigenous people employed in positions under the program in a number of agencies (including Australian Federal Police; Centrelink; Department of Defence; DEEWR; Department of Families, Housing, Community Services and Indigenous Affairs; Department of Finance; Department of Human Services; Department of Infrastructure and Transport, Regional Development and Local Government; Department of Resource, Energy and Tourism; and Department of Veterans Affairs). Positions were located in New South Wales, Victoria, Queensland, Western Australia, Tasmania and the Australian Capital Territory. There were 50 positions in the 2012 program. Participants are currently placed in the Australian Crime Commission; Austrade; DEEWR; Department of Families, Housing, Community Services and Indigenous Affairs; Department of Finance; Department of Human Services; Innovation and the Bureau of Meteorology. Positions are located in New South Wales, Victoria, Queensland, South Australia, Western Australia and the Australian Capital Territory. On 18 September 2013, the Prime Minister announced a new set of administrative arrangements which will see some of these agencies disappear and their functions combined with different ministries. *(Information provided by government agency with program responsibility)*

Appendix E: Additional relevant material in the Clearinghouse

The Closing the Gap Clearinghouse Assessed collection includes summaries of research and evaluations that provide information on what works to overcome Indigenous disadvantage across the seven Council of Australian Government building block topics.

The table below contains a list of selected research and evaluations that were the key pieces of evidence used in this issues paper. The major components are summarised in the Assessed collection.

To view the Assessed collection, visit <http://www.aihw.gov.au/closingthegap/collections/>.

Table E1: Assessed collection items for *Improving labour market outcomes through education and training*

Title	Year	Author(s)
The role of Community Development Employment Projects in remote communities	2004	Misko J
The labour market dynamics of Indigenous Australians	2005	Gray M & Hunter B
Evaluation strategy for Job Services Australia 2009 to 2012	2009	DEEWR
Measures of Indigenous wellbeing and their determinants across the lifecourse: measuring and analysing Indigenous wellbeing	2011	Biddle N
NSW Government employment and economic development programs for Aboriginal people: review of programs and broader considerations	2011	ACG
'The Way Ahead'—mentoring of Aboriginal apprentices & trainees: follow up & assessment	2011	Powers T
What Works. The Work Program. Success in remote schools: a research study of eleven improving remote schools	2012	National Curriculum Services
Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People: final report	2012	Behrendt L, Larkin S, Griew R & Kelly P
Potential factors influencing Indigenous education participation and achievement	2012	Biddle N & Cameron T
Decomposing differences in labour force status between Indigenous and non-Indigenous Australians	2012	Kalb G, Le T, Hunter B & Leung F
Increasing Indigenous employment rates	2012	Gray M, Hunter B & Lohoar S
Report on government services 2013: Indigenous compendium	2013	SCRGSP
Cultural dimensions of Indigenous participation in vocational education and training: new perspectives	2013	Dockery AM
Closing the gap: Prime Minister's report 2013	2013	Australian Government

Table E2 contains a list of Closing the Gap Clearinghouse issues papers and resource sheets related to this resource sheet.

To view the publications, visit <http://www.aihw.gov.au/closingthegap/publications/>.

Table E2: Related Clearinghouse resource sheets and issues papers

Title	Year	Author(s)
Pathways for Indigenous school leavers to undertake training or gain employment	2010	Hunter B
School attendance and retention of Indigenous Australian students	2010	Purdie N & Buckley S
School readiness: what does it mean for Indigenous children, families, schools and communities	2010	Dockett S, Perry B & Kearney E
Closing the school completion gap for Indigenous students	2011	Helme S & Lamb S
Increasing Indigenous employment rates	2012	Gray M, Hunter B & Lohar S
Strategies to enhance employment of Indigenous ex-offenders after release from correctional institutions	2012	Graffam J & Shinkfield A
Engaging Indigenous students through school-based health education	2012	McCuaig L & Nelson A
Mentoring programs for Indigenous youth at risk	2013	Ware V

References

ABS (Australian Bureau of Statistics) 2006. TableBuilder: 2006 Census of Population and Housing. Canberra: ABS. Viewed 27 December 2013, <http://www.abs.gov.au/websitedbs/censushome.nsf/home/tablebuilder>.

ABS 2011. TableBuilder: 2011 Census of Population and Housing. Canberra: ABS. Viewed 27 December 2013, <http://www.abs.gov.au/websitedbs/censushome.nsf/home/tablebuilder>.

ABS 2012a. Census of Population and Housing: estimating homelessness, 2011. ABS cat. no. 2049.0. Canberra: ABS. Viewed 27 December 2013, <http://abs.gov.au/ausstats/abs@.nsf/Latestproducts/2049.0Main Features22011>.

ABS 2012b. Prisoners in Australia. 2012 reissue. ABS cat. no. 4517.0. Canberra: ABS. Viewed 27 December 2013, <http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/24B61FAA213E5470CA257B3C000DCF8A/$File/45170_2012reissue.pdf>.

ABS 2012c. Schools, Australia, 2012. ABS cat. no. 4221.0. Canberra: ABS. Viewed 27 December 2013, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4221.0Main+Features202012>.

ABS 2012d. Community Development Employment Projects. Viewed 1 November 2013, <http://www.abs.gov.au/websitedbs/censushome.nsf/home/statementspersoncdep?opendocument&navpos=430>.

ABS 2013. Estimates of Aboriginal and Torres Strait Islander Australians, June 2011. ABS cat. no. 3238.0.55.001. Canberra: ABS. Viewed 27 December 2013, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/3238.0.55.001>.

ACER (Australian Council for Educational Research) 2006. Purdie N, Frigo, T, Stone A, Dick W, Enhancing employment opportunities for Indigenous Victorians: a review of the literature. Melbourne: ACER. Viewed May 2013 <http://research.acer.edu.au/indigenous_education/19>.

ACER 2011. Dispelling myths: Indigenous students' engagement with university. Australasian Survey of Student Engagement research briefing. Vol. 10, April. Melbourne: ACER. Viewed 1 May 2013, <http://www.acer.edu.au/documents/aussereports/AUSSE_Research_Briefing_Vol10.pdf>.

ACG (Allen Consulting Group) 2011a. Assessment of the economic and employment outcomes of the Working on Country program. Report to the Australian Government Department of Sustainability, Environment, Water, Population and Communities. Canberra: ACG. Viewed 1 October 2013, <http://www.environment.gov.au/indigenous/workingoncountry/publications/woc-economics.html>.

ACG 2011b. NSW Government employment and economic development programs for Aboriginal people: review of programs and broader considerations. Report to the Minister for Aboriginal Affairs, New South Wales Government. Sydney: ACG. Viewed 27 December 2013, <http://www.acilallen.com.au/cms_files/acgaboriginalemploymentnsw2011.pdf>.

Australian Government 2011. The future of remote participation and employment servicing arrangements: discussion paper. Canberra: Australian Government Department of Education, Employment and Workplace Relations. Viewed 31 December 2013, <http://www.nesa.com.au/media/31247/the%20future%20of%20remote%20participation%20and%20employment%20servicing%20arrangements%20discussion_paper%2015.08.11.pdf>.

Australian Government 2013. Closing the Gap: Prime Minister's report 2013. Canberra: Australian Government Department of Families, Housing, Community Services and Indigenous Affairs. Viewed 30 December 2013, <http://www.dss.gov.au/our-responsibilities/Indigenous-australians/programs-services/closing-the-gap/closing-the-gap-prime-ministers-report-2013>.

Behrendt L, Larkin S, Griew R & Kelly P 2012. Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People: final report July 2012. Canberra: Australian Government. Viewed 27 December 2013, <http://www.innovation.gov.au/highereducation/IndigenousHigherEducation/ReviewOfIndigenousHigherEducation/FinalReport/index.html>.

Biddle N 2010a. A human capital approach to the educational marginalisation of Indigenous Australians. CAEPR working paper no. 67/2010. Canberra: Centre for Aboriginal Economic Policy Research (CAEPR), The Australian National University. Viewed 28 December 2013, <http://caepr.anu.edu.au/Publications/WP/2010WP67.php>.

Biddle N 2010b. Indigenous migration and the labour market: a cautionary tale. Australian Journal of Labour Economics 13(3):313–30. Viewed 28 December 2013, <http://business.curtin.edu.au/local/docs/C5biddle.pdf>.

Biddle N 2011. Measures of Indigenous wellbeing and their determinants across the lifecourse: measuring and analysing Indigenous wellbeing. Lecture 2, 2011 CAEPR lecture series. CAEPR, The Australian National University. Viewed 1 October 2013, <http://caepr.anu.edu.au/Measuring-and-analysing-wellbeing.php>.

Biddle N & Cameron T 2012. Potential factors influencing Indigenous education participation and achievement. NCVER research report. Adelaide: National Centre for Vocational Education Research(NCVER). Viewed 1 May 2013, <http://www.ncver.edu.au/publications/2560.html>.

Booth AL, Leigh A & Varganova E 2012. Does ethnic discrimination vary across minority groups? Evidence from a field experiment. Oxford Bulletin of Economics and Statistics 74(4):547–73. doi:10.1111/j.1468-0084.2011.00664.x. Viewed 28 December 2013, <http://andrewleigh.org//pdf/AuditDiscrimination.pdf>.

COAG (Council of Australian Governments) 2008. National Partnership Agreement on Indigenous Economic Participation. Canberra: COAG. Viewed 1 September 2013, <http://www.federalfinancialrelations.gov.au/content/npa/skills/economic_participation/national_partnership.pdf>.

COAG 2012. National Indigenous Reform Agreement (Closing the Gap). Canberra: COAG. Viewed 28 December 2013, <http://www.federalfinancialrelations.gov.au/content/national_agreements.aspx>.

COAG Reform Council 2013. Indigenous reform 2011–12: comparing performance across Australia. Report to the COAG. Canberra: COAG Reform Council. Viewed 1 November 2013, <http://www.coagreformcouncil.gov.au/reports/Indigenous-reform/Indigenous-reform-2011-12-comparing-performance-across-australia>.

Constable J, O'Leary J & Roberts A 2013. Closing the work gap in corporate Australia: Indigenous perspectives on effective engagement between Aboriginal and Torres Strait Islander communities and the private sector. Sydney: Diversity Council Australia. Viewed 28 December 2013, <http://dca.org.au/files/file/Indigenous%20documents/DCA%20RA%20LL%20Closing%20the%20Work%20Gap%20Exec%20Summary%20March%202013.pdf>.

Cooper T, Bahn S & Giles M 2012. Investigating the social welfare indicators of Aboriginal regional art centres: a pilot study. Perth: Edith Cowan University. Viewed 1 October 2013, <http://www.daa.wa.gov.au/Documents/ReportsPublications/Art_centre_report.pdf>.

Davies N 2009. The way ahead for Aboriginal people project: final report. Prepared for BVET and STS. Sydney: NSW Board of Vocational Education and Training (BVET) & NSW State Training Services, Department of Education and Training (STS), New South Wales. Viewed 1 August 2013, <http://www.bvet.nsw.gov.au/pdf/TheWayAheadforAboriginalPeopleProject.pdf>.

DEECD (Department of Education and Early Childhood Development, Victoria) 2012. The On Track Survey 2012: the destinations of school leavers in Victoria: statewide report. Melbourne: DEECD. Viewed 1 June 2013, <http://www.education.vic.gov.au/Documents/about/research/ontrackreport2012.pdf>.

DEEWR (Australian Government Department of Education, Employment and Workplace Relations) 2009. Evaluation strategy for Job Services Australia 2009 to 2012. Canberra: DEEWR. Viewed 31 December 2013, <http://docs.employment.gov.au/node/6038>.

DEEWR 2010. STEP and Wage Assistance: a net impact study: off-benefit outcomes measured to August 2007. Canberra: DEEWR. Viewed 31 December 2013, <http://docs.employment.gov.au/node/7882>.

Deloitte Access Economics 2012a. Econometric analysis of the Australian Apprenticeships Incentives Program. Prepared for the Australian Government Department of Education, Employment and Workplace Relations. Canberra: Deloitte Access Economics. Viewed 1 April 2013, <http://www.australianapprenticeships.gov.au/publications/econometric-analysis-australian-apprenticeships-incentives-program>.

Deloitte Access Economics 2012b. Youth transitions evidence base: 2012 update. Prepared for DEEWR. Canberra: Deloitte Access Economics. Viewed 28 December 2013, <http://docs.education.gov.au/node/32291>.

Department of Education and Training, Queensland 2009. Next step 2009: a report on the destinations of Year 12 completers from 2008 in Queensland. Brisbane: Department of Education and Training. Viewed 30 December 2013, <http://education.qld.gov.au/nextstep/pdfs/2009pdfs/nextstep09.pdf>.

Department of Education, Training and Employment, Queensland 2012. Next step 2012: a report on the destinations of Year 12 completers from 2011 in Queensland. Brisbane: Department of Education, Training and Employment. Viewed 1 June 2012, <http://education.qld.gov.au/nextstep/2012report.html>.

Department of Labour, New Zealand 2010. How have Māori and Pacific people been affected by the recession? Wellington: Department of Labour. Viewed 30 December 2013, <http://www.dol.govt.nz/publications/lmr/hlfs-investigation-reports/maori-pacific-been-affected-recession/index.asp>.

DEWR (Australian Government Department of Employment and Workplace Relations) 2003. Indigenous Employment Policy Evaluation: stage two: effectiveness report. Canberra: DEWR. Viewed 30 December 2013, <http://docs.employment.gov.au/node/6420>.

DIISRTE (Department of Industry, Innovation, Science, Research and Tertiary Education), 2012 Students: selected higher education statistics, 2011 student full year. Canberra: DIISRTE/ Viewed June 2013 <http://www.innovation.gov.au/highereducation/HigherEducationStatistics/StatisticsPublications/Pages/2011StudentFullYear.aspx>.

Dockery AM 2013. Cultural dimensions of Indigenous participation in vocational education and training: new perspectives. NCVER research report. Adelaide: NCVER. Viewed 1 August 2013, <http://www.ncver.edu.au/publications/2573.html>.

DoFD (Department of Finance and Deregulation) 2009a. Evaluation of the Community Development Employment Projects Program: evaluation report. Canberra: Australian Government Department of Finance and Deregulation. Viewed 1 September 2013, <http://www.anao.gov.au/~/media/Uploads/Documents/evaluation_of_the_community_development_employment_projects_(cdep)_program.pdf>.

DoFD 2009b. Performance audit of the Sporting Chance program. Canberra: Australian Government Department of Finance and Deregulation. Viewed 1 October 2013, <http://www.anao.gov.au/uploads/documents/Performance_Audit_of_The_Sporting_Chance_Program.pdf>.

DSEWPaC (Australian Government Department of Sustainability, Environment, Water, Population and Communities) 2013. Working on Country. Reporting back to you: 2009–2012: report to Working on Country funding recipients. Canberra: DSEWPaC. Viewed 27 December 2013, <http://www.environment.gov.au/indigenous/workingoncountry/publications/woc-report-card.html>.

GenerationOne & AUSPOLL 2011. Community attitudes to Indigenous education, training and employment. Sydney: GenerationOne. Viewed 28 December 2013, <http://generationone.org.au/uploads/assets/917e8e7a7fb79af304acbcb5d14f1f0a18ea5eaa.pdf>.

Graffam J & Shinkfield A 2012. Strategies to enhance employment of Indigenous ex offenders after release from correctional institutions. Resource sheet no. 11. Produced for the Closing the Gap Clearinghouse. Cat. no. IHW 58. Canberra: Australian Institute of Health and Welfare & Melbourne: Australian Institute of Family Studies. Viewed 28 December 2013, <https://www.aihw.gov.au/ClosingTheGap/Publications/>.

Gray D & Wilkes E 2010. Reducing alcohol and other drug related harm. Resource sheet no. 3. Produced for the Closing the Gap Clearinghouse. Cat. no. IHW 35. Canberra: Australian Institute of Health and Welfare & Melbourne: Australian Institute of Family Studies. Viewed 28 December 2013, <https://www.aihw.gov.au/ClosingTheGap/Publications/>.

Gray M & Hunter B 2005. The labour market dynamics of Indigenous Australians. Journal of Sociology 41(4):386–405.doi:10.1177/1440783305058474.

Gray M, Hunter B & Lohoar S 2012. Increasing Indigenous employment rates. Issues paper no. 3. Produced for the Closing the Gap Clearinghouse. Cat. no. IHW 71. Canberra: Australian Institute of Health and Welfare & Melbourne: Australian Institute of Family Studies. Viewed 29 December 2013, <https://www.aihw.gov.au/ClosingTheGap/Publications/>.

Hill R 2009. Keeping up: strengthening transitions from education into work for Indigenous young people. Canberra: Reconciliation Australia & Sydney: Dusseldorp Skills Forum. Viewed 1 May 2013, <http://www.reconciliation.org.au/getfile?id=81&file=Keeping%20up.pdf>.

Howard A, Edge J & Watt D 2012. Understanding the value, challenges, and opportunities of engaging Métis, Inuit, and First Nation workers. Ottawa: Conference Board of Canada. Viewed 28 December 2013, <http://www.aboriginalhr.ca/files/file/resources/reports/CBoC_UnderstandingtheValue-RPT%20-%20July%202012.pdf>.

Hunter B 2007. Cumulative causation and the Productivity Commission's Framework for Overcoming Indigenous Disadvantage. Australian Journal of Labour Economics 10(3):185–202. Viewed 1 October 2013, <http://ceebi.curtin.edu.au/local/docs/C4_hunter.pdf>.

Hunter BH & Gray MC 2012. Continuity and change in the CDEP Scheme. CAEPR working paper no. 84/2012. Canberra: CAEPR, The Australian National University. Viewed 29 December 2013, <http://caepr.anu.edu.au/Publications/WP/2012WP84.php>.

Kalb G, Le T, Hunter B & Leung F 2012. Decomposing differences in labour force status between Indigenous and non-Indigenous Australians. IZA discussion paper no. 6808. Bonn: Institute for the Study of Labor (IZA). Viewed 1 May 2013, <http://www.melbourneinstitute.com/downloads/hilda/Bibliography/Working+Discussion+Research_Papers/2012/Kalb_etal_Decomposing_differences_in_labour_force_status_between_Indigenous_and_non-Indigenous_Australians.pdf>.

Ministry of Business, Innovation and Employment, New Zealand 2013. Māori labour market factsheet—March 2013. Wellington: Ministry of Business, Innovation and Employment. Viewed 30 December 2013, <http://www.dol.govt.nz/publications/lmr/pdfs/lmr-fs/lmr-fs-maori-mar13.pdf>.

Misko J 2004. The role of Community Development Employment Projects in remote communities. NCVER research report. Adelaide: NCVER. Viewed 1 May 2013, <http://www.ncver.edu.au/publications/1505.html>.

National Curriculum Services 2012. What Works. The Work Program. Success in remote schools: a research study of eleven improving remote schools. Melbourne: National Curriculum Services Pty Ltd. Viewed 1 September 2013, <http://www.whatworks.edu.au/upload/1341805220784_file_SuccessinRemoteSchools2012.pdf>.

ORIC (Office of the Registrar of Indigenous Corporations) 2012. At the heart of art: a snapshot of Aboriginal and Torres Strait Islander corporations in the visual arts sector. Canberra: ORIC. Viewed 31 December 2013, <http://www.oric.gov.au/html/publications/other/11_0327_Corp_Visual_Arts_Sector_v3-3.pdf>.

Powers T 2011. 'The Way Ahead'—mentoring of Aboriginal apprentices & trainees: follow up & assessment. Prepared for NSW Board of Vocational Education and Training & State Training Services, Department of Education and Training, New South Wales. Sydney: Powers and Associates. Viewed 29 December 2013, <http://www.bvet.nsw.gov.au/pdf/Thewayaheadfollowupassessment.pdf>.

Purdie N & Buckley S 2010. School attendance and retention of Indigenous Australian students. Issues paper no. 1. Produced for the Closing the Gap Clearinghouse. Cat. no. IHW 33. Canberra: Australian Institute of Health and Welfare & Melbourne: Australian Institute of Family Studies. Viewed 1 May 2013, <https://www.aihw.gov.au/ClosingTheGap/Publications/>.

RPR Consulting 2010. Review of the NSW Health Aboriginal Environmental Health Officer Training Program: summary report. Sydney: NSW Department of Health. Viewed 1 May 2013, <http://www0.health.nsw.gov.au/pubs/2010/pdf/aboriginal_training_100019.pdf>.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2013. Report on government services 2013: Indigenous compendium. Canberra: Productivity Commission. Viewed 27 December 2013, <http://www.pc.gov.au/gsp/rogs/indigenous-compendium-2013>.

Te Puni Kōkiri 2012. Ngā huarahi mō ngā taiohi Māori: Māori youth transitions. Summary sheet 019–2012. Wellington: Te Puni Kōkiri. Viewed 30 December 2013, <http://www.tpk.govt.nz/en/in-print/our-publications/fact-sheets/maori-youth-transitions/download/YouthTransitions.pdf>.

Te Puni Kōkiri 2013. Māori Future Makers. Wellington: Te Puni Kōkiri. Viewed 30 December 2013, <http://www.maorifuturemakers.com/>.

Urbis 2012. Assessment of the social outcomes of the Working on Country program. Prepared for DSEWPaC. Sydney: Urbis. Viewed 27 December 2013, <http://www.environment.gov.au/indigenous/workingoncountry/publications/woc-social.html>.

Vurens van Es R & Dockery AM 2008. Indigenous Australians in the labour market: exploring the role of social capital. Centre for Labour Market Research discussion paper series no. 08/03. Perth: Curtin Business School, Curtin University of Technology. Viewed 1 May 2013, <http://business.curtin.edu.au/local/docs/2008.03_ExploringTheRole.pdf>.

Acknowledgments

Dr Tom Karmel was the Managing Director of the National Centre for Vocational Education Research (NCVER). He is a current member of the Australian Government's National Skills Standards Council. His research interests and experience are in the economics of education and training. He has worked for the Australian Bureau of Statistics. His research interests centre on the labour market and the economics of education. He is especially interested in performance indicators in higher education and vocational education.

Dr Josie Misko is a Senior Research Fellow at NCVER with particular research interests in the implementation of VET reforms including accelerated apprenticeships, entitlements and prisoner education. She is also interested in the implementation of quality systems and regulatory frameworks in Australia and overseas. Her recent work has been focused on the quality of assessments, labour mobility of foreign workers, workforce development, e-learning and high-performance work organisations. She is also interested in investigating the effectiveness and efficiency of VET institutions, and in programs aimed at lifting the foundation or basic skills of adults with low basic skills.

Davinia Blomberg is a research officer at NCVER with considerable experience in the analysis of data from national collections on education, employment and training (including apprenticeships and traineeships), VET in schools, higher education, and the Longitudinal Survey of Australian Youth.

Dr Alice Bednarz is a Research Fellow at NCVER. She is very interested in mathematical modelling, especially for VET completion rates. She is also interested in funding and financing of students undertaking education and training.

Georgina Atkinson is a Research Officer at NCVER and works in the Research Management team. She has a special interest in the training outcomes of Indigenous Australians.

Abbreviations

ABS	Australian Bureau of Statistics
ABSTUDY	Aboriginal Study Assistance Scheme
ACER	Australian Council for Educational Research
AFB	Away From Base
ANZSCO	Australian and New Zealand Standard Classification of Occupations
BVET	The Board of Vocational Education and Training
CDEP	Community Development and Employment Programs
CLIEP	Corporate Leaders for Indigenous Employment Project
COAG	Council of Australian Governments
DEEWR	Department of Employment Education and Workplace Relations
IEI	Indigenous Employment Initiative
IEU	Indigenous Higher Education Units
JSA	Job Services Australia
NAPLAN	National Assessment Program - Literacy and Numeracy

NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NCEA	National Certificate of Educational Achievement
RJCP	Remote Jobs and Community Program
SEAM	Improving School Enrolment and Attendance through Welfare Reform Measure
SET	Student Education Trusts
SFNT	Stronger Futures in the Northern Territory
STEP	Structured Employment and Training
VET	Vocational Education and Training

Terminology

Indigenous: 'Aboriginal and Torres Strait Islander' and 'Indigenous' are used interchangeably to refer to Australian Aboriginal and/or Torres Strait Islander people. The Closing the Gap Clearinghouse uses the term 'Indigenous Australians' to refer to Australia's first people.

Funding

This paper was commissioned by the Closing the Gap Clearinghouse. The Clearinghouse is a Council of Australian Governments' initiative jointly funded by all Australian Governments. The Australian Institute of Health and Welfare in collaboration with the Australian Institute of Family Studies deliver the Clearinghouse.

Suggested citation

Karmel T, Misko J, Blomberg D, Bednarz A & Atkinson G 2014. Improving labour market outcomes through education and training. Issues paper no. 9. Produced for the Closing the Gap Clearinghouse. Canberra: Australian Institute of Health and Welfare & Melbourne: Australian Institute of Family Studies.

Copyright

ISBN 978-1-74249-539-2

ISSN 2201-845X

Cat. no. IHW 118