



Australian Government

Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People Final Report

July 2012

Expert Panel

Professor Larissa Behrendt (Chair)
Professor Steven Larkin
Mr Robert Griew
Ms Patricia Kelly

Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People: Final Report July 2012

ISBN: 978 1 922125 25 5 (Print)

ISBN: 978 1 922125 26 2 (PDF)

ISBN: 978 1 922125 27 9 (DOCX)

This document can also be accessed via the Innovation website at:
www.innovation.gov.au/IHER.



Except where otherwise noted, all material presented in this document is provided under a Creative Commons Attribution 3.0 Australia (<http://creativecommons.org/licenses/by/3.0/au>) licence. To the extent that copyright subsists in a third party, permission may be required from the third party to reuse the material.

The details of the relevant licence conditions are available on the Creative Commons website (accessible using the links provided), as is the full legal code for the CC BY 3.0 AU licence (<http://creativecommons.org/licenses/by/3.0/au/legalcode>).

This document must be attributed as the *Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People: Final Report*.

Disclaimer

The material contained in this document has been developed by the Panel of the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People ('the Panel'). The views and opinions expressed in the materials do not reflect the views of or have the endorsement of the Australian Government or of any Minister, or indicate the Australian Government's commitment to a particular course of action, and the Australian Government is not responsible for the accuracy of the contents.

Contents

Executive summary	ix
Recommendations	xvii
Introduction	1
Context.....	3
What are we trying to achieve?	11
Parity for Aboriginal and Torres Strait Islander students and staff in the higher education sector	13
Part I: Unlocking capacity and empowering choices	15
1 Unlocking capacity and empowering choices	17
1.1 Schools.....	17
1.2 Other pathways	35
1.3 Enabling programs	48
1.4 Access to information	51
Part II: Supporting success and releasing capability	55
Introduction to Part II.....	57
2 Aboriginal and Torres Strait Islander student success	59
2.1 Provision of support through Indigenous Education Units and the faculties	60
2.2 Building professional pathways and responding to community need	65
3 Provision of Aboriginal and Torres Strait Islander-specific support to universities and students.....	73
3.1 Indigenous Support Program funding.....	74
3.2 Indigenous Tutorial Assistance Scheme – Tertiary Tuition.....	76
3.3 Support for Aboriginal and Torres Strait Islander students from regional and remote areas	79
3.4 Other non-financial support for students	85
3.5 Recognising and broadening student choices	86
3.6 Financial support for Aboriginal and Torres Strait Islander students	88
4 Aboriginal and Torres Strait Islander knowledge and research	94
4.1 Aboriginal and Torres Strait Islander knowledge and perspectives	94
4.2 Higher degrees by research and research training.....	104
4.3 Aboriginal and Torres Strait Islander research capability	116
5 Supporting Aboriginal and Torres Strait Islander staff	132



5.1	Growing and retaining the general Aboriginal and Torres Strait Islander university workforce.....	133
5.2	Building the Aboriginal and Torres Strait Islander academic and research workforce.....	137
6	University culture and governance	142
6.1	University culture.....	142
6.2	University governance.....	145
6.3	Parity targets to be included in mission-based compacts.....	151
7	The way forward: an Aboriginal and Torres Strait Islander higher education strategy and evaluation framework.....	153
7.1	Development of an Aboriginal and Torres Strait Islander higher education strategy and the role of the Indigenous Higher Education Advisory Council	153
7.2	Development of a monitoring and evaluation framework.....	154
	Part III: Lessons learned.....	159
	Introduction to Part III.....	161
8	Whole-of-university approach	162
9	Unlocking capacity and empowering choices	166
9.1	Schools.....	166
9.2	Vocational education and training sector.....	167
9.3	Aboriginal and Torres Strait Islander workforce.....	170
9.4	Correctional centres	171
9.5	Aspiration	173
9.6	Readiness	178
9.7	Access to information	180
10	Aboriginal and Torres Strait Islander student success	183
10.1	Student support: a case management approach.....	183
10.2	Regional and remote delivery.....	184
10.3	Financial support	186
11	Building professional pathways and responding to community need	189
11.1	Community-based approach to Aboriginal and Torres Strait Islander education.....	189
11.2	Professions and universities collaborating	191
11.3	Indigenous graduate attributes.....	193
12	Aboriginal and Torres Strait Islander knowledge and perspectives.....	196
12.1	Curriculum and pedagogy	196

12.2 Teacher education.....	199
12.3 The interface between Indigenous and Western knowledge systems ...	201
13 Research, research training and university workforce	206
13.1 Good practice supervision of Aboriginal and Torres Strait Islander higher degree by research students	206
13.2 Cohort support for Aboriginal and Torres Strait Islander higher degree by research students	208
13.3 Building Aboriginal and Torres Strait Islander research capacity in students and early career researchers	209
13.4 Building the Aboriginal and Torres Strait Islander higher education workforce.....	211
13.5 Ethical practice in research involving Aboriginal and Torres Strait Islander communities	214
13.6 University strategies to support Aboriginal and Torres Strait Islander researchers	217
13.7 Research teams and models for research success.....	219
14 University culture and governance	223
14.1 Bringing community knowledge to campus	223
14.2 Decision-making and accountability structures.....	225
Acronyms and abbreviations	231
Glossary.....	233
Appendix I: Terms of reference	239
Appendix II: Review process and personnel	241
Appendix III: Submissions	243
Appendix IV: Consultations	246
Appendix V: Commissioned research	257
References.....	259
Index.....	275





Australian Government

Review of Higher Education Access and Outcomes

for Aboriginal and Torres Strait Islander People



Senator the Hon Chris Evans
Minister for Tertiary Education, Skills, Science and Research
Parliament House
Canberra ACT 2600

12 July 2012

Dear Minister

On 14 April 2011 you initiated a review to provide advice and make recommendations to the Australian Government on higher education access and outcomes for Aboriginal and Torres Strait Islander people.

On behalf of the Review Panel, Mr Robert Griew, Ms Patricia Kelly and Professor Steven Larkin, I am pleased to provide you with our *Final Report*, which includes our findings and recommendations for governments, universities, employers and professional organisations.

I believe that the Review and the implementation of our recommendations has the potential to dramatically improve the Australian higher education sector. You will see in this report that our hope is that every person who aspires to have a higher education and that has the capacity to undertake it is given a genuine opportunity to do so. Higher education and the opportunities it affords can transform the lives of Aboriginal and Torres Strait Islander Australians.

The transformative power of higher education underpins the prosperity of our nation and is of particular importance for Aboriginal and Torres Strait Islander communities where overcoming socio-economic disadvantage will only be achieved if members of those communities are given the capacity to assist in finding the solutions to seemingly intractable problems.

The Review was supported by a comprehensive consultation process with the sector. I travelled to every public university in Australia (and to the University of Notre Dame in Broome) and met with vice-chancellors, other senior university representatives and most importantly, Aboriginal and Torres Strait Islander students, graduates and staff.

During our consultations, the Review Panel had the privilege of meeting people working in Aboriginal and Torres Strait Islander education who were generous with their knowledge and time, including education researchers, Elders and professional business people. We also benefited from constructive insights provided in the many submissions that were made to the Review by universities, Aboriginal and Torres Strait Islander organisations and interested individuals. We were inspired by the determination of the students we met throughout the consultation process to change their lives by getting a higher education degree.

The work of the Panel was assisted by some of the great thinkers in the sector including Professor Ian Anderson, Professor Shane Houston, Professor Michael

McDaniel, Professor Irabinna Rigney, Mr Greg Phillips, Dr Bob Morgan, Professor Linda Tuhiwai Smith and Distinguished Professor Graham Hingangaroa Smith. We were helped in our work by the support and involvement of the Indigenous Higher Education Advisory Council, particularly Professor Aileen Moreton-Robinson. We were also greatly assisted by Mr Frank Gafa, who liaised with the National Union of Students and ensured that we gave strong consideration to the views of students, and Professor Peter Lee who liaised with Universities Australia and ensured that we understood the perspective of the sector as we developed our thinking and recommendations.

A review of this size and complexity is not possible without a strong and dedicated secretariat. Thank you to the Review Secretariat team headed by Jasmin Fielder and supported by senior staff including, over the period, Catherine Vandermark, Lisa Schofield and Craig Ritchie.

Thank you, Minister, for giving us all the opportunity to work on and contribute to the Review.

Yours sincerely

A handwritten signature in black ink, reading "Larissa Behrendt". The signature is written in a cursive, flowing style. The name "Larissa" is written in a larger, more prominent script, and "Behrendt" follows in a similar but slightly smaller script. The signature is set against a light gray rectangular background.

Professor Larissa Behrendt

Executive summary

I'm the first of 32 grandchildren to come to university ... Sometimes when I come here [Flinders University] I'm like wow I'm at university and I'm not just at university but I'm going to law school (Jamilla Sekiou, Bachelor of Laws and Legal Practice, Flinders University).

When I left the island I was given a garden basket. I was told by an Elder: education is the garden, it gives you fruit; it gives you food. With that garden basket you fill it up with knowledge and you bring it back to the community and you feed the community with the knowledge you have gained (Adeah Kabai, engineering student, CQUniversity).

Aboriginal and Torres Strait Islander young people across the country are increasingly aspiring to get an education, go to university and take up professional and leadership positions. In doing so, they want to drive positive outcomes for their communities and for the broader Australian community. This Review examines what can be done across government, universities, business, professions and communities to support not just young people, but all Aboriginal and Torres Strait Islander people to participate and succeed in higher education. In turn, benefits will flow to all Australians, as was identified in the 2008 Bradley Review of Higher Education (the Bradley Review).

The Bradley Review concluded that 'Australia faces a critical moment in the history of higher education', where 'the reach, quality and performance of a nation's higher education system will be key determinants of its economic and social progress' (Bradley et al. 2008, p. xi).

In commissioning the Bradley Review, the government recognised the important role higher education plays in driving productivity and delivering a strong and steady supply of highly skilled labour—in effect, nation building. But for higher education to truly support nation building, all Australians must be able to contribute to and share in its benefits.

The Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People (the Review) builds on the Bradley Review and examines how improving higher education outcomes among Aboriginal and Torres Strait Islander people will contribute to nation building and reduce Indigenous disadvantage.

Aboriginal and Torres Strait Islander people are significantly underrepresented in the higher education system, contributing to the high levels of social and economic disadvantage they often experience. Producing graduates qualified to take up professional, academic and leadership positions across community, government and corporate sectors will help to address this disadvantage.

In conducting the Review, the Review Panel (the Panel) has taken account of existing government policies and other strategies including the *Indigenous Economic Development Strategy 2011–2018*,¹ the National Aboriginal and Torres Strait

¹ The *Indigenous Economic Development Strategy 2011–2018* 'is an Australian Government policy framework that aims to support the increased personal and economic wellbeing of Aboriginal and Torres Strait Islander Australians through greater participation in the economy' (Australian Government 2011).



Islander Education Policy and the *Aboriginal and Torres Strait Islander Education Action Plan 2010–2014*.

The Review focuses on the specific barriers that are preventing Aboriginal and Torres Strait Islander people from achieving their full potential in higher education, and recommends actions to improve higher education outcomes.

Some of the barriers addressed by this Review are not limited to Aboriginal and Torres Strait Islander people, and the Panel believes that by resolving them there will likely be flow-on benefits for all Australians.

Terms of reference

The terms of reference of the Review asked the Panel to provide advice and make recommendations in relation to:

- achieving parity for Aboriginal and Torres Strait Islander students, researchers, and academic and non-academic staff
- best practice and opportunities for change inside universities and other higher education providers (spanning both Indigenous-specific units and whole-of-university culture, policies, activities and programs)
- the effectiveness of existing Commonwealth Government programs that aim to encourage better outcomes for Indigenous Australians in higher education
- the recognition and equivalence of Indigenous knowledge in the higher education sector.

Parity targets and scope of review

The term ‘parity’, referred to in the Review’s terms of reference, generally means achieving ‘equality’ or ‘equivalence’. In this context, the Panel has taken it to mean ‘equality’ or ‘equivalence’ of participation and outcomes in higher education between Aboriginal and Torres Strait Islander and non-Indigenous Australians. In doing so, the Panel considered how best to measure such ‘equivalence’ and then how to set sector-wide targets to achieve it. The Panel has recommended that the parity target for student enrolments and staff/researcher numbers should be based on the proportion of the total population aged between 15 and 64 who are Aboriginal and Torres Strait Islander people. This means that the initial national parity target for student enrolments and staff/researcher numbers would be 2.2%² and revised in line with new population data following each national census (ABS 2012a). For retention and completion rates of students, the Panel has recommended that the parity target be set to match retention and completion rates of non-Indigenous students.

The Panel believes that the upcoming mid-term university compact discussions and negotiation of future compacts with universities will provide the most appropriate mechanism for the Australian Government and universities to negotiate the relevant targets for each university.

The scope of the Review and its recommendations are focused on universities. If parity targets are to be achieved, the higher education sector must take the lead, with government, business, professional bodies, research agencies, the vocational

² The initial parity target of 2.2% is based on 2006 Census data.



education and training (VET) and school sectors, and Aboriginal and Torres Strait Islander communities as active partners.

References to *universities* throughout the report relate to Table A higher education providers³ unless specified otherwise. The references to *students* throughout the report relate to undergraduate, postgraduate and higher degree by research (HDR) students, unless specified otherwise. References to *postgraduate* students throughout the report relate to students studying any postgraduate course (including coursework masters and doctorates) whereas references to *HDR* students relate only to students undertaking higher degrees by research (i.e. masters by research and PhDs).

The Panel's vision

While the ultimate aim of the Review is to achieve parity in higher education for Aboriginal and Torres Strait Islander students and staff, the Panel's vision is much broader. In the coming years the Panel wants higher education to become a natural pathway for Aboriginal and Torres Strait Islander people. Success in higher education will lay the foundations for an Aboriginal and Torres Strait Islander professional class that can contribute to closing the gap and to Australia's broader wellbeing and economic prosperity. The Panel also wants to see more high-quality Aboriginal and Torres Strait Islander researchers in universities and research agencies contributing to a national research agenda that values Aboriginal and Torres Strait Islander perspectives and reflects Indigenous development priorities.

The Panel ultimately hopes to see the higher education sector playing a leading role in building capacity within Aboriginal and Torres Strait Islander communities, and making a meaningful contribution to closing the gap between Indigenous and non-Indigenous Australians.

Consultation process

To undertake this Review, the Panel conducted extensive consultations, both face to face and through a submission process. The Chair of the Panel visited every Table A higher education provider across the country to gather the views of university management, Aboriginal and Torres Strait Islander students and staff, and representative bodies. The Panel released a context paper and call for submissions, with 77 submissions received from individuals, universities, professional and industry bodies and other organisations.

The report makes references to existing programs and best practice identified during consultations and also includes a section on case studies highlighting success factors and challenges regarding key issues. The Review aims to build on existing efforts by learning from what is working and making changes targeted at improving what is not working.

Unlocking capacity and empowering choices

Schools are the primary avenue through which most people enter higher education, and the sector must work more closely with schools to make this true for Aboriginal and Torres Strait Islander people.

³ See the glossary.



The Panel understands the pipeline of Aboriginal and Torres Strait Islander school students coming through the school system will not be sufficient on its own to meet the Panel's proposed targets for Aboriginal and Torres Strait Islander participation in higher education, even as Year 12 completion rates continue to improve.

Notwithstanding this observation, the Panel supports the efforts of government, schools, business and non-government organisations to improve the education outcomes of Aboriginal and Torres Strait Islander school students, and supports the *Aboriginal and Torres Strait Islander Education Action Plan 2010–2014*. The Panel believes that universities can play a greater role in supporting Aboriginal and Torres Strait Islander school students, starting in primary school, through outreach programs that support aspiration building and provide mentoring and academic support in key areas like mathematics and science.

At the same time, more Aboriginal and Torres Strait Islander people will need to be supported to enter the higher education system through other pathways, particularly the workforce and VET system. Universities and employers could further build on existing partnerships and explore new ones to provide financial and other support to Aboriginal and Torres Strait Islander people in the workforce to take up university studies. To improve pathways from the VET sector to university, VET students need to be encouraged and supported to enrol in higher-level VET courses (Certificate IV and above) as they can act as a pathway to higher education. The Panel suggests that special entry arrangements and credit transfer for courses completed need to be further developed.

Supporting student success

To succeed at university Aboriginal and Torres Strait Islander students need access to a range of social, financial and academic support. The Panel proposes a fundamental shift from often marginalised Indigenous Education Units bearing responsibility for supporting Aboriginal and Torres Strait Islander students, to a whole-of-university effort. Indigenous Education Units are currently the main source of cultural, and often academic, support for Aboriginal and Torres Strait Islander students. Students have said Indigenous Education Units are important to them as supportive environments that enhance their university experience and the Panel believes that they should continue to play this supportive role for students. However, they cannot be expected to drive whole-of-university strategies because they simply do not have the reach, resources or discipline-specific knowledge to do so.

Therefore, the Panel believes that faculties should be primarily responsible for supporting the academic success of Aboriginal and Torres Strait Islander students, given the discipline-based knowledge and staff available to them. Faculties can provide discipline-specific tutoring, mentoring, and connections to the professional world and employment. Faculties are where academics and teachers and older students can be partnered with students as mentors or role models, where discipline-associated professions connect with the university, and where students learn to be leaders in their future professional field.

Success for students will also mean more students choosing to study across a broader field of disciplines. Initially, the Panel believes that universities should focus on those disciplines that will contribute to closing the gap or where Aboriginal and Torres Strait Islander students have been underrepresented.



The Panel proposes that Indigenous-specific funding support provided by government to universities should be reformed in line with a set of principles aimed at delivering flexible, simplified, student-focused support within a strong accountability and reporting framework. The Australian Government should review individual programs in accordance with these principles and develop new program guidelines in close consultation with universities.

With regard to specific programs, the Panel found that the Indigenous Tutorial Assistance Scheme – Tertiary Tuition (ITAS-TT) program provided tutoring support that was highly valued by students in helping them to succeed in their studies. It could be further strengthened through changes to the eligibility criteria and possible development of a national tutor database to support the program.

The Commonwealth Scholarships Program was shown to have significant levels of under-spending. The Panel proposes that the various categories of scholarships be amalgamated into one simplified payment program which may help to improve take-up rates.

A number of submissions raised issues regarding financial support for Aboriginal and Torres Strait Islander students. The Panel also considered Professor Lee Dow's comment in the Review of Student Income Support Reforms that:

[T]he relationship between the residual Indigenous scholarships elements of the Commonwealth Scholarships Program and the new Student Start-up Scholarships and Relocation Scholarships, which are available for ABSTUDY higher education students, warrants further consideration (Dow 2011, p. 52).

The Student Start-up Scholarships and Relocation Scholarships are paid close to the commencement of studies. There is no need to apply separately for the scholarships—they are an automatic entitlement for qualifying higher education students in receipt of ABSTUDY Living Allowance, Youth Allowance or Austudy. The scholarships are tax-free and do not impact on the student's income support entitlement. The Panel also considered the increase in ABSTUDY scholarship debt as a result of the operation of two separate schemes.

The Panel notes that reforms following the Bradley Review and the Review of Student Income Support Reforms in 2011 are starting to flow through to provide additional income support to Aboriginal and Torres Strait Islander students. The Panel suggests that the government monitor carefully how the recent income support reforms support Aboriginal and Torres Strait Islander students over the next few years. Access to adequate and affordable housing remains a problem, particularly for regional and remote Aboriginal and Torres Strait Islander students who move to the cities to study. The Panel was encouraged to see innovative approaches to delivering on-campus accommodation and would like to see universities make further efforts in this area.

Employers, universities and professional bodies may be able to do more to provide financial and other support to students through cadetships, scholarships and bursaries, beyond their existing efforts that, the Panel acknowledges, are already making important contributions.



Building professional pathways and responding to community need

Building a class of Aboriginal and Torres Strait Islander professionals who can respond to the needs of their own communities will be vital to meeting Closing the Gap targets. It is also central to the Panel's vision for the future of Aboriginal and Torres Strait Islander success in higher education. The Panel believes that faculties can play a leading role in supporting Aboriginal and Torres Strait Islander students graduating as professionals in their chosen field by forming close partnerships with professional bodies. Professional bodies can drive demand for more Aboriginal and Torres Strait Islander professionals and, together with employers, can support students to excel through scholarships, mentoring, cadetships and work experience.

By increasing the numbers of Aboriginal and Torres Strait Islander professionals across different fields, all Australians will benefit from access to more diverse expertise, knowledge and skills.

Aboriginal and Torres Strait Islander knowledge and research

Indigenous perspectives and knowledge, translated into curriculum, teaching practices and graduate attributes, can make important contributions to helping professionals meet the needs of Aboriginal and Torres Strait Islander communities. Where professionals are being trained to work in fields with Aboriginal and Torres Strait Islander clients, business partners and/or communities, they should learn relevant knowledge and gain an understanding of contemporary Indigenous issues to help them in their professional work. The Panel proposes that universities develop Aboriginal and Torres Strait Islander Teaching and Learning Frameworks that reflect the inclusion of Indigenous knowledge within curriculums, graduate attributes and teaching practices. The Panel also recommends that the Australian Government continue to support the work of the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) in the digitisation of Aboriginal and Torres Strait Islander data. The Panel further recommends that there be a review of AIATSIS to examine its future strategic direction, its role and functions, governance structures and levels of resourcing with a view to strengthening its capacity to preserve and disseminate Indigenous knowledge and support Indigenous research.

Researchers translate knowledge and ideas into innovation that drives productivity and improves the wellbeing of all Australians. The Panel considers it imperative that the national research priorities include specifics related to Aboriginal and Torres Strait Islander research. It also supports growing the number of Aboriginal and Torres Strait Islander people completing higher degrees by research, and ensuring that there is adequate government support for Aboriginal and Torres Strait Islander research and researchers.

Supporting Aboriginal and Torres Strait Islander staff

Given the relatively low number of Aboriginal and Torres Strait Islander staff in both general and academic positions across the sector, the Panel believes that universities will need to increase their efforts to 'grow their own' academic staff and to attract external staff into the sector. Building on the National Indigenous Higher Education Workforce Strategy, government can help by investing in academic staff,



initially providing short-term funding to all universities to employ staff and in the longer term moving to a system where funding is provided to universities who continue to employ these staff after the initial funding has ceased.

The Panel also wants to see government, employers and universities partner to sponsor a cohort of Aboriginal and Torres Strait Islander intellectual and professional leaders to take up leadership roles across a broader range of faculties.

University culture and sector governance

For all of the above to succeed, vice-chancellors will need to lead from the top and, together with faculties, drive change in university culture and governance, so that there is shared responsibility for Aboriginal and Torres Strait Islander higher education outcomes across each university leadership. Improving Aboriginal and Torres Strait Islander higher education outcomes should be integral to the university's core business.

The Panel believes that there should be greater representation of Aboriginal and Torres Strait Islander people in senior governance positions. The vice-chancellor and other senior university management should be responsible and accountable for delivering Aboriginal and Torres Strait Islander student and staff success and this should be reflected in their performance arrangements.

The achievement of the parity targets is central to achievement of the Panel's vision and will require all of the above issues to be addressed and progress to be measured. The Panel believes that the most appropriate accountability mechanism for articulating strategies and measuring progress will be through the mission-based compacts between the universities and government. The Panel would like to see universities articulate their strategies for achieving the parity targets within their negotiations with government and for these to be recorded and reported on through the compacts. The government should consider adjusting reward payment structures to recognise those universities that exceed the targets through performance payments.

The way forward: an Aboriginal and Torres Strait Islander higher education strategy and monitoring and evaluation framework

The Panel proposes that the Australian Government lead the development of an Aboriginal and Torres Strait Islander higher education strategy to provide a comprehensive framework for its response to the Review. The Indigenous Higher Education Advisory Council (IHEAC) can provide a leadership and advisory role to the Minister in the development of the strategy. It will also be important for the Australian Government to develop a robust monitoring and evaluation framework to monitor progress and evaluate outcomes. The Panel notes that while there is a large quantity of data collected through the Council of Australian Governments (COAG) and departmental reporting processes, further work could be done on the quality and relevance of data collected. The Panel would like to see a greater focus on data and evidence that specifically identify the critical factors influencing Aboriginal and Torres Strait Islander success in higher education. Where possible, efforts should be made by the Australian Government to avoid any duplication of effort and to make the best use of existing data. The government will also need to undertake further modelling work to set appropriate timeframes for achievement of targets, noting that they are



interdependent with the achievement of other targets already set by government including the COAG Closing the Gap targets.



Recommendations

What are we trying to achieve?

Parity for Aboriginal and Torres Strait Islander students and staff in the higher education sector

Recommendation 1

That the Australian Government:

- define the population parity rate (parity) as the proportion of the population aged between 15 and 64 years that is Aboriginal and/or Torres Strait Islander according to ABS population statistics—this national parity rate is currently 2.2%
- revise the parity figure each time new census data is available
- use this parity rate to set national targets for Aboriginal and Torres Strait Islander student and staff enrolments.

Recommendation 2

That universities use the population parity target identified by the Australian Government to set their own targets and timeframes:

- for the proportion of the total domestic student population to be Aboriginal or Torres Strait Islander students, focusing initially on priority disciplines that support the Closing the Gap agenda or where Aboriginal and Torres Strait Islander students are currently most underrepresented
- for the proportion of domestic students undertaking higher degrees by research or research training programs to be Aboriginal or Torres Strait Islander people
- for the retention and completion rates by Aboriginal and Torres Strait Islander students, matching the rates for those of non-Indigenous students across the disciplines, and at each of the levels of study
- for the proportion of the university general and academic staff to be Aboriginal or Torres Strait Islander people
- reflecting their geographic and demographic catchments and their own strategies.

Recommendation 3

That the Australian Government engage with universities in discussion of these targets and the universities' strategies to achieve them in the context of mid-compact discussions and future compacts, and reward universities for achieving and moving beyond these targets through incentive payments.



Unlocking capacity and empowering choices

Schools

Recommendation 4

That the Australian Government work with state and territory education departments to ensure that career advisers and teachers:

- encourage Aboriginal and Torres Strait Islander students to consider higher education as a post-school option
- have access to professional development that increases their capacity to teach and advise Aboriginal and Torres Strait Islander students.

Recommendation 5

That the Australian Government revise the guidelines for the Higher Education Participation and Partnerships Program (HEPPP) to:

- refocus the emphasis of projects that are aimed at Aboriginal and Torres Strait Islander young people to a greater extent on:
- developing academic skills, especially in mathematics and sciences, in primary and early secondary schools, while still also giving some priority to:
- building aspiration to go to university
- building Aboriginal and Torres Strait Islander peer and family networks to encourage higher education as a shared goal
- providing students in Years 10 to 12 with mentoring, pathway support and case management and academic enrichment
- providing relevant information to students in Years 10 to 12, their families and communities about the transition to university for graduating secondary students
- clarify that HEPPP funding should be targeted at generic promotion of higher education rather than promotion of universities' individual courses.

Other pathways

Recommendation 6

That universities and the vocational education and training (VET) sectors:

- work with employers and professional associations to encourage them to support their Aboriginal and Torres Strait Islander employees to undertake higher education, including through cadetship models, scholarships and flexible leave arrangements
- collaborate with professional bodies and private and public sector employers to build and extend alternative pathways into higher education, including pursuing better credit transfer arrangements between VET and universities, pursuing delivery partnerships, and ensuring that VET providers are promoting higher education as an option post-VET



- support Aboriginal and Torres Strait Islander students to enrol in and complete higher-level (at least Certificate IV and above), but also diploma and advanced diploma-level, qualifications.

Recommendation 7

That the Indigenous Higher Education Advisory Council work with the National VET Equity Advisory Council to provide joint advice to governments on how to improve pathways between VET and higher education.

Enabling programs

Recommendation 8

That the Australian Government, VET providers and universities collaborate to improve the reach and effectiveness of enabling courses for disadvantaged learners, particularly Aboriginal and Torres Strait Islander students, including:

- reforming Commonwealth Grant Scheme funding so that it increases with the number of students undertaking higher education enabling courses
- facilitating tracking of students who undertake enabling courses at one university and move to and enrol at a second university so that both universities gain recognition for success.

Access to information

Recommendation 9

That universities and the Australian Government improve the access to and effectiveness of the information they provide for potential Aboriginal and Torres Strait Islander students, including through:

- dedicated contact points and Aboriginal and Torres Strait Islander higher education advisers located within universities
- a campaign in Indigenous media to promote the importance and relevance of higher education to Aboriginal and Torres Strait Islander students
- developing capacity within the MyUniversity website through which potential Aboriginal and Torres Strait Islander students can access information on scholarships, financial and other supports available to students undertaking higher education, and requirements for entry to and success in higher education.

Aboriginal and Torres Strait Islander student success

Provision of support through Indigenous Education Units and the faculties

Recommendation 10

That universities adopt a whole-of-university approach to Aboriginal and Torres Strait Islander student success so that faculties and mainstream support services have primary responsibility for supporting Aboriginal and Torres Strait Islander students, backed up by Indigenous Education Units.



Recommendation 11

That universities:

- continue to support Indigenous Education Units to provide a culturally safe environment for Aboriginal and Torres Strait Islander students, including postgraduate and higher degree by research students
- review whether their Indigenous Education Units have appropriate objectives, funding, structures and accountability measures to ensure quality student outcomes with a focus on:
- outreach work with schools and other sectors
- improvements in retention and completion rates
- access to quality tutoring services
- collaborate with each other and government to build an evidence base and share good practice.

Building professional pathways and responding to community need

Recommendation 12

That universities, professional bodies, employers and Aboriginal and Torres Strait Islander professional organisations better support Aboriginal and Torres Strait Islander communities by:

- refining university planning processes to take account of the likely future needs of Aboriginal and Torres Strait Islander communities for a professional workforce
- developing innovative local partnerships to drive and support demand for growing the number and breadth of Aboriginal and Torres Strait Islander professionals
- encouraging Aboriginal and Torres Strait Islander membership of professional bodies and the establishment of Aboriginal and Torres Strait Islander professional and student associations within professions.

Provision of Aboriginal and Torres Strait Islander-specific support to universities and students

Indigenous Tutorial Assistance Scheme – Tertiary Tuition

Recommendation 13

That the Australian Government reform funding for supplementary Aboriginal and Torres Strait Islander support programs, including the Indigenous Support Program and the Indigenous Tutorial Assistance Scheme – Tertiary Tuition (ITAS-TT), in time for the 2013 academic year, based on the following design principles:

- Allow universities greater flexibility to provide locally relevant, tailored support for Aboriginal and Torres Strait Islander students and staff.
- Target available funding to achieve an improvement in current enrolment levels but also with a greater emphasis on retention and completion rates.
- Ensure that funding would be simple to administer.



- Ensure that funding would support clear outcome-focused accountability for universities.

The new funding model should include consideration of tutoring support for students who were previously ineligible for ITAS-TT assistance.

Recommendation 14

That universities collaborate to share tutoring (ITAS-TT) best practice and explore the establishment of a national tutor database.

Support for Aboriginal and Torres Strait Islander students from regional and remote areas

Recommendation 15

That universities consider how best to support the needs of regional and remote Aboriginal and Torres Strait Islander students, including through:

- the use of virtual networks and other technology-based solutions to provide greater access to universities by remote and regional students
- options to provide additional and affordable housing specifically for Aboriginal and Torres Strait Islander people relocating away from their families. These options could include developing further partnerships and philanthropic support to deliver affordable accommodation on campus.
- working with the Higher Education Standards Panel to develop quality standards for Away-from-Base education delivery
- collaboration to allow recognition of the effort of universities that may enrol students who then go on to complete their degrees at different universities.

Recommendation 16

That the Australian Government revise the Away-from-Base funding guidelines to align with the quality standards developed in response to Recommendation 15.

Financial support for Aboriginal and Torres Strait Islander students

Recommendation 17

That the Australian Government and universities, in consultation with Aboriginal and Torres Strait Islander student representatives:

- examine any outstanding issues regarding government income support payments for Aboriginal and Torres Strait Islander students, including issues relating to ABSTUDY, Australian Postgraduate Awards and income support for students undertaking postgraduate degrees that were formerly undergraduate degrees, focusing on the needs of students with children, and explore opportunities to partner with philanthropic and private sector organisations to provide additional income support for students
- amalgamate existing Commonwealth scholarships for Aboriginal and Torres Strait Islander students into one program based on the overarching reforms outlined in Recommendation 13.



Aboriginal and Torres Strait Islander knowledge and research

Aboriginal and Torres Strait Islander knowledge and perspectives

Recommendation 18

That universities develop and implement an Aboriginal and Torres Strait Islander teaching and learning strategy applicable across a range of curriculums, focused on standards of excellence as applied to other curriculum content and feeding into descriptions of graduate attributes, with an initial focus on priority disciplines to close the gap such as teaching and health professions.

Recommendation 19

That the Australian Government continue to support the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) to digitise and thus preserve its collection for future generations and particularly for use in higher education, and encourage the development of a national approach to data digitisation working with states, territories and community groups to ensure that Indigenous knowledge be digitised appropriately and preserved.

Higher degrees by research and research training

Recommendation 20

That universities incorporate Aboriginal and Torres Strait Islander supervision in their planning and as a competency within their internal training for higher degree by research (HDR) supervisors, and consider, where appropriate, flexible co-supervision arrangements that provide for Aboriginal and Torres Strait Islander supervisors who are not necessarily academic staff in a university.

Recommendation 21

That the Australian Research Council consider conducting an early review of implementation of the Aboriginal and Torres Strait Islander Researchers' Network to ensure that it is appropriately targeting HDR students.

Recommendation 22

That the Australian Government work with universities through compact negotiations to ensure that they:

- allocate Research Training Scheme funding equivalent to a university's Aboriginal and Torres Strait Islander HDR student target to support Aboriginal and Torres Strait Islander research training and a pipeline of Aboriginal and Torres Strait Islander HDR students. Universities will need to report on their strategy and level of funding as well as report on outcomes through the compact.
- allocate Australian Postgraduate Award funding equivalent to a university's Aboriginal and Torres Strait Islander HDR student target to support the completion of degrees by Aboriginal and Torres Strait Islander HDR students and a pipeline of Aboriginal and Torres Strait Islander HDR students. Universities will need to report on their strategy as well as on outcomes through the compact.



Aboriginal and Torres Strait Islander research capability

Recommendation 23

That universities develop Aboriginal and Torres Strait Islander research strategies within their business planning processes, for inclusion in their mission-based compacts. Strategies should include increasing the number of Aboriginal and Torres Strait Islander academics with completed higher degrees by research and the use of ethical research practices when undertaking research involving Aboriginal and Torres Strait Islander communities.

Recommendation 24

That the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) provide more formal guidance to publicly funded research agencies, universities and researchers on ethical research practice. This could include, for example, information on the AIATSIS website of case studies and materials to assist Australian researchers.

Recommendation 25

That the Australian Government consider revisions to the National Research Priorities that recognise the importance of:

- closing the gap between Aboriginal and Torres Strait Islander people and all other Australians
- protection of Indigenous culture and knowledge.

Recommendation 26

That the Australian Research Council and the Australian Bureau of Statistics work together to create an Indigenous research code to better identify research relating to Indigenous knowledges.

Recommendation 27

That the Australian Research Council (ARC) examine the adoption of a strategic approach to building capacity in Aboriginal and Torres Strait Islander researchers across its funding programs, building on the experiences of the National Health and Medical Research Council. The ARC should examine:

- current barriers to winning competitive grants experienced by Aboriginal and Torres Strait Islander people
- whether available funding programs can better assist in supporting Aboriginal and Torres Strait Islander researchers achieve research outcomes, particularly early career researchers
- the performance of the new Discovery Indigenous scheme
- whether ethical research practices are sufficiently supported within its competitive grants and grant approval processes.

Recommendation 28

That the Australian Government undertake a review of the Australian Institute of Aboriginal and Torres Strait Islander Studies to consider how best to maintain the



institute's unique place in developing Aboriginal and Torres Strait Islander academic and research activities and the relationship it has with universities.

Supporting Aboriginal and Torres Strait Islander staff

Recommendation 29

That universities develop strategies, informed by the National Indigenous Higher Education Workforce Strategy, to recruit, support and retain Aboriginal and Torres Strait Islander staff to meet the parity targets set by the Australian Government.

Recommendation 30

That the Australian Government bring forward work to implement an Aboriginal and Torres Strait Islander researcher workforce plan under the national Research Workforce Strategy.

Recommendation 31

That the Australian Government consider developing:

- a funding program to provide additional scholarships at both the undergraduate and postgraduate level to support universities' ability to 'grow their own' Aboriginal and Torres Strait Islander academic staff
- a 'top-up' funding program for positions for three years to support universities to attract new Aboriginal and Torres Strait Islander staff members to join the higher education sector.

University culture and governance

Recommendation 32

That universities continue to develop and implement a range of strategies to:

- improve the cultural understanding and awareness of staff, students and researchers within their institution, including the provision of cultural competency training
- increase the number of Aboriginal and Torres Strait Islander people in senior management positions
- increase the number of Aboriginal and Torres Strait Islander people represented in the highest-level governance structures
- increase accountability of faculty leaders and senior management for achieving parity targets and improved outcomes.

The way forward: an Aboriginal and Torres Strait Islander higher education strategy and evaluation framework

Development of an Aboriginal and Torres Strait Islander higher education strategy and the role of the Indigenous Higher Education Advisory Council

Recommendation 33

That the Australian Government work with the higher education sector, Aboriginal and Torres Strait Islander academics, students, communities and other stakeholders



to develop an Aboriginal and Torres Strait Islander higher education and research strategy that responds to the recommendations of this report.

Recommendation 34

That the Indigenous Higher Education Advisory Council play a leadership role and an advisory role to the Minister on the development and implementation of the proposed Aboriginal and Torres Strait Islander higher education and research strategy in response to this Review.

Development of a monitoring and evaluation framework

Recommendation 35

That the Australian Government and universities work together to:

- develop a national Aboriginal and Torres Strait Islander higher education monitoring and evaluation framework
- develop a set of standardised words to be used by universities, based on the national census's Indigenous identification question, when asking whether a person identifies as Aboriginal or Torres Strait Islander
- encourage Aboriginal and Torres Strait Islander students to identify themselves as such to their university.



Introduction



Context

The Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People follows on from the 2008 Review of Higher Education (the Bradley Review) by proposing measures that address what is a significant gap between Aboriginal and Torres Strait Islander and non-Indigenous Australians' higher education outcomes.

The Bradley Review recognised, in light of Australia's growing economic and social policy challenges, the need for specific strategies to increase the participation in higher education of groups currently underrepresented within the system, particularly those from a low socio-economic status (SES) background. The Bradley Review specifically identified the need to address access and outcomes in higher education for Aboriginal and Torres Strait Islander people.

The terms of reference for the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People (the Review) asked the Review Panel (the Panel) to provide advice and make recommendations in relation to:

- achieving parity for Aboriginal and Torres Strait Islander students, researchers, and academic and non-academic staff
- best practice and opportunities for change inside universities and other higher education providers (spanning both Indigenous-specific units and whole-of-university culture, policies, activities and programs)
- the effectiveness of existing Commonwealth Government programs that aim to encourage better outcomes for Aboriginal and Torres Strait Islander Australians in higher education
- the recognition and equivalence of Indigenous knowledge in the higher education sector.

The Panel proposes a collaborative approach be developed involving universities, governments, professional bodies, the business sector and communities working together to improve the lives of Aboriginal and Torres Strait Islander people through higher education. Strategies outlined in the report include attracting and retaining more Aboriginal and Torres Strait Islander students and staff, improving academic achievement, simplifying and better focusing university and government support programs and ensuring that graduates are better equipped to meet the needs of Aboriginal and Torres Strait Islander people through embedding Indigenous perspectives in teaching, learning and research.

Our approach: empowering communities, Closing the Gap and nation building

Higher education and training has a critical role to play in improving the socio-economic position of Aboriginal and Torres Strait Islander people, their families and their communities. It also has an important role to play in driving the nation's social and economic development.

Both of these transformative processes are consistent with the commitment to address Aboriginal and Torres Strait Islander disadvantage as the central goal of the Closing the Gap agenda. Closing the Gap is a commitment by all Australian



governments to improve the lives of Aboriginal and Torres Strait Islander people across six areas relating to health, early childhood development, education and economic participation.

The higher education sector has a vital role to play in raising the health, education and economic outcomes for Aboriginal and Torres Strait Islander people by making sure they have the skills and capacity they need to drive change from within their communities. Part of this capacity building is preparing Aboriginal and Torres Strait Islander people for leadership roles, so they are the ones making the decisions that affect their communities and providing positive examples for the people around them. Seeing parents at work, for example, provides strong role models for children, especially in the university sector where few Aboriginal and Torres Strait Islander people are seen to have ventured.

Making these changes will require a strong commitment from universities to raise enrolment, retention and completion rates for Aboriginal and Torres Strait Islander students, as well as improving employment opportunities within the sector for potential Aboriginal and Torres Strait Islander staff.

Despite significant progress in recent decades, Aboriginal and Torres Strait Islander people remain significantly underrepresented in Australian universities. The important milestones in Aboriginal and Torres Strait Islander higher education, such as the first Aboriginal or Torres Strait Islander student to receive a degree from an Australian university or the graduation of the first Aboriginal or Torres Strait Islander doctor, came nearly a century after other countries with similar colonial histories, such as the United States, Canada and New Zealand (Anderson 2008).

The Panel believes that this disadvantage comes at a cost not only to Aboriginal and Torres Strait Islander people, but also to the nation in terms of opportunities lost. Underrepresentation in higher education by these communities means that significant and unique perspectives and experiences of Australia's First Nation peoples are not being shared in classrooms, in lecture theatres or in research output in proportion to other voices from the national community. There are also significant economic and fiscal costs associated with lower higher education outcomes for Aboriginal and Torres Strait Islander people that come with lower economic participation rates and higher dependency on government services.

Higher education comes with the promises of higher incomes and associated intergenerational health and security benefits, and the promise of greater autonomy with a new generation of Aboriginal and Torres Strait Islander professionals responding to and meeting the needs of their communities across industry, commerce and government.

Universities are where we educate architects and engineers to build homes and communities, where we train doctors and nurses, teachers, lawyers, social workers and journalists. It is where we educate future leaders and captains of industry. The higher education system is what ultimately builds the prosperity of our nation. And it is also a place where research can help analyse the problems facing the community, where best practice models can be developed by using expertise in particular areas and where Indigenous knowledge and viewpoints can be incorporated into the national knowledge base.

Higher education will become increasingly vital as the nation responds to the social and economic challenges posed by an ageing population and issues like climate

change. It is critical that Aboriginal and Torres Strait Islander people are engaged as students, teachers, researchers and professionals, bringing their unique experiences, perspectives and methods to addressing these challenges.

Improving higher education outcomes of Aboriginal and Torres Strait Islander people comes with significant economic benefits as well. The Centre for Aboriginal Economic Policy Research estimates that 'if the educational level of the Indigenous population was increased to that of the non-Indigenous population, the value of this hypothetical change [to the nation] is \$1.09 billion per annum' (Taylor et al. 2011, p. viii). Access Economics quantifies economy-wide advantages from improvements in the quality of life of Aboriginal and Torres Strait Islander people as more than \$10 billion in extra gross domestic product by 2029, increasing government revenue by \$4.6 billion and reducing government expenditure by \$3.7 billion (Access Economics 2008, p. iv).

In light of broader higher education reform, this is an opportune moment to address disadvantage—empowering Aboriginal and Torres Strait Islander people to gain access to the opportunities and life benefits that higher education affords. This Review recommends that government take the opportunity of broader higher education reform to not only address disadvantage, but to also include Aboriginal and Torres Strait Islander people in the nation-building agenda of the next decade.

Next steps

The purpose of this report is to make recommendations in relation to what universities, government and other stakeholders need to do to put more effort into improving higher education outcomes for Aboriginal and Torres Strait Islander people. Some submissions to the Review raised the need for the report to also spell out how universities should do this as well. The Panel understands there are differences between universities in terms of their circumstances, their student populations and how far advanced they are in meeting their share of the parity targets. Accordingly, there can be no 'one size fits all' approach to how they should implement the report's recommendations and the Panel cannot prescribe sector-wide actions.

The Panel believes that universities should build from this report, working in partnership with government and other stakeholders (schools, VET providers, employers and professional bodies) to develop individual strategies to implement the recommendations aimed at them. Throughout the report the Panel has used examples and case studies (in the absence of strong empirical evidence) to help universities to identify what is already being done that they can learn from.

Building on existing efforts

The Australian Government and many universities have taken steps in recent years to try to improve the participation of Aboriginal and Torres Strait Islander people in higher education. These have mostly taken the form of support programs and financial assistance. While progress has been slow, and the programs have had varying degrees of success, the Panel believes that this Review should build on existing efforts by learning from what is working and making changes targeted at improving what is not working.

This report points to examples of programs that have been identified during consultations as showing signs of promise or success. However, the Panel believes



that there is more work to do on rigorous, independent and long-term evaluation of these programs.

Current situation

Aboriginal and Torres Strait Islander people hold a unique place in the fabric of Australian society and culture as First Nation peoples. However, across education, employment and cultural spheres, their participation and influence remain low.

Population

- **Aboriginal and Torres Strait Islander people made up 2.2% of the Australian working-age population⁴ in 2006** (ABS 2012a).
- **Aboriginal and Torres Strait Islander people are more likely to live in regional and remote areas compared to non-Indigenous people.** In 2006, 43.3% of Aboriginal and Torres Strait Islander people lived in regional areas and 24.6% in remote (or very remote) areas, compared to 28.9% of non-Indigenous people who lived in regional areas and 1.8% in remote (or very remote) areas (ABS 2011b).

School

- **Aboriginal and Torres Strait Islander students' apparent retention rates⁵ are lower compared to non-Indigenous students.** In 2010, 47.2% of Aboriginal and Torres Strait Islander students remained in school from the first year of high school to Year 12, compared to 79.4% of non-Indigenous students (SCRGSP 2011b, p. 4.58).
- **Aboriginal and Torres Strait Islander students are less likely to complete Year 12 compared to non-Indigenous students.** In 2008, 45.4% of Aboriginal and Torres Strait Islander 20- to 24-year-olds reported completing Year 12 or equivalent, compared to 88.1% of non-Indigenous 20- to 24-year-olds (SCRGSP 2011b, p. 4.49).
- **Aboriginal and Torres Strait Islander students are less likely to gain a university entrance score compared to non-Indigenous students.** In 2008, around 10% of Aboriginal and Torres Strait Islander students who completed Year 12 gained a university entrance score, compared to around 46% of non-Indigenous students (DEEWR 2008, pp. xxi, 35).

Vocational education and training

- **Aboriginal and Torres Strait Islander students made up 4.6% of all enrolments in vocational education and training (VET) in 2010** (NCVER 2010).
- **Aboriginal and Torres Strait Islander students aged 15 to 19 years participate in VET and schooling in similar numbers compared to non-Indigenous 15- to 19-year-olds, who have a higher number of students enrolled in school.** In 2010, 25,789 Aboriginal and Torres Strait Islander students aged 15 to 19 years enrolled in VET and 27,170

⁴ Working-age population includes those aged 15 to 64 years.

⁵ The apparent retention rate is the percentage of full-time students who continued to Year 12 from respective cohort groups at the commencement of their secondary schooling (Year 7/8) (SCRGSP 2011b, p. 4.58).

Aboriginal and Torres Strait Islander students enrolled in full-time school. In comparison, 403,878 non-Indigenous students aged 15 to 19 years enrolled in VET and 752,453 non-Indigenous students enrolled in full-time school (ABS 2011a; internal DEEWR data derived from NCVER 2010).

- **Aboriginal and Torres Strait Islander students are eight times more likely to be enrolled in a VET course than a university course. Non-Indigenous Australians are two times more likely.** In 2010, the proportion of working-age Aboriginal and Torres Strait Islander people enrolled in VET was 23%, compared to 3% in a university (Taylor et al. 2011, p. viii).
- **The majority of Aboriginal and Torres Strait Islander VET completions are for Certificate I–III qualifications.** In 2010, the overwhelming majority (82.1%) of Aboriginal and Torres Strait Islander completions were for Certificate I–III qualifications (NCVER 2010, Table 4).

Workforce

- **Aboriginal and Torres Strait Islander people are less likely to participate in the labour force compared to non-Indigenous people.** In 2008, 64.5% of the Aboriginal and Torres Strait Islander working-age population⁶ participated in the labour force, compared to 78.9% of the non-Indigenous working-age population (SCRGSP 2011b, p. 4.67, Table 4A.6.6).
- **Aboriginal and Torres Strait Islander people are more likely to have a lower median income compared to non-Indigenous people.** In 2008, Aboriginal and Torres Strait Islander people aged 18 years and over received a median gross weekly equivalised household (GWEH) income of \$445 per week,⁷ compared to non-Indigenous people aged 18 years and over who received a median GWEH income of \$746 per week (SCRGSP 2011b, p. 4.103, Figure 4.9.2).

Higher education – students

- **Aboriginal and Torres Strait Islander students made up 1.4% of all enrolments in university in 2010** (DIISRTE 2012a).⁸
- **Aboriginal and Torres Strait Islander people are less likely to participate in university compared to non-Indigenous people.** In 2006, 2.8% of the Aboriginal and Torres Strait Islander working-age population⁹ attended university, compared to 5.0% of the non-Indigenous working-age population (ABS 2012a; DIISRTE 2012a).¹⁰
- **Aboriginal and Torres Strait Islander students are less likely to be admitted to university on the basis of their prior educational attainment compared to non-Indigenous students.** In 2010, 47.3% of Aboriginal and Torres Strait Islander students entered university on the

⁶ Working-age population includes those aged 15 to 64 years.

⁷ Based on 2008 dollars.

⁸ Based on Table A providers and domestic students only.

⁹ Working-age population includes those aged 15 to 64 years.

¹⁰ Based on Table A providers and domestic students only.



basis of their prior educational attainment,¹¹ compared to 83.0% of non-Indigenous students (DIISRTE 2012a).¹²

- **Aboriginal and Torres Strait Islander students are more likely to be female compared to non-Indigenous students.** In 2010, 66.2% of Aboriginal and Torres Strait Islander students enrolled in university were female, compared to 57.9% of non-Indigenous students (DIISRTE 2012a).¹³
- **Aboriginal and Torres Strait Islander students are more likely to be mature-age students (aged 25 years and over) compared to non-Indigenous students.** In 2010, 54.4% of Aboriginal and Torres Strait Islander students enrolled in university were aged 25 years and over, compared to 38.2% of non-Indigenous students (DIISRTE 2012a).¹⁴
- **Aboriginal and Torres Strait Islander students are more likely to use an external mode of attendance compared to non-Indigenous students.** In 2010, 27.4% of Aboriginal and Torres Strait Islander students enrolled in university used an external mode of attendance, compared to 15.5% of non-Indigenous students (DIISRTE 2012a).¹⁵
- **Aboriginal and Torres Strait Islander student retention rates are lower compared to non-Indigenous students.** In 2010, 63.4% of Aboriginal and Torres Strait Islander students who were studying in 2009 continued to be enrolled at university,¹⁶ compared to 79.8% of non-Indigenous students (DIISRTE 2012a).¹⁷
- **Aboriginal and Torres Strait Islander students have lower completion rates over a five-year period compared to non-Indigenous students.** In 2010, 40.8% of Aboriginal and Torres Strait Islander students who commenced a bachelor course in 2005 had completed their course, compared to 68.6% of non-Indigenous students (DEEWR n.d.).¹⁸

Higher education – staff

- **Aboriginal and Torres Strait Islander full-time equivalent (FTE) staff made up 1.0% of all FTE staff in universities in 2010** (DIISRTE 2012a).¹⁹
- **Aboriginal and Torres Strait Islander FTE academic staff made up 0.8% of all FTE academic staff in universities in 2010** (DIISRTE 2012a).²⁰

¹¹ Prior educational attainment includes a higher education course, secondary education, or a VET award course.

¹² Based on Table A providers and domestic students only.

¹³ Based on Table A providers and domestic students only.

¹⁴ Based on Table A providers and domestic students only.

¹⁵ Based on Table A providers and domestic students only.

¹⁶ Excluding any students who completed in 2009.

¹⁷ Based on Table A providers and domestic students only.

¹⁸ Data includes both the student ID and Commonwealth Higher Education Student Support Number components to pick up students who may switch providers during their course.

¹⁹ Based on Table A providers and domestic students only.

²⁰ Based on Table A providers and domestic students only.

- **Aboriginal and Torres Strait Islander FTE non-academic staff made up 1.2% of all FTE non-academic staff in universities in 2010** (DIISRTE 2012a).²¹
- **Aboriginal and Torres Strait Islander FTE staff are more likely to be in non-academic positions compared to non-Indigenous FTE staff.** In 2010, 65.8% of Aboriginal and Torres Strait Islander FTE staff were employed in non-academic positions, compared to 56.8% of non-Indigenous FTE staff (DIISRTE 2012a).²²
- **Aboriginal and Torres Strait Islander FTE staff are less likely to be in higher-classification academic positions compared to non-Indigenous FTE staff.** In 2010, 7.0% of Aboriginal and Torres Strait Islander FTE staff were employed at above the senior lecturer level, and 6.2% at the senior lecturer level (Level C), compared to 11.1% of non-Indigenous FTE staff who were employed at above the senior lecturer level, and 10.1% at the senior lecturer level (Level C) (DIISRTE 2012a).²³
- **Aboriginal and Torres Strait Islander FTE staff are less likely to be employed in a research-only function in university, compared to non-Indigenous FTE staff.** In 2010, 6.7% of Aboriginal and Torres Strait Islander FTE staff were employed in a research-only function, compared to 14.8% of non-Indigenous FTE staff (DIISRTE 2012a).²⁴

Higher education – research

- **Aboriginal and Torres Strait Islander students made up 1.1% of higher degree by research (HDR) students at university, and 0.8% of all HDR completions in 2010** (DIISRTE 2012a).²⁵
- **Aboriginal and Torres Strait Islander HDR student retention rates are slightly lower compared to non-Indigenous students.** 80.1% of Aboriginal and Torres Strait Islander HDR students who were studying in 2009 continued to be enrolled at university in 2010,²⁶ compared to 83.9% of non-Indigenous students (DIISRTE 2012a).²⁷

Professions

- **Aboriginal and Torres Strait Islander people made up 0.8% of the professional occupation workforce in 2006** (Taylor et al. 2011, p. 3).
- **Aboriginal and Torres Strait Islander people made up 0.6% of the managerial occupation workforce in 2006** (Taylor et al. 2011, p. 3).
- **Aboriginal and Torres Strait Islander professionals are less likely to have a degree or higher qualification compared to non-Indigenous professionals.** In 2006, 39.5% of Aboriginal and Torres Strait Islander

²¹ Based on Table A providers and domestic students only.

²² Based on Table A providers and domestic students only.

²³ Based on Table A providers and domestic students only.

²⁴ Based on Table A providers and domestic students only.

²⁵ Based on Table A providers and domestic students only.

²⁶ Excluding any students who completed in 2009.

²⁷ Based on Table A providers and domestic students only.



professionals had a degree or higher qualification, compared to 69.3% of non-Indigenous professionals (Taylor et al. 2011, p. 5).

- **Aboriginal and Torres Strait Islander managers are less likely to have a degree or higher qualification compared to non-Indigenous managers.** In 2006, 16.9% of Aboriginal and Torres Strait Islander managers had a degree or higher qualification, compared to 28.7% of non-Indigenous managers (Taylor et al. 2011, p. 5).



What are we trying to achieve?

The Panel's vision is for a future where higher education is a natural pathway for Aboriginal and Torres Strait Islander people, with more Aboriginal and Torres Strait Islander professionals in decision-making roles across professions, government and industry, and where the higher education sector values the world views and perspectives of Aboriginal and Torres Strait Islander people.

A flexible, responsive and inclusive higher education system is the key to making this happen.

The Bradley Review recommended the establishment of sector-wide targets for participation of the groups that are still underrepresented in higher education, including Aboriginal and Torres Strait Islander students. Building on the Bradley Review's recommendation of a participation target for low SES undergraduate students of 20% by 2020, the Panel recommends setting targets for Aboriginal and Torres Strait Islander students that are focused on achieving parity for Aboriginal and Torres Strait Islander people in higher education. The term 'parity', referred to in the Review's terms of reference, generally means achieving 'equality' or 'equivalence'. In this context, the Panel has taken it to mean 'equality' or 'equivalence' of participation and outcomes in higher education between Aboriginal and Torres Strait Islander and non-Indigenous Australians.

Enabling more Indigenous people to gain access to higher education will require a range of strategies. These should include: Widening the focus of the higher education participation agenda [by] including Indigenous people as a distinct group of interest, in addition to and separate from people from low SES backgrounds (submission no. 16, Group of Eight, p. 5).

The Panel recommends that the parity target for student enrolments and staff/researcher numbers should be based on the proportion of the total population aged between 15 and 64 who are Aboriginal and Torres Strait Islander people. This means that the initial parity target for student enrolments and staff/researcher numbers would be 2.2%²⁸ and revised in line with new population data following each national census. For retention and completion rates of students, the Panel has recommended that the parity target be set to match retention and completion rates of non-Indigenous students.

This approach, supported by the Group of Eight, recognises that Aboriginal and Torres Strait Islander children and their families face a range of complex challenges that, while often linked to low socio-economic status, also go beyond such status for many Indigenous families.²⁹ As is outlined throughout the report, many submissions

²⁸ Based on the ABS 2006 *Census of population and housing* (ABS 2006).

²⁹ The Panel notes that submission no. 54 from the Centre for Independent Studies argued that Indigenous students' participation in higher education was primarily influenced by their low socio-economic status and that those attending university were mostly from urban middle-class backgrounds. The Panel notes that comparing departmental data against census data indicates that Aboriginal and Torres Strait Islander students from low SES backgrounds are less likely to attend university than non-Indigenous students from low SES backgrounds. At the same time there were still nearly one third (31.9%) of Aboriginal and Torres Strait Islander students at university who were from



pointed to educational disadvantage, lack of history within families of attending university, intergenerational poverty, the remoteness for some families from universities, and the need for higher levels of academic and social support for students once at university as all contributing to current poor participation and higher education outcomes among Aboriginal and Torres Strait Islander students. In addition, data included later in the report highlights that Aboriginal and Torres Strait Islander students have higher dropout rates and are clustered in a limited range of disciplines. Similarly, Aboriginal and Torres Strait Islander staff are also clustered at lower levels within academic positions.

Achieving parity in enrolments, retention and completions across a broader spread of disciplines will tell us not only that the choice to participate in higher education is the norm for Aboriginal and Torres Strait Islander people but also that the higher education system is supporting their success. At the same time, similar parity targets will need to be set for staff in both academic and general positions and for researchers. The Panel suggests that universities should focus their initial efforts in disciplines where Aboriginal and Torres Strait Islander students are underrepresented or in those fields that can contribute to closing the gap.

Achieving parity will be a long-term goal. The Panel explored options for setting a timeframe for the achievement of the sector-wide parity target. In doing so, it took account of the low SES target timeframe, the target of halving the gap in Year 12 (or equivalent) attainment between Aboriginal and Torres Strait Islander and non-Indigenous school students by 2020, and also sought some preliminary modelling from the Department of Industry, Innovation, Science, Research and Tertiary Education (DIISRTE). This preliminary modelling indicated that the parity target for enrolments may be feasible by 2030. However, the Panel believes that further modelling is required before a realistic and achievable timeframe can be set. It will also be important to monitor the interactions and flow-on effects between the various targets including the Year 12 target, the enrolment target, the retention and completion targets, and the higher degree and academic staffing targets. The Panel suggests that differing and sequenced timeframes are likely to be required for each target to allow the flow-on effects from one to the other and also to take account of the different starting points or current gaps in parity. For example, it would be unrealistic to assume that the sector could achieve 2.2% of all postgraduate students being Aboriginal and Torres Strait Islander students within the same timeframe as lifting Aboriginal and Torres Strait Islander student enrolments for undergraduate degrees to the same level, given that postgraduate degrees require undergraduate completions.

Regular measurement and review of progress of all targets will be critical.

low SES backgrounds compared with just 15% for non-Indigenous students (based on 2006 Census data and 2010 departmental data, which may not be directly comparable). Using the data with some caution, and taking account of other submissions, the Panel concluded that while socio-economic status is an important contributor to higher education participation for all students, there are a range of other factors that contribute not only to the participation but also the success of Aboriginal and Torres Strait Islander students once at university.

At the same time, the Panel encourages individual universities to consider setting timeframes for their own targets as, arguably, they will be in a better position to track their cohorts and forecast possible scenarios. They will also need to take account of their geographic catchment areas to set appropriate targets reflecting the proportion of the working-age population within their catchment area that is from Aboriginal and Torres Strait Islander backgrounds.

The Panel believes that achieving parity must be a shared agenda for universities, governments, business and the professions, schools, and Aboriginal and Torres Strait Islander people and communities. Universities as individual institutions are already taking steps to improve Aboriginal and Torres Strait Islander participation in higher education, but they can do more by collaborating with each other and driving sector-wide initiatives, and with the ongoing strong support of government, schools and the professions.

The Panel also believes that to achieve parity, university action must be institution-wide, not just focused on Indigenous Education Units. Universities must work to increase the recruitment of and support for Aboriginal and Torres Strait Islander students and staff, with an initial focus on disciplines where Aboriginal and Torres Strait Islander student enrolments are currently lowest and those disciplines that have national priority in meeting the Closing the Gap targets. These might include fields such as early childhood education, health sciences, engineering and accounting.

The challenges faced by the higher education sector in terms of enrolments, retention and completions are far-reaching and affect many non-Indigenous students as well.

Parity for Aboriginal and Torres Strait Islander students and staff in the higher education sector

Any significant improvement in outcomes for Aboriginal and Torres Strait Islander Australians' participation in higher education is going to require new ways of thinking about and acting to improve results. The recommendations set out below are not directed solely at any sector. Rather, they recognise that it must be a shared agenda involving all sectors working in partnership.

Recommendations

Recommendation 1

That the Australian Government:

- define the population parity rate (parity) as the proportion of the population aged between 15 and 64 years that is Aboriginal and/or Torres Strait Islander according to ABS population statistics—this national parity rate is currently 2.2%
- revise the parity figure each time new census data is available
- use this parity rate to set national targets for Aboriginal and Torres Strait Islander student and staff enrolments.



Recommendation 2

That universities use the population parity target identified by the Australian Government to set their own targets and timeframes:

- for the proportion of the total domestic student population to be Aboriginal or Torres Strait Islander students, focusing initially on priority disciplines that support the Closing the Gap agenda or where Aboriginal and Torres Strait Islander students are currently most underrepresented
- for the proportion of domestic students undertaking higher degree by research or research training programs to be Aboriginal or Torres Strait Islander people
- for the retention and completion rates by Aboriginal and Torres Strait Islander students, matching the rates for those of non-Indigenous students across the disciplines, and at each of the levels of study
- for the proportion of the university general and academic staff to be Aboriginal or Torres Strait Islander people
- reflecting their geographic and demographic catchments and their own strategies.

Recommendation 3

That the Australian Government engage with universities in discussion of these targets and the universities' strategies to achieve them in the context of mid-compact discussions and future compacts, and reward universities for achieving and moving beyond these targets through incentive payments.

Part I: Unlocking capacity and empowering choices



1 Unlocking capacity and empowering choices

Achieving better higher education outcomes for Aboriginal and Torres Strait Islander people will require action to increase the supply of people ready and able to participate in higher education. While university may not be the chosen pathway of everyone, it is important that everyone has this as an option.

Throughout consultations the Panel heard from many students about how supportive and proud their parents were of them for going to university. But even with this support, there are significant personal and community factors such as a lack of encouragement from educators, lack of aspiration and lack of community understanding and support to take on higher education that can act as disincentives to Aboriginal and Torres Strait Islander people choosing to enrol in university. Inadequate information about financial and other support for potential Aboriginal and Torres Strait Islander students can also discourage university enrolment.

By addressing these and other disincentives, the Panel believes that more Aboriginal and Torres Strait Islander people can be supported to a point where they have a real option to go to university.

Governments and the higher education sector must work closely with institutions that have the greatest potential to develop and supply Aboriginal and Torres Strait Islander candidates for higher education to provide potential students with the information and targeted support they need to make university a realistic option.

The Panel identified school students, the workforce and the VET sector as the key groups from which significantly greater numbers of Aboriginal and Torres Strait Islander people could and should be entering the higher education system.

1.1 Schools

Higher education does not exist in a vacuum. It is part of a broader process of education that begins before a person first starts school. While it is not in the scope of this Review to make specific recommendations relating to school education, the Panel believes that it is impossible to look at issues of higher education without looking at how it connects with schools and how the sector can encourage and facilitate better pathways into university.

If children are not taught to read, write and count, they have no hope of going to university (submission no. 54, Centre for Independent Studies, p. 2).

Universities can only do so much on their own. Although we acknowledge that the scope of the Review limits what the panel can recommend regarding the pipeline of Indigenous people through the school system, we must put on record that this pipeline is a crucial limiting factor to the overall success that universities can demonstrate in improving Indigenous access and outcomes (submission no. 59, Universities Australia, p. 9).



The school sector is the primary avenue through which most Australians enter higher education, but not for Aboriginal and Torres Strait Islander young people.

Schooling provides students with the knowledge, skills and qualities that are the basis for higher education and lifelong learning, making success at school fundamental to successfully transitioning to higher education.

While progress has been made over recent years, the rates of retention, Year 12 completion and transition to university are still poor for Aboriginal and Torres Strait Islander school students and well below those of non-Indigenous students.

The current challenge facing the university sector in terms of Indigenous engagement is two-fold. The first challenge is that nationally Indigenous kids are still dropping out of school in Years 8 and 9, and the majority of Indigenous students making it to Year 12 either do not aspire to head into university, nor have the necessary skill set and achievement levels, or both. The second challenge, is a subset [*sic*] of the first and that is the retention of Indigenous university students (submission no. 6, Australian Indigenous Mentoring Experience, p. 2).

Current situation

High school retention and completion rates are lower for Aboriginal and Torres Strait Islander students than for non-Indigenous students

According to the Steering Committee for the Review of Government Service Provision, '[a]pparent retention rates³⁰ for Aboriginal and Torres Strait Islander students from the beginning of secondary school to Year 12 increased from 32.1% in 1998 to 47.2% in 2010, while the non-Indigenous rate increased from 72.7% to 79.4%' (SCRGSP 2011b, p. 4.49).

As a result of high dropout levels, in 2008 the proportion of Aboriginal and Torres Strait Islander 20- to 24-year-olds who reported completing Year 12 or equivalent was 45.4%, half that of non-Indigenous 20- to 24-year-olds (88.1%) (SCRGSP 2011b, p. 4.49).

Levels of academic achievement and attainment are low among Aboriginal and Torres Strait Islander students

As noted in a report by Universities Australia (James et al. 2008, pp. 47–8), there has consistently been a wide gap in literacy and numeracy between Aboriginal and Torres Strait Islander and non-Indigenous students. In 2009, 1,143 Aboriginal and Torres Strait Islander 15-year-old school students participated in the triennial OECD Programme for International Student Assessment. Results indicate that the differences between Aboriginal and Torres Strait Islander students and non-Indigenous students in the domains of reading and mathematical and scientific literacy equate to around two full years of schooling. Almost 40% of Aboriginal and Torres Strait Islander students did not reach Level 2 (the OECD baseline) compared to 14% of non-Indigenous students (Thomson et al. 2010, p. 11).

³⁰ The apparent retention rate is the percentage of full-time students who continued to Year 12 from respective cohort groups at the commencement of their secondary schooling (Year 7/8).

In 2009, only around one third of Aboriginal and Torres Strait Islander students achieved the minimum proficiency level in international tests for science, mathematics and reading literacy, compared to around two thirds of non-Indigenous students (SCRGSP 2011a, p. 34).

Without significant improvements in literacy and numeracy attainment, a school-to-university pathway will continue to be inaccessible for high numbers of Aboriginal and Torres Strait Islander school students.

Across all levels of education Indigenous participation in STEM [science, technology, engineering and mathematics] is well below that of non-Indigenous students, which is especially significant given the very young demographic profile of the Indigenous population (ABS 2006). ... without an appropriate level of STEM skills, Indigenous peoples' share in the opportunities of Australia's economy will be limited (submission no. 17, South Australian Department of Further Education, Employment, Science and Technology, p. 1).

The numbers of Aboriginal and Torres Strait Islander students who leave school eligible for university are low

Despite increases in the overall proportion of school students who are Aboriginal and Torres Strait Islander³¹ and some improvements in the retention rate for Aboriginal and Torres Strait Islander high school students, the gains have not been great enough to result in more than a trickle of Aboriginal and Torres Strait Islander students coming through the pipeline from high school to university (Aurora Project 2011b, pp. 18–21).

For direct entry to university from Year 12, most students need an Australian tertiary admission rank (ATAR), with an ATAR above 50.00 'usually required for entry into more popular courses and universities' (SCRGSP 2011b, p. 4.55). In 2010, 7.1% of the Aboriginal and Torres Strait Islander potential Year 12 population achieved an ATAR of 50.00 or above, compared to 40.4% of non-Indigenous students (SCRGSP 2011b, p. 4.56). However, it should be noted that many universities 'take a holistic approach when assessing applications from Indigenous students', meaning that 'Indigenous applicants often are not assessed solely on the basis of their academic results' (SCRGSP 2011b, p. 4.55).

One reason for lower levels of university eligibility for Aboriginal and Torres Strait Islander students may be course selection in the later years of high school. A 2008 paper by the Indigenous Higher Education Advisory Council (Thomas 2008, p. 14) noted that Aboriginal and Torres Strait Islander students are seriously underrepresented in 'academic' courses in Years 11 and 12. 'In 2008, about 38% of Indigenous students undertook a Year 11/12 course aimed at gaining university entrance, compared to 78% of non-Indigenous students' (DEEWR 2008, p. 59).

One of my teachers said to me, 'I'm not putting you into chemistry, physics or any of those because I can't see you passing this year, I

³¹ While the overall proportion of school students who were Indigenous increased from 3.5% in 2001 to 4.2% in 2006, this increase is in part due to changes in population demographics and has had no apparent influence on the proportion of Aboriginal and Torres Strait Islander students in higher education (James et al. 2008, p. 44).



reckon you're going to drop out any way' (Cameron Howard, Medicine, University of Western Australia).

There are low levels of aspiration to participate in higher education among Aboriginal and Torres Strait Islander students

The capacity to aspire is not evenly distributed in society. While during consultations the Panel met many individuals and their families who aspired to or were engaged in higher education, there are still generally lower levels of aspiration to participate in higher education among Aboriginal and Torres Strait Islander people than non-Indigenous Australians. There are several reasons for this, including a lack of confidence in academic ability, low expectations of academic achievement by teachers and career advisers, and a lack of understanding among friends and family about the opportunities that higher education offers.

Many Aboriginal and Torres Strait Islander students have been taught to have negative views of their academic ability and as a result lack confidence. Hossain et al. surveyed 50 high school students from five Queensland schools and found that a high degree of negative self-perceptions existed, with Aboriginal and Torres Strait Islander students believing they are 'too dumb' to attend university (2008, p. 12). During consultations the Panel heard from many university students that during school they had felt they were not ready or good enough for university, and it was only with extra support from enabling courses or Indigenous Education Units that they made it to university.

I never thought of any academic goals or future for myself (Billy Kickett Morris, Medicine, University of Western Australia).

After high school, university was never an option for me, it was just something I didn't think I could achieve (Nicole Copley, Teaching, University of the Sunshine Coast).

High-performing Aboriginal and Torres Strait Islander school students often do not go on to higher education

Neither Year 12 attainment nor high achievement during Years 7 to 12 guarantee a transition into higher education for Aboriginal and Torres Strait Islander people. 'What is a natural and often assumed progression for many non-Indigenous students can still be a major barrier for some Aboriginal and Torres Strait Islander students' (Aurora Project 2011b, p. 22).

The 2010 Longitudinal Surveys of Australian Youth found that Aboriginal and Torres Strait Islander students performing within the top brackets at school are not proportionately represented in university participation (cited in Aurora Project 2011b, p. 22). Only 39% of Aboriginal and Torres Strait Islander students who scored in the highest reading quartile continued directly into tertiary study, compared to 65% of non-Indigenous students (Nguyen & NCVET 2010, p. 8, Table 7).

It may be that capable students are reluctant to show ambition beyond that which is expected by their peers. Many members of the Aboriginal and Torres Strait Islander community have a cultural reluctance about 'talking ourselves up' (submission no. 36, CareerTrackers, p. 4).



The survey conducted by Hossain et al. revealed that even students in Years 11 or 12 who are consistently getting high marks consider leaving school early and securing menial employment (Hossain et al. 2008, p. 13).

Teachers often have low expectations of Aboriginal and Torres Strait Islander students

The Panel found many teachers have low expectations of Aboriginal and Torres Strait Islander students' academic skill and potential, which can affect how students are taught and the options they are presented, and may affect their aspirations to pursue higher education (Craven et al. 2005; Ferrari 2006, both cited in James et al. 2008, p. 48). For example, career advice given in schools is weighted to steer Aboriginal and Torres Strait Islander students into vocational education and training and university may not even be presented as an option.

Calma cites Dr Chris Sarra as arguing that 'mainstream Australia has very negative perceptions' of Aboriginal and Torres Strait Islander people, filtering down to those involved in the education system. 'Some teachers have lower expectations of Aboriginal and Torres Strait Islander children based on the "complexity" of Indigenous young people and perceptions that Indigenous families "don't value education"' (Calma 2008, p. 46, note 172). This bias generates disproportionately negative outcomes for students who are not pushed as hard, given less attention and not given the support they need to aspire to and transition into higher education.

I got told by most of my teachers, 'Look, you're not going to be up to doing tertiary education, so probably best to leave now' (Declan Scott, Medicine, University of Western Australia).

During the consultations the Panel also heard anecdotally that a lack of information on and understanding of pathways into higher education by teachers and career advisers means they often do not provide adequate information to students. A study by Craven et al. on Aboriginal and Torres Strait Islander school students' aspirations relating to schooling and further education found the students who participated in the study were not getting accurate career information about educational pathways and prerequisites (Craven et al. 2005, p. 17).

University outreach programs do not always provide the support and information school students need

The study by Hossain et al. (2008, p. 19) suggests that university outreach activities do not always provide Aboriginal and Torres Strait Islander school students with the level of intensive support they need, including adequate information on the financial and academic aspects and long-term economic benefits of undertaking higher education study. In this study, 43% of Aboriginal and Torres Strait Islander respondents reported an urgent need for economic information about, for example, the HECS-HELP system and the long-term benefits of higher education, and 40% noted a 'substantial' need for academic information like the importance of school-based grades and appropriate subject selection to entry into higher education.

These information gaps may in part reflect Aboriginal and Torres Strait Islander students' unfamiliarity about pathways to higher education, which has resulted from inadequate career counselling at school, the inability of families to provide advice if no member of the family has previously attended university, and the absence of Aboriginal and Torres Strait Islander role models who have been to university



(Craven et al. 2005; Lamb et al. 2004, p. 27; James and Devlin 2006; James et al. 2008, p. 49). Well-targeted university outreach programs can fill this gap.

Other factors that influence success at school

For Aboriginal and Torres Strait Islander students, a key factor influencing their ability to succeed in the school system is that many are the first in their family to attend senior secondary school. This means they are less likely to have the knowledge, resources and potentially aspiration necessary for them to achieve their academic goals, including knowing what is expected of them and feeling a sense of belonging (Aurora Project 2011b, p. 23).

First generation senior secondary students (Aboriginal and Torres Strait Islander or otherwise) are less likely to attend university and to complete their studies than the broader student population. One recent research study revealed that only 29% of students whose father left school by Year 10 attained university qualifications, compared to a 65% university graduation rate for students whose father went to university (Cassells et al. 2011, p. 15). These findings are consistent across the higher education sectors in other countries.³²

I'm the first of 32 grandchildren to come to university (Jamilla Sekiou, Bachelor of Laws and Legal Practice, Flinders University).

What is being done to improve school achievement and transition to higher education?

Closing the Gap targets and National Partnership Agreements

In 2008, governments agreed to take action to close the gap in education outcomes between Aboriginal and Torres Strait Islander and non-Indigenous students by:

- halving the gap for Aboriginal and Torres Strait Islander students in reading, writing and numeracy within a decade (2018)
- halving the gap for Aboriginal and Torres Strait Islander 20- to 24-year-olds in Year 12 or equivalent attainment rates by 2020
- ensuring that all Aboriginal and Torres Strait Islander 4-year-olds in remote communities have access to early childhood education within five years (by 2013).

These targets are being supported by government investments in National Partnership Agreements such as the Smarter Schools National Partnership Agreements (Low Socio-economic Status School Communities; Literacy and

³² In Canada, 70% of students who had one parent with a university education went on to attend university themselves. In contrast, among students who did not have a parent with a college degree, only 30% enrolled in university (Thomas & Quinn 2007, p. 39, cited in Aurora Project 2011b, p. 23). The same Thomas and Quinn study showed that in Germany students were more likely to enrol in university if their father had been to university (55% compared to 9% of students whose father had not completed school) (p. 35, cited in Aurora Project, p. 24). Moreover, in a small study conducted in the United Kingdom in 2005, 77% of first generation students dropped out of their university degree in the first year, with 40% leaving during the first semester (cited in Thomas & Quinn 2007, p. 83, cited in Aurora Project, p. 24). In another study by Chen and Carroll, it was found that in the United States, 68% of students whose mother or father had a bachelor's degree also completed university studies. By comparison, the percentage was only 24% for students whose parents did not have a degree (Chen & Carroll 2005, p. 6, cited in Aurora Project 2011b, p. 24).

Numeracy)—which are focusing on the special needs of disadvantaged students and in particular Aboriginal and Torres Strait Islander students and investing \$2.5 billion in the wider education system—and the \$970 million National Partnership Agreement on Early Childhood Education, funded over five financial years to June 2013.

The last Closing the Gap report delivered to the Commonwealth Parliament by Prime Minister Julia Gillard showed that progress has been made on two of the three education targets:

- The gap in the proportion of Aboriginal and Torres Strait Islander and non-Indigenous students at or above national minimum standards in reading, writing and numeracy at Years 3, 5, 7 and 9 has decreased in seven out of the eight instances since 2008, with the only exception being Year 7 numeracy. There are eight gaps (four year levels across reading and numeracy) against which progress is measured. ‘Some falls in the gap have been quite large: Year 3 reading (6.6 percentage points), Year 3 numeracy (4.6 percentage points), Year 5 numeracy (4.5 percentage points), and Year 7 reading (4.9 percentage points)’. Others have been smaller: Year 9 numeracy (0.2 percentage points) and Year 9 reading (1.9 percentage points) (Australian Government 2012b, p. 19).
- The proportion of Aboriginal and Torres Strait Islander children living in remote communities who were enrolled in a preschool program in the year before full-time schooling rose from 87% in 2009 to 90% in 2010. The Australian Government anticipates that more improvements will occur in 2011–12 and 2012–13 when the majority of funding from the Commonwealth under the National Partnership Agreement on Early Childhood Education will be delivered (Australian Government 2012b, p. 18).

Progress since 2008 against the Closing the Gap Year 12 attainment target will not be available until the 2011 Census data is released (Australian Government 2012b, p. 22).

To help meet Closing the Gap targets, the government delivers and supports a number of targeted programs and initiatives that seek to build or reinforce the school and university-readiness of Aboriginal and Torres Strait Islander students, such as the *Aboriginal and Torres Strait Islander Education Action Plan 2010–2014*, the Indigenous Youth Leadership Program and several programs delivered by non-government providers. The government also delivers the Higher Education Participation and Partnerships Program that reaches out to low SES school students, some of whom are Aboriginal or Torres Strait Islander.

Aboriginal and Torres Strait Islander Education Action Plan 2010–2014

In May 2011, COAG endorsed the *Aboriginal and Torres Strait Islander Education Action Plan 2010–2014*. The purpose of the plan, developed by the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA),³³ is to help education providers to accelerate improvements in the

³³ MCEECDYA is now the COAG Standing Council on School Education and Early Childhood (SCSEEC).



educational outcomes of all Aboriginal and Torres Strait Islander children and young people (MCEECDYA 2010).

The plan identifies national, systemic and local-level action in six priority areas that evidence shows will contribute to improved outcomes in Aboriginal and Torres Strait Islander education:

- readiness for school
- engagement and connections
- attendance
- literacy and numeracy
- leadership, quality teaching and workforce development
- pathways to real post-school options.

Through Action 46 of the 'pathways to real post-school options' domain, all governments have committed to the development of a companion document to the plan that outlines actions to close the gap in training, university and employment outcomes and to provide links between the school sector and the training, tertiary education and employment services sectors. Through other actions, school education providers have committed to provide innovative and tailored learning opportunities, mentoring and case management strategies to increase the retention of Aboriginal and Torres Strait Islander students to Year 12. They have also committed to strengthen partnerships between schools, VET providers, universities and Aboriginal and Torres Strait Islander communities to broaden horizons and post-school options of Aboriginal and Torres Strait Islander students.

Indigenous Youth Leadership Program

The Indigenous Youth Leadership Program provides funding to support young Aboriginal and Torres Strait Islander people who have a high potential for educational success, but are disadvantaged, to attend high-performing secondary schools (to complete Year 12) or universities (to undertake an undergraduate degree) (DEEWR 2011i). As at October 2011, 523 of the 634 students participating in the program were secondary school students (unpublished departmental data). By targeting both Year 12 completions and university enrolments, the Indigenous Youth Leadership Program contributes to increasing the potential pool of Aboriginal and Torres Strait Islander higher education students (unpublished departmental data) (DEEWR 2011k, p. 60).

Non-government programs

A number of non-government organisations work with Aboriginal and Torres Strait Islander school students to support and mentor them through high school. Others work with teachers to improve the support they give to students. Some of the organisations that were drawn to the Panel's attention throughout the consultations were the Stronger Smarter Institute, the Aurora Project, the Australian Indigenous Mentoring Experience, the Yalari Foundation and the Australian Indigenous Education Foundation.

The Stronger Smarter Institute is a partnership between Education Queensland and Queensland University of Technology that aims to raise expectations of and outcomes for Aboriginal and Torres Strait Islander students. The institute delivers



leadership programs for school leaders and works in partnership with governments, schools and universities engaged in Aboriginal and Torres Strait Islander education to enhance the teaching of Aboriginal and Torres Strait Islander school students. It also develops and facilitates research projects.

The Stronger Smarter Leadership Program aims to support school and community leaders in their pursuit of educational excellence for all Aboriginal and Torres Strait Islander students by helping to enhance their leadership capacity and challenge their assumptions about school culture and practices.

The institute also administers the Australian Government-funded Focus School Next Steps initiative, which is designed to improve educational outcomes for more than 9,000 Aboriginal and Torres Strait Islander students in 102 schools across Australia in the areas of attendance, engagement, literacy and numeracy.

The Aurora Project delivers education programs that focus on increasing opportunities and support for Aboriginal and Torres Strait Islander students and professionals through training, internships, placements, scholarships, professional development and other initiatives such as The Aspiration Initiative. The initiative works to increase opportunities and support for Aboriginal and Torres Strait Islander students, helping to ensure that they realise their potential at school, university and beyond.

The Australian Indigenous Mentoring Experience (AIME) delivers programs that aim to give Aboriginal and Torres Strait Islander high school students the skills, opportunities, belief and confidence to finish school at the same rate as their non-Indigenous peers. AIME operates from university campuses and runs a core program and an outreach program that deliver mentoring, tutoring and leadership and development programs to students in Years 9 to 12. AIME also connects students with post-Year 12 opportunities, including further education and employment.

The Yalari Foundation provides support and access for Aboriginal and Torres Strait Islander students from rural and remote areas to attend high school and, in limited cases, university, by providing education scholarships for tuition and accommodation. Since its inception in 2006, Yalari has provided scholarships to around 180 students to attend boarding school.

The Australian Indigenous Education Foundation (AIEF) provides boarding school and residential college scholarships for Aboriginal and Torres Strait Islander students in financial need to attend school and university. The AIEF currently supports around 230 secondary students in boarding schools in New South Wales, Queensland and Western Australia.

While there is anecdotal evidence of the success of these programs, the Panel is not aware of any independent evaluations of them (with the exception of Yalari), and suggests that such evaluations would be helpful to share examples of programs achieving success.

Higher Education Participation and Partnerships Program

The Higher Education Participation and Partnerships Program (HEPPP) was introduced by the Australian Government in 2010 to support the government's ambition that 20% of domestic undergraduate students are from a low socio-economic status (SES) background by 2020. The HEPPP provides funding to assist



universities to undertake participation and partnership activities that improve access to undergraduate courses for students from low SES backgrounds, as well as improving the retention and completion rates for these students. The government has committed \$736 million over four years from 2012 under the HEPPP. It does not specifically target Aboriginal and Torres Strait Islander students, but given their high incidence of low SES they are likely to be major beneficiaries of this program (in 2006, 47.9% of Aboriginal and Torres Strait Islander Australians lived in low SES areas compared to 17.1% of non-Indigenous Australians (ABS 2008b)).

The 'Participation' component of the HEPPP provides a financial incentive to universities to increase the participation of domestic students from low SES backgrounds in accredited undergraduate courses, and support the retention and success of those students. Participation activities run by a university might include aspiration and capacity building, mentoring, peer support, tutoring, scholarships, transition programs and modifications to teaching delivery and learning methods to better meet the needs of students from low SES backgrounds.

The 'Partnerships' component of the HEPPP provides funding to universities to develop outreach activities in partnership with primary and secondary schools, VET providers, other universities, state and territory governments, community groups, and other stakeholders to raise the aspirations and build the capacity of people from low SES backgrounds to participate in higher education.

The Panel notes in the 2012–13 Budget the Australian Government announced it would reform the HEPPP by reducing funding for the participation component by \$68.2 million over four years from 1 January 2013, resulting in a fall in the average annual funding rate per student from \$1,800 to \$1,400 but locking in \$1,400 per student so that as low SES numbers grow, so will funding to universities. The government will also increase the funding available through the partnerships component of the HEPPP by \$50 million over four years to support innovative approaches to help disadvantaged students aspire to and complete a university qualification, including Aboriginal and Torres Strait Islander students.

In the 2012–13 Budget the government also announced it will increase loading funding for enabling courses (discussed in section 1.3), which will support disadvantaged students once they reach university. Together these budget changes will produce a net increase of relevant equity funding of over \$23 million, and support growth in participation and enabling loading funding into the future.

What are universities doing?

Research conducted by Dr Wendy Brady shows that the majority of universities undertake some form of outreach activity to help unlock capacity at the school level and increase their Aboriginal and Torres Strait Islander student intake (Brady 2012, p. 15), with varying levels of success. These outreach activities can take the form of recruitment drives, mentoring programs, career expos, transition days, school visits, attendance at community events, and the general marketing of the university to Aboriginal and Torres Strait Islander students. Their purpose is to build students' understanding of the opportunities afforded by, and the nature of, university study—both to inspire students and equip them with the capacity to succeed.

What needs to change?

It is clear to the Panel that the combination of low retention, low academic achievement and low attainment in schools is producing a much lower proportion of

Aboriginal and Torres Strait Islander students than non-Indigenous students leaving high school with the capacity to get into and succeed at university. This point was a recurring theme throughout the consultation process.³⁴

The low numbers of Aboriginal and Torres Strait Islander students completing Year 12 with the knowledge and skill levels required for university entrance presents a major barrier to increasing the numbers of Aboriginal and Torres Strait Islander students and staff in higher education.

Universities need to build strong relationships with schools and work closely with them to encourage Aboriginal and Torres Strait Islander retention, academic achievement, Year 12 completion and transition to university by:

- increasing efforts to build students' skills in key areas like mathematics and science, academic achievement and aspiration to go to university, beginning at least with students in Year 7 (the earlier the better), through outreach activities and intensive support in the form of case management, mentoring, outreach and academic enrichment programs, while still putting resources toward:
- building family and community support for higher education
- building peer networks that support academic participation
- ensuring that students have the information they need about higher education like the importance of school subject selection and grades; immediate costs associated with study for books, travel and accommodation; what to expect in terms of classes, lectures and study; and support available through HECS-HELP, scholarships, subsidies and Indigenous Education Units
- improving teacher quality and education by ensuring that teachers graduate with the qualifications, training and cultural competence to promote excellence and encourage ongoing study.

Universities and schools should also consider working in partnership with non-government organisations that deliver support programs for Aboriginal and Torres Strait Islander students and are achieving good results. The Panel notes some schools and universities are already doing this by working with organisations such as the Smith Family, the Australian Indigenous Mentoring Experience and the Stronger Smarter Institute.

Improve university outreach

During university consultations the majority of younger students interviewed indicated the main reason they ended up in university was because of one or more positive experiences with a university while they were still at school—through a school-based camp, a university visit, or a particular individual. The main impact of those positive experiences was that they were introduced to advantages of

³⁴ For example, submissions from Anthony Linden Jones (no. 1); Australian Indigenous Mentoring Experience (no. 6); Group of Eight (no. 16); Government of South Australia – Department of Further Education, Employment, Science and Technology (no. 17); La Trobe University (no. 20); Swinburne University of Technology (no. 24); Victorian Aboriginal Education Association Inc. (no. 38); Janine Oldfield (no. 4); Government of New South Wales – Department of Education and Communities (no. 71).



participating in university and gained a stronger understanding of what would be expected of them.

I came to uni through Shenton House at University of Western Australia; they have an outreach program (Cameron Howard, Medicine, University of Western Australia).

They [Shenton House at University of Western Australia] were the first people to say, 'You can do this', and that's what I wanted to do but I just never even considered that it would have ever been a possibility for me (Billy Kickett Morris, Medicine, University of Western Australia).

A high number of submissions noted the importance of university outreach activities like preparatory courses, bridging programs, information sessions, residential programs such as science and mathematics camps in Years 7 and 8, parent and community engagement and mentoring support programs³⁵ that raise aspirations, provide important information, build key skills, support academic achievement and encourage peer networks for Aboriginal and Torres Strait Islander students.

Universities fund some of their outreach activities to Aboriginal and Torres Strait Islander school students through the HEPPP, which the Panel found is generally considered to be a good program.

The Commonwealth Government's Higher Education Participation and Partnerships Program (HEPPP) provides an excellent opportunity to connect efforts in the schools, vocational and university sectors to lift the achievement of Aboriginal students in higher education ... (submission no. 71, NSW Government, p. 6).

The Panel heard anecdotally that some universities are using HEPPP funding for marketing activities to recruit students to their university or to particular courses run by their university rather than to encourage participation in higher education more broadly. The Panel believes that the individual university marketing budgets should be used for that purpose.

Building aspiration

The Panel heard that building aspirations for Aboriginal and Torres Strait Islander people of all ages is vital:

in school children in order to ensure progression and retention to secondary and post-secondary levels, and in parents and elder family members in order to provide adequate support networks for the students (submission no. 22, Swinburne University of Technology, p. 3).

³⁵ For example, submissions from the University of Western Australia (no. 61); Charles Darwin University (no. 75); University of Queensland (no. 42); Australian Indigenous Mentoring Experience (no. 6); Victoria University (no. 11); James Cook University – School of Education (no. 14); Group of Eight (no. 16); National Union of Students (no. 31); Curtin University (no. 49); CareerTrackers Indigenous Internship Program (no. 36); Victorian Aboriginal Education Association Inc. (no. 38); Indigenous Lawyers Association of Queensland (no. 52); Medical Deans Australia and New Zealand Inc. (no. 25).

Aspiring, while still at high school, to participate and succeed in higher education is a key factor in a student's decision to attend university once they finish Year 12. Anderson argues 'aspiration building requires some form of university presence in the lives of Indigenous students who are considering options about post-secondary pathways' (2011, p. 27). Universities can encourage aspiration in Aboriginal and Torres Strait Islander students through outreach activities that build skill sets, encourage learning, build cohorts, provide mentoring and show students, their families and communities where an education can take them.

Outreach activities need to begin as early as possible

Sector consultations suggested that outreach activities are most commonly aimed at Aboriginal and Torres Strait Islander Year 9–12 students from local high schools³⁶ when dropout rates are increasing and large numbers of Aboriginal and Torres Strait Islander students have already made the decision to leave school for work, VET study or unemployment.

The Panel believes it is vital that universities start their outreach activities with students no later than Year 7 and earlier where possible.

The national literacy and numeracy rates show that by Year 7, Aboriginal and Torres Strait Islander students are behind non-Indigenous students on literacy and mathematics competency (NAP 2008, 2009, 2010, 2011). School retention rates³⁷ after Year 10 drop significantly to around 48.7% (ABS 2012b, National School Statistics Collection Table 64a). If universities do not start their outreach with Aboriginal and Torres Strait Islander students in primary and early secondary schools it may be too late to support their academic achievement.

[T]here is a growing recognition in the sector that to increase overall access rates there needs to be more work done by universities to increase the aspiration to go to university amongst junior-middle secondary schools (submission no. 31, National Union of Students, p. 2).

Gale et al. (2010, p. 33) cite Heckman and Rubinstein (2001, p. 148) as noting that 'the best "pay-offs" for investment in education are those in which academic and aspirational support for students begins as early as possible and is continued for as long as possible'.

Building on existing efforts

The University of New South Wales ASPIRE program aims to build capacity across New South Wales at student, school and community levels to encourage more students from low SES backgrounds, including Aboriginal and Torres Strait Islander students, to progress to university. The comprehensive program works with students from Kindergarten to Year 12 to create an awareness of higher education, raise student aspirations, support academic achievement and help students to realise their full potential. It is delivered through age-appropriate in-school and on-campus activities and supported by additional elements such as mentoring and tutoring. The University of New South Wales ASPIRE program is funded through the HEPPP.

³⁶ For example, programs run by the Australian National University, RMIT University, the University of Melbourne, Charles Darwin University, and the University of Queensland.

³⁷ Based on 2011 apparent retention rates.



Early indications are that the program is achieving positive outcomes, including changing the attitudes of students who previously had negative attitudes to higher education and increasing the numbers of university offers for partner schools. Schools who have a high level of engagement with ASPIRE have shown an 85% increase in the numbers of offers to university from 2009 to 2011, compared with a 24% increase for schools with a low level of engagement with ASPIRE.³⁸ In its next phase the ASPIRE program will focus on increasing the numbers of partner schools, working with teachers on professional development, embedding aspirational activities in school curriculums and building linkages with community organisations. An Indigenous ASPIRE project officer has also been recruited to work specifically with ASPIRE Aboriginal and Torres Strait Islander students and communities.

Support for Years 10 to 12 should focus on supporting a successful transition to university

While the Panel believes that junior and early secondary school years are the formative years in which outreach programs are most important, it is also necessary to support students in Years 10 to 12 to ensure that they continue on the path to Year 12 and on to university. Mentoring, pathway support and case management are vital in these years to help Aboriginal and Torres Strait Islander students overcome any barriers to completing Year 12 and successfully transition to university. The Panel found that a mentor and case management support can mean the difference between an Aboriginal and Torres Strait Islander student staying at school and dropping out of school before reaching Year 12.³⁹

Building on existing efforts

A number of universities, including the University of Sydney, have formed partnerships with the Australian Indigenous Mentoring Experience (AIME). AIME operates on campus to provide Aboriginal and Torres Strait Islander high school students in Years 9 to 12 with mentors who are at university. The mentors provide literacy and numeracy support, homework and assessment support, and help students to build self-confidence.

Innovative programs such as the Australian Indigenous Mentoring Experience (AIME), which brings university students into direct contact with young Aboriginal and Torres Strait Islander students, and which the University has long been associated with, are highly valuable (submission no. 33, University of Sydney, p. 7).

Building key skills and peer networks

It is important that outreach activities help Aboriginal and Torres Strait Islander students to build the skills they will need to complete Year 12, successfully transition to university, and enrol in courses in which Aboriginal and Torres Strait Islander students are underrepresented.

With a significant gap in results between Aboriginal and Torres Strait Islander and non-Indigenous students in key competencies such as mathematics, science and English (Thomson & De Bortoli 2008, p. vii; James et al. 2008, pp. 47–8; SCRGSP 2011a, pp. 16, 34), the Panel believes that building skills in these areas needs to be

³⁸ Statistics provided by University of New South Wales.

³⁹ Submission no. 6, Australian Indigenous Mentoring Experience.

a focus for university outreach programs. Not only will they help students to successfully complete Year 12, but they can also give students better opportunities to pursue the degree of their choice at university.

[T]here is an urgent need to improve Indigenous school students' exposure to and performance in mathematics. Low performance in this crucial enabling discipline excludes too many Indigenous students from university study in science, technology, engineering and mathematics (STEM) disciplines, and in Medicine, Dentistry and Veterinary Science (submission no. 16, Group of Eight, p. 13).

The government announced a science and mathematics package in the 2012–13 Budget in response to the Chief Scientist's *Mathematics, Engineering and Science in the National Interest* report. The \$54 million package is designed to encourage school students to take up mathematics and science through special programs, scholarships and partnerships with universities, and to improve the number, quality and training of teachers in mathematics and science. The Panel hopes to see better student engagement with mathematics and science at school as a result of this investment.

Another way of encouraging mathematics and science take-up that has proved successful is through peer networks, which can encourage aspiration and academic excellence through peer-to-peer encouragement and support. Peer networks have been found to be effective (Pechenkina & Anderson 2011, pp. 17–18) in overcoming a number of barriers to education for Aboriginal and Torres Strait Islander students, including the absence of readily accessible personal family assistance experienced by many first generation senior secondary students.

Research in the United States also indicates that students are four times more likely to enrol in university if their friends do (Choy 2002, p. 16), suggesting further benefits that could emerge from creating a strong cohort of Aboriginal and Torres Strait Islander students who can support each other throughout school (Aurora Project 2011b, p. 24).

Building on existing efforts

The University of Western Australia's School of Indigenous Studies runs an annual Indigenous Science and Engineering Camp for students in Years 9 and 10. The camp is designed to encourage students to study science and mathematics through to Year 12 and to progress into university studies in the areas of science, engineering and technology. Twenty-five Aboriginal and Torres Strait Islander students attend the camp each year, with a majority coming from regional areas of Western Australia.

The camp involves cultural 'science' excursions, hands-on experiences in science and engineering faculties on campus, information on science career options for students and parents, and interaction with Aboriginal and Torres Strait Islander science and engineering graduates and current students. A follow-up program of contact and engagement is provided in Years 11 and 12, as part of the School of Indigenous Studies residential study and careers seminars.

The camp and follow-up program ensure that the younger participants have the supervisors and role models they need to encourage them to do science and



mathematics and the older participants have a group of peers they can share information and experiences with.

The university is seeing an increase in science enrolments, as the first cohort from the Indigenous Science and Engineering Camp program enter university.

Better information and education for school students and their families

Many submissions noted the need for outreach activities to help Aboriginal and Torres Strait Islander families and communities to understand the value of university education and build wider expectations for their children to go on to tertiary education after high school.⁴⁰

Programs aimed with a particular focus on families and communities can be used to develop the expectation that tertiary education will be pursued after high school. Universities should form relationships with Indigenous communities and families to engage and encourage tertiary education throughout primary school, where these relationships can provide a supportive environment for enrolment after high school (submission no. 47, Curtin Student Guild, p. 3).

The need for better information is more fully explored in section 1.4.

Universities should form partnerships to deliver successful outreach programs

The Panel found many universities that are delivering successful outreach programs to Aboriginal and Torres Strait Islander students are doing so in close partnership with schools, government, communities, non-government organisations and other universities.⁴¹ A collaborative approach to outreach means universities can reach more students and ensures that the key people and organisations whose involvement is necessary to make them successful are engaged.

Through building on partnerships between key stakeholders, including schools, higher education providers, business and industry, parent and family groups, government and community groups; individual capacity to engage with higher education would increase, supporting Aboriginal people to make informed choices about [their] education ... options (submission no. 58, WA Government, p. 3).

The Panel also found the Higher Education Participation and Partnerships Program is supporting partnerships between universities and other groups by providing tangible financial incentives for the secondary and tertiary sectors to develop these collaborative arrangements (submission no. 75, Charles Darwin University, p. 7).

⁴⁰ For example, submissions by Anthony Linden Jones (no. 1); Victoria University (no. 11); Group of Eight (no. 16); Australian Catholic University (no. 37); Charles Darwin University (no. 75); University of Queensland (no. 42); Janine Oldfield (no. 4); Curtin University – Curtin Student Guild (no. 47).

⁴¹ For example, consortium of eight Queensland universities and the Queensland Department of Education, Training and Employment's Schools Outreach and Indigenous Engagement projects (led by the Queensland University of Technology and funded by the Australian Government's Higher Education Participation and Partnerships Program); University of South Australia's collaboration with community, business and government to support the Aboriginal Power Cup.

Building on existing efforts

Eight universities in Queensland⁴² and the Queensland Department of Education, Training and Employment are collaborating in a statewide effort to stimulate interest in higher education and widen participation by people from low-income and Aboriginal and Torres Strait Islander backgrounds.

The aim of the collaboration is to increase schooling, higher education and employment outcomes for these target groups. It comprises six projects being run over four years that focus on community engagement. It builds on existing capacity in the Indigenous Education Units in the eight universities, with each unit seeking to respond to local needs through targeted activities like university outreach to students, parents and communities, learning support to improve school retention and build aspirations for higher education, career advice, mentoring, homework centres and social networking.

High-achieving students need to be supported, as well as those at risk

Different views came out of the consultations on how to best build the pool of university-ready Aboriginal and Torres Strait Islander students. One approach put forward by the Aurora Project is to move beyond raising basic levels of literacy and numeracy and instead focus on Aboriginal and Torres Strait Islander students who are performing at or above the national average in the early years of high school (Aurora Project 2011b, p. 34). This approach is designed to make sure that gifted students with academic potential receive the support they need, and increases their chance of success. The Prep for Prep (New York) case study examined by the Aurora Project is an example of this; it focuses on bright students from African American, Latino and Asian backgrounds and places a selected few in the best boarding and independent schools in the city of New York (Aurora Project 2011b, p. 26).

A different approach is to focus on raising academic standards across the board. In an address to the Panel's Key Thinkers Forum, Dr Chris Sarra spoke of the need to develop a 'high expectations' relationship with Aboriginal and Torres Strait Islander people. This approach, promoted by the Stronger Smarter Institute, encourages the academic excellence of all Aboriginal and Torres Strait Islander students and tries to instil this attitude in all teachers, career counsellors, and education administrators. This approach has the potential to create a much larger pool of university-ready Aboriginal and Torres Strait Islander students. It also requires significantly more resources and is less likely to achieve individual success at the same rate as the higher-achievers approach. An example of this approach from the United States is the Upward Bound program, which is funded federally and supports over 42,000 first generation and low-income students at 700 locations across the country (Aurora Project 2011b, p. 30).

The Australian Government has tended to focus on raising the educational outcomes of all Aboriginal and Torres Strait Islander students. However, the Panel considers that both approaches—supporting talented students to achieve their potential and

⁴² Australian Catholic University, CQUniversity, Griffith University, James Cook University, Queensland University of Technology, the University of Queensland, the University of Southern Queensland and the University of the Sunshine Coast (the consortium is led by the Queensland University of Technology and funded by the Australian Government's Higher Education Participation and Partnerships Program).



raising the academic standards of all students—are essential to improving access and outcomes for Aboriginal and Torres Strait Islander students. Universities should support both approaches where possible.

Improve the education of teachers

Teacher quality is a key enabling factor in improving student learning outcomes. As the sector primarily responsible for training the next generation of teachers, the higher education sector has an important role to play in ensuring that new teachers graduate with an understanding of Aboriginal and Torres Strait Islander perspectives and a commitment to growing the aspirations, skills and academic achievements of Aboriginal and Torres Strait Islander students.

The Panel notes that from 2013 all states and territories will be using a nationally consistent approach to standards and strategies for teaching Aboriginal and Torres Strait Islander students, based on the National Professional Standards for Teachers. To ensure that graduate teachers meet these standards, universities mandate Aboriginal and Torres Strait Islander education subjects in their curriculum and ensure that students who pass their teacher education course meet the competencies of the graduate standard, which includes demonstrating broad knowledge and understanding of the impact of culture, cultural identity and linguistic background on the education of students from Aboriginal and Torres Strait Islander backgrounds.

However, while the National Professional Standards for Teachers are implicit in university teacher education curriculum development, they do not impose how such standards are to be met within a given curriculum—universities are autonomous in teacher education curriculum design. This explains why different universities produce graduates with varying levels of teacher quality, and highlights the need for teacher attributes to be improved. The national accreditation of initial teacher education programs comes into effect from 2013 and will address issues of teacher quality and preparedness. Teacher quality and capacity will be addressed later in the report under *Improving secondary school teacher attributes* in section 4.1.

Building on existing efforts

Macquarie University has introduced in 2012 a Master of Indigenous Education degree, which is designed to provide students with knowledge and understanding of Aboriginal and Torres Strait Islander education perspectives and policies, practices and issues relevant to Aboriginal and Torres Strait Islander education.

Te Kotahitanga is a research and professional development program run by the University of Waikato's School of Education in partnership with the Pounamu Education Research and Development Centre in New Zealand (Te Kete Ipurangi n.d.). Te Kotahitanga supports teachers to improve Māori students' learning and achievement, teaching them to create a culturally responsive environment for learning which responds to student performance and understandings. The program includes an Effective Teaching Profile as part of a teacher's professional development, underpinned by two major principles: the teacher understands the need to reject explicitly negative explanations for Māori students' achievement, and accepts responsibility for the learning of all their students. The program is operating in 49 secondary schools in New Zealand, reaching approximately 2,000 teachers.

In Australia, the Stronger Smarter Institute, in partnership with the Queensland University of Technology, is working to build the capacity of teachers and principals



already in the field through professional development. The Stronger Smarter Leadership Program is aimed at challenging their assumptions about school culture and practices and enhancing the leadership capacity of teachers and principals to achieve cultural change at the school level. The program also teaches teachers and principals to have a 'high expectations' relationship with their Aboriginal and Torres Strait Islander students. Since it began in 2006, a total of 829 school leaders from 254 schools have completed the institute's core leadership program.

Recommendations

Recommendation 4

That the Australian Government work with state and territory education departments to ensure that career advisers and teachers:

- encourage Aboriginal and Torres Strait Islander students to consider higher education as a post-school option
- have access to professional development that increases their capacity to teach and advise Aboriginal and Torres Strait Islander students.

Recommendation 5

That the Australian Government revise the guidelines for the Higher Education Participation and Partnerships Program (HEPPP) to:

- refocus the emphasis of projects that are aimed at Aboriginal and Torres Strait Islander young people to a greater extent on:
- developing academic skills, especially in mathematics and sciences, in primary and early secondary schools, while still also giving some priority to:
- building aspiration to go to university
- building Aboriginal and Torres Strait Islander peer and family networks to encourage higher education as a shared goal
- providing students in Years 10 to 12 with mentoring, pathway support and case management and academic enrichment
- providing relevant information to students in Years 10 to 12, their families and communities about the transition to university for graduating secondary students
- clarify that HEPPP funding should be targeted at generic promotion of higher education rather than promotion of universities' individual courses.

1.2 Other pathways

Other groups identified by the Panel from which greater numbers of Aboriginal and Torres Strait Islander people could and should be entering the higher education system include the Aboriginal and Torres Strait Islander workforce and VET students.

Notwithstanding the importance of the secondary school pipeline, the VET Sector connection and the pathways for the existing Indigenous



workforce into higher education and the professions continue to be important (Anderson 2011, p. 27).

As with schools, the Panel believes that it is important to look at and make recommendations in these areas as they relate to higher education, because they are all important potential pathways into university.

[W]e need realistic exciting ways of building effective pathways into university, particularly for those young adults who did not find their school experience rewarding or attractive (submission no. 14, James Cook University, p. 1).

1.2.1 Aboriginal and Torres Strait Islander workforce

Workplaces are a key avenue for acquiring new skills, knowledge, and training. Investing in an Aboriginal or Torres Strait Islander employee's education provides ongoing personal benefits to the individual, long-term economic benefits to workplaces, benefits to Aboriginal and Torres Strait Islander communities, and the development of a better skilled, more efficient labour force across multiple industry sectors.

It is worthwhile targeting people who have been working in a relevant field because they bring experience and add new perspectives to their learning.

If staff and trainees are able to retain their employment while studying, they are likely to incorporate the skills and understanding in their everyday work so there is an immediate benefit to their clients and the community. These workers have a positive effect on the motivation of young Aboriginal people to go to university by showing that it is both possible and worthwhile – they become role models and mentors (submission no. 51, NSW Department of Family and Community Services, p. 2).

The Panel believes that the Aboriginal and Torres Strait Islander workforce is well placed to produce a pool of university-ready candidates. This is particularly true of the public service and community sectors.

Current situation

Aboriginal and Torres Strait Islander labour force participation is improving

Over recent years labour force participation for Aboriginal and Torres Strait Islander people has been steadily improving.

Between 1994 and 2008 labour force participation for Aboriginal and Torres Strait Islander people aged 15 to 64 increased from 54.5% to 64.5% (SCRGSP 2011b, p. 4.67).

During the same period, for Aboriginal and Torres Strait Islander people aged 18 years and over, the level of mean gross weekly equivalised household income they received increased from \$422 to \$580,⁴³ suggesting that Aboriginal and Torres Strait

⁴³ Income is expressed in 2008 dollars.

Islander people are gaining access to higher-paying, more secure employment (SCRGSP 2011b, p. 4.102).

There are significant numbers of Aboriginal and Torres Strait Islander public sector, community sector and private sector employees with the capacity to undertake higher education

Public sector

Both at the national and state and territory levels the public sector is a significant employer of Aboriginal and Torres Strait Islander people.

In 2011, Aboriginal and Torres Strait Islander people accounted for around 2.1% of all Australian Public Service (APS) employees (APSC 2011, p. 164, Table 7.1). As a party to the COAG National Partnership on Indigenous Economic Participation, the Commonwealth has agreed to increase Aboriginal and Torres Strait Islander employment across the Commonwealth public sector to 2.7% by 2015 (DEEWR 2011c).

In 2009–10, Aboriginal and Torres Strait Islander people represented 2% of all state and territory public service employees (Taylor et al. 2011, p. 10). Across this overall cohort, however, Aboriginal and Torres Strait Islander staffing levels varied considerably. Within the Victorian Public Service, just over 1% of the workforce was Aboriginal or Torres Strait Islander (State Services Authority 2010, p. 11, Table 2.2), while the NT Public Service had an Aboriginal and Torres Strait Islander employment rate of 8.1% (OCPE 2010, Figure 30). Noting that the proportion of Victoria's working-age (15–64 years old) population that is Aboriginal or Torres Strait Islander is only 0.6%, in contrast to 26.6% in the Northern Territory, these figures need to be looked at in this context (ABS 2012a).

Taking the Australia Public Service as an example, there are significant numbers of Aboriginal and Torres Strait Islander APS employees with the potential to undertake a new higher education qualification (APSC 2010, p. 104, Table 57). In 2010, almost 35% of the Aboriginal and Torres Strait Islander APS workforce reported an undergraduate diploma or lower as their highest educational qualification.⁴⁴ This cohort represents a large pool of Aboriginal and Torres Strait Islander APS employees who could potentially undertake an undergraduate degree. In 2010, a further 12% of the Aboriginal and Torres Strait Islander APS workforce reported a bachelor's degree or postgraduate diploma as their highest educational qualification. This cohort represents a significant number of Aboriginal and Torres Strait Islander people with the potential to re-engage in further education, including HDR study. (Notably, almost 52% of Aboriginal and Torres Strait Islander APS employees reported *no data* against their highest educational qualification, meaning that the actual sizes of the potential undergraduate and postgraduate cohorts are subject to significant variations (APSC 2010, p. 104, Table 57).)

Community sector

The community sector is another potential field from which high numbers of new Aboriginal and Torres Strait Islander students could be enrolled.

⁴⁴ Respondents in this cohort include those who recorded an undergraduate diploma, associate diploma, skilled vocational qualification, basic vocational qualification, or Year 12, 11, 10 or less as their highest educational qualification.



Across the community sector, significant numbers of Aboriginal and Torres Strait Islander employees provide vital services in policy development, public engagement, client support, research and financial administration without relevant university qualifications. In the NSW Department of Family and Community Services, for example, there are many experienced Aboriginal caseworkers who would like to qualify and work as psychologists (submission no. 51, NSW Department of Family and Community Services, p. 1).

In many cases, these paraprofessionals have developed their academic skills, governance capabilities and leadership qualities through non-accredited on-the-job training. If accredited training has been completed, it is often a low-level VET qualification.

Private sector

The private sector has driven the main growth in Aboriginal and Torres Strait Islander labour force participation in recent years (Gray & Hunter 2011, cited in Taylor et al. 2011, p. 13). At the 2006 Census, 74.2% of Aboriginal and Torres Strait Islander people with a job were employed by the private sector, compared with 25.8% employed by the public sector (ABS 2006). Through initiatives such as Reconciliation Action Plans and the Australian Employment Covenant, many in the private sector have shown an interest in building the Aboriginal and Torres Strait Islander workforce, and have developed and implemented strategies to do so.

This growth and commitment highlights the importance of engaging the private sector in supporting Aboriginal and Torres Strait Islander employees to undertake undergraduate and postgraduate study.

What is being done to encourage public, private and community sector employees to undertake higher education?

What is government doing?

Within the public sector individual departments and agencies have developed their own strategies to encourage Aboriginal and Torres Strait Islander employees to undertake higher education. For example, the Department of Education, Employment and Workplace Relations (DEEWR) provides study assistance to Aboriginal and Torres Strait Islander employees employed under their collective agreement, which includes study leave of up to 15 hours per week and reimbursement of approved financial assistance up to the maximum of \$3,000 a year (DEEWR 2012, p. 2). As far as the Panel is aware, no research has been conducted that looks at the levels of study assistance across departments and agencies. Anecdotally, DEEWR is considered to have a generous study assistance policy.

What is business doing?

Many companies are seeing the value of Aboriginal and Torres Strait Islander higher education and working with communities and universities to support Aboriginal students.

The mining industry has been particularly active in working to upskill its Aboriginal and Torres Strait Islander employees to meet the existing and future skills needs of the sector. In its submission to the Review, the Minerals Council of Australia outlined several member company initiatives that support Aboriginal and Torres Strait Islander employees. Most of these were to assist Aboriginal and Torres Strait Islander people to move from school, VET or higher education into a job with the

sector, and there were some initiatives that supported Aboriginal and Torres Strait Islander people to undertake a degree in the form of generous scholarships.

The Panel has not, however, found much evidence of programs run by businesses that assist their *existing* Aboriginal and Torres Strait Islander employees to undertake higher education.

What needs to change?

Better and clearer pathways for the Aboriginal and Torres Strait Islander workforce into higher education

Like VET students coming from the school system, paraprofessionals are often marginalised in lower-level courses and graduate without qualifications that would assist them to move to professional and/or managerial positions. The government and higher education sector need to work with VET providers and employers in the public, community and private sectors to raise awareness of and create easy-to-access programs and pathways into higher education for their employees, whether to a first degree for paraprofessionals or postgraduate study for people who have already completed an undergraduate degree.

Articulation pathways would be easier for Aboriginal and Torres Strait Islander Health Workers to understand and navigate if they were more clearly defined (submission no. 63, Health Workforce Australia, p. 3).

The Business Council of Australia currently conducts research on corporate sector best practice to recruit Aboriginal and Torres Strait Islander people into employment. The Panel believes that this research needs to be built on and expanded to look at best practice pathways for Aboriginal and Torres Strait Islander employees into higher education while still working. In this way, best practice programs can be shared and replicated across Australia's corporate sector.

Building on existing efforts

Both the National Australia Bank and BHP Billiton, in partnership with the Melbourne Business School and the Australian Government, support an Indigenous MBA scholarship for eligible Aboriginal and Torres Strait Islander applicants. A condition of both scholarships is that the applicant must have had at least two years' full-time work experience, which encourages those already in the workforce to apply.

More support for Aboriginal and Torres Strait Islander employees to undertake higher education

A lack of assistance in terms of financial support and flexible work arrangements from government and employers often acts as a barrier to Aboriginal and Torres Strait Islander employees considering higher education. Employers need to understand the benefits of their employees undertaking higher education, such as improved skills and knowledge, and to provide appropriate support.

A large proportion of Health Workers reported their interest in pursuing higher education. However, some are hindered by barriers to accessing education and training ... [L]imited access to required funding, leave and family support/obligations can hinder an Aboriginal & Torres Strait Islander person meeting their aspirational educational goals (submission no. 63, Health Workforce Australia, p. 2).



A number of written submissions reiterated the importance of workplaces as places of learning, and of the need to develop stronger pathways between the workforce and higher education sectors.⁴⁵ Many of these submissions stressed the importance of developing programs that allow Aboriginal and Torres Strait Islander people to pursue university qualifications while remaining in full-time employment or receiving a full-time equivalent wage. The Panel notes that a number of employers in the corporate, community and government sectors provide cadetships to Aboriginal and Torres Strait Islander people to help them into employment during their study or once they have graduated,⁴⁶ but not to study at university while already employed. The Panel believes that employers should place greater emphasis on developing existing Aboriginal and Torres Strait Islander employees.

There have been successful initiatives to increase the number of Aboriginal students in Higher Education through the Aboriginal Cadetship Program ... Commonwealth funding supports undergraduate Aboriginal students and [the NSW Government Department of Family and] Community Services provides these students with placements during university breaks and guaranteed employment after graduation.

A similar scheme to the Cadetship Program is needed for mature Aboriginal people already working in relevant fields (submission no. 51, NSW Department of Family and Community Services, p. 2).

Recognition of prior learning for paraprofessionals

The Panel believes that universities should consider ways to provide greater flexibility for recognised prior learning and experience among Aboriginal and Torres Strait Islander workers. One way to encourage them to study may be to provide greater recognition of their often considerable work experience in certain sectors. For example, there are many Aboriginal and Torres Strait Islander people working in the health and education sectors without any higher education qualifications but with decades of on-the-job experience.

Any assessment and recognition of prior learning or experience would, of course, need to adhere to quality standards.

1.2.2 Vocational education and training

Unlike the higher education sector, VET providers have a proven record of enrolling Aboriginal and Torres Strait Islander students in VET courses in numbers that reflect population parity. This can be both a benefit and a drawback for the higher education sector—a benefit when higher-level VET courses are used as a launching pad into university for students without the existing academic preparedness for direct entry, and a drawback when VET acts as a diversion from higher education. With the majority of Aboriginal and Torres Strait Islander students enrolled in and completing low-level VET courses—82.1% of completions in 2010 were for Certificate I–III qualifications (NCVER 2010, Table 4)—that do not facilitate entry to university, VET is typically a diversion from higher education.

⁴⁵ For example, submissions by the University of Sydney (no. 33); Group of Eight (no. 16); Minerals Council of Australia (no. 21); Charles Darwin University (no. 75).

⁴⁶ For example, submissions by the Minerals Council of Australia (no. 21) and the Government of New South Wales – Department of Family and Community Services (no. 51).

Whilst it is acknowledged that alternative entry and other pathways are critical elements for assisting Indigenous access to [higher education], a significant number of Indigenous students are precluded from gaining [higher education] admission via articulation through VET due to the level of their VET qualification (DEEWR 2008; DEST 2006, both cited in submission no. 75, Charles Darwin University, p. 1).

The critical first step to unlocking the capacity of Aboriginal and Torres Strait Islander VET students is to ensure that they are enrolling in and completing higher-level VET courses (Certificate IV and above). Only then will VET-to-university pathways be successful.

Current situation

Aboriginal and Torres Strait Islander students are more likely to enrol in a VET course than non-Indigenous students

Analysis by the Centre for Aboriginal Economic Policy Research shows that in 2010, Aboriginal and Torres Strait Islander Australians were eight times more likely to be enrolled in a VET course than a university course, whereas non-Indigenous Australians were two times more likely. Within the Aboriginal and Torres Strait Islander population itself, the proportion of working-age adults⁴⁷ enrolled in a VET institution in 2010 was 23%, compared to just 3% in a university (Taylor et al. 2011, p. viii).

There are a number of possible reasons why the VET sector is more successful in enrolling higher proportionate numbers of Aboriginal and Torres Strait Islander people. One reason may be that lower entry requirements make VET a more accessible study option for Aboriginal and Torres Strait Islander students who lack the academic qualifications and aspirations to undertake university-level study. It may also be that Aboriginal and Torres Strait Islander students are actively drawn to VET by its method of study, its curricular content, or the career options that a VET qualification provides. According to the National Centre for Vocational Education Research (NCVER) *Student Outcomes Survey 2011*, the overwhelming majority of Aboriginal and Torres Strait Islander students undertook VET training for employment-related (74.8%) or personal development (23.0%) reasons. Only 2.2% of Aboriginal and Torres Strait Islander students listed their motivation for undertaking VET study as entry into another course of study (VET, university or otherwise). In comparison, 80.6% of non-Indigenous students undertook VET training for employment-related reasons, 15.0% for personal development reasons and 4.5% to get into another course of study (NCVER 2011, Table 9).

There is also evidence that indicates the popularity of VET study may be in part due to geographical availability. 'A total of 49 cities and towns across Australia host a university or one of its campuses and offer degree-level courses ... [I]t is significant to note that only 44 per cent of Indigenous people live within one of these 49 cities and towns compared to 73 per cent of the non-Indigenous population' (Taylor et al. 2011, p. 21). In contrast, VET institutions are almost everywhere across Australia, with almost all localities having some physical presence of a VET institution or provider.

⁴⁷ Aged 15 to 64.



Students have also indicated a preference to earn money for themselves and their families, and that the pursuit of a vocational education pathway allows them to 'learn as you earn' (Hossain et al. 2008, pp. 22–3). This immediate economic incentive contrasts starkly with the long-term commitment and significant financial cost associated with enrolment in higher education.

VET can act as a diversion from higher education

While the high number of Aboriginal and Torres Strait Islander VET students represents a significant pool of people who can transition into higher education, VET may in fact be contributing to low university enrolments by diverting university-capable students away from higher education.

As noted above, by age 17 there are more Aboriginal and Torres Strait Islander students enrolled in VET than in school, reducing the potential pool of young Aboriginal and Torres Strait Islander people who are placed to access a direct school-to-university pathway.

During consultations the Panel found there was a view that government-developed funding arrangements like Job Services Australia (JSA) may be providing an incentive that pushes capable Aboriginal and Torres Strait Islander people towards a VET qualification instead of higher education study. This appears to stem from a misunderstanding of how JSA works.

Under the JSA program, JSA providers can receive outcome payments from the government for job seekers who complete Qualifying Education Course milestones. A Qualifying Education Course can be accredited training or higher education, must be full-time study (unless a job seeker is considered a Principal Carer Parent), is normally of two or more semesters in duration over a 12-month period, and is approved for Austudy or Youth Allowance (Student) or ABSTUDY purposes.

There is nothing to prevent a JSA provider placing a job seeker into a tertiary course (including some masters and doctorate-level courses) longer than 12 months and claiming an outcome payment after the job seeker has successfully completed the first semester, and again after they complete a second semester, even if the job seeker ceases income support or transfers to ABSTUDY, Youth Allowance (Student) or Austudy as a result of their studies. However, the Panel notes that JSA is not designed to be a normal pathway to higher education.

Almost 80% of the over 72,000 Aboriginal and Torres Strait Islander people who have commenced with JSA are in Streams 3 and 4 (DIIS RTE 2012b), meaning they have severe barriers to employment which often include literacy and numeracy issues, and which would translate into even greater barriers to higher education. The Panel also notes that for the Stream 1 candidates, who are more likely to have the capacity to undertake higher education (there were only 3,814 as at March 2012), there is little incentive for JSA providers to place them in any kind of education and training (including VET) because there are no outcome payments available to JSA providers for placing Stream 1 job seekers into education and training in the first 12 months of a job seeker's unemployment.

The Panel does not believe that a change to the structure of outcome payments will greatly improve the number of Aboriginal and Torres Strait Islander JSA clients who participate in university. Rather, universities should focus on reaching students while still at school and encouraging them to undertake higher education, including

providing information on non-direct entry pathways into higher education like enabling courses, before they become unemployed.

Most Aboriginal and Torres Strait Islander students enrol in and complete low-level VET courses, and are more likely to do so than non-Indigenous students

In the VET sector, successful completion of higher-level qualifications (Certificate IV and above) are more likely to provide the bridging skills and pathways to higher education. Between 2002 and 2009, VET course enrolments of Aboriginal and Torres Strait Islander students increased by 30%. However, the proportion of Aboriginal and Torres Strait Islander course enrolments at Certificate IV and above decreased from 11.4% in 2002 (8,912 course enrolments) to 9.4% (9,858 course enrolments) in 2009. In this period, the majority of all Aboriginal and Torres Strait Islander course enrolments remained in Certificate I, II and III courses (internal DEEWR data derived from NCVER 2010).⁴⁸

In 2010, the overwhelming majority (82.1%) of Aboriginal and Torres Strait Islander completions were for Certificate I–III qualifications. In contrast, completions in Certificate IV accounted for only 12.5% of all Aboriginal and Torres Strait Islander VET completions, and diploma-level and above completions (including advanced diplomas, graduate certificates, and diploma or higher) combined to account for only 5.4% of all completions. There were no completions in associate degrees, bachelor degrees or graduate diplomas. In comparison, 66.9% of non-Indigenous completions were for Certificate I–III, 19.1% for Certificate IV, and 14.1% for diploma-level and above completions (with no completions in associate degrees) (NCVER 2010, Table 4).

In many cases, Certificate level courses lead to beneficial and appropriate training and employment pathways for Indigenous students, but the low numbers of Indigenous students in higher level courses is worrying. Lower level certificate courses do not typically provide articulation pathways into higher education (submission no. 16, Group of Eight, p. 11).

Pathways from VET are not leading to higher education

The Panel found there is evidence that the VET sector is not providing a pathway into higher education for large numbers of Aboriginal and Torres Strait Islander VET graduates, even when they are completing higher-level courses.

NCVER data shows that in 2011, 4.0% of Aboriginal and Torres Strait Islander VET students reported being enrolled in university six months after completing their training, compared to 6.7% of non-Indigenous students (NCVER 2011, Table 9).

A core reason behind this may be that Aboriginal and Torres Strait Islander students do not often undertake VET study for the purpose of transitioning into higher education.

⁴⁸ It is possible for students to be enrolled in more than one course in any year.



Other barriers to a successful transition from VET into higher education include a lack of awareness about how to transition and an inconsistent approach to credit transfer arrangements. These were well documented in public submissions.⁴⁹

Much of the analysis that has been done about pathway arrangements between VET and higher education, and credit transfer in particular, has found them to be problematic (PhillipsKPA 2006, cited in Bradley et al. 2008, p. 181). The Bradley Review noted that '[v]arious efforts to strengthen the connections between higher education and VET have been made in Australia over the last twenty-five years with limited success, due to structural rigidities as well as differences in curriculum, pedagogy and assessment' (2008, p. 179).

Without effective pathway arrangements between courses and institutions, the capacity of Aboriginal and Torres Strait Islander VET students to transition to higher education is minimised, as is the capacity of the sector more broadly to develop a pool of potential university candidates.

[T]he key to boosting participation in higher education by Aboriginal and Torres Strait Islander people is to improve pathways from VET, and to ensure that good support structures are in place during and post-transition (submission no. 24, Swinburne University of Technology, p. 5).

Notably, some universities show greater success than others in recruiting students from the VET sector. The top five universities in terms of Aboriginal and Torres Strait Islander students admitted on the basis of a VET award course in 2010 are RMIT University (33.3%), Charles Sturt University (32.8%), La Trobe University (29.4%), University of Tasmania (26.1%) and Swinburne University of Technology (23.1%) (DIISRTE 2012a).⁵⁰ Two of these (RMIT and Swinburne) are dual-sector institutions.

What is currently being done to help VET students to transition to higher education?

Government

In 2009, the Commonwealth and state and territory governments, through COAG, signed up to the National Agreement for Skills and Workforce Development. The agreement aims to ensure that all working-age Australians, and Aboriginal and Torres Strait Islander Australians in particular, have the opportunity to develop the skills and qualifications that will enable them to participate in, and contribute to, the modern labour market. Two of the targets contained in the agreement are to:

- halve the proportion of people aged 20 to 64 without a Certificate III or above
- double the number of people completing diploma and advanced diploma qualifications.

⁴⁹ For example, submissions by the Group of Eight (no. 16); Swinburne University of Technology (no. 24); University of Newcastle (no. 28); The Smith Family (no. 34); Janine Oldfield (no. 4); University of Sydney Students' Representative Council (no. 60); University of Sydney (no. 33); Australian Government – Health Workforce Australia (no. 63); Government of New South Wales – Department of Education and Communities (no. 71); Charles Darwin University (no. 75).

⁵⁰ Based on Table A providers and domestic students only.

A new framework of objectives and principles for a reformed national VET system was adopted by COAG at its meeting on 19 August 2011. The framework will be used to guide the development of reform directions for consideration by COAG in 2012. Two of the key themes of the framework are encouraging increased participation in higher-level qualifications and the importance of strengthened pathways between the higher education and VET sectors (COAG Reform Council 2011, p. 35).

Higher education sector

A number of universities have taken steps to improve pathways between VET and higher education by becoming dual-sector institutions (universities that offer VET qualifications), by using VET qualifications as entry points to bachelor programs or by providing credit transfer arrangements for units completed through VET.

What needs to change?

While VET is not currently used successfully as a pathway into higher education for many Aboriginal and Torres Strait Islander students, it holds potential to unlock the capacity of a pool of students who are already engaged in learning.

The Panel believes that governments, schools, the higher education sector and the VET sector must work together to:

- encourage university-capable Aboriginal and Torres Strait Islander students to seek entry into university
- ensure that all Aboriginal and Torres Strait Islander students enrolling in a VET qualification understand the higher education options available to them post-VET
- encourage Aboriginal and Torres Strait Islander students who are unable to access university through direct entry to enrol in higher-level VET courses that enable their later transition to university
- promote VET to higher education pathway arrangements like credit transfer articulation to Aboriginal and Torres Strait Islander students
- support Aboriginal and Torres Strait Islander VET students who do not have the literacy and numeracy skills to undertake higher-level VET courses to get the skills they need.

Stronger relationships between TAFE and Universities provide positive platforms for students to progress through to higher education (submission no. 28, University of Newcastle, p. 4).

The Panel again notes the importance of personal aspiration and support to a successful transition from VET to higher education. Aspiration and adequate support from teachers, career advisers, family and friends, and higher education providers are vital to ensuring that school students make the choice to attend university over VET. They are also vital to helping VET students make the decision to pursue higher education after they complete their qualification.

Improve understanding of pathways to higher education

Like in schools, VET teacher and career adviser quality and expectations of Aboriginal and Torres Strait Islander students are important factors in driving



successful educational outcomes, including whether or not a student transitions from VET to university.

Unless these teachers and career advisers are more culturally aware, support student aspiration through high expectations, and make their students aware of the options available to them, it is unlikely the number of Aboriginal and Torres Strait Islander VET students transitioning to university will grow. Universities and VET institutions educating and training VET teachers and career advisers need to ensure that they are providing them with the skills sets and knowledge to support Aboriginal and Torres Strait Islander student aspiration and transition to higher education, should they choose to take that path.

Universities also need to ensure that they are working closely with VET institutions to provide information to teachers and students about pathways to higher education at multiple points—when students make enquiries about enrolling in a VET course, when they enrol, during the course, and once they have completed it.

Support Aboriginal and Torres Strait Islander students to enrol in higher-level VET courses

The Panel believes that there is opportunity for the VET sector to encourage and support students to gain higher-level qualifications of Certificate IV and above, and to work closely with universities to ensure that these qualifications can translate to entry into higher education.

[Articulation] pathways (from Advanced Diploma, Diploma and Certificate IV courses) are an increasingly important route into higher education, especially for people who did not have access to high quality schooling earlier in life, who underperformed at school, or who had not considered university as a realistic option (submission no. 16, Group of Eight, p. 11).

Building on existing efforts

The Panel notes the work of the Victorian Government—through its VET policy framework for Indigenous communities (Wurreker Strategy) and Tertiary Education Access Plan, and the Victorian Skills Commission’s dedicated VET Access and Equity Advisory Committee—to improve VET access, participation and outcomes for Aboriginal students (DEEWR 2010a, pp. 20–1), including raising qualification levels. These strategies see successful VET outcomes in higher-level qualifications as an important part of raising the numbers of Victorians entering the higher education system, particularly those who do not currently meet entry criteria (DIIRD, p. 8), and form part of the Victorian Government’s commitment to the National Agreement for Skills and Workforce Development.

Improve pathway arrangements from VET to higher education

A number of submissions to the Review outlined arrangements of particular universities and dual-sector institutions⁵¹ for providing pathways between VET and higher education in particular disciplines, ranging from using a VET qualification as an entry point to a university degree, to giving credit for VET units completed towards elective university courses, and towards non-elective university courses.

⁵¹ Charles Darwin University, Swinburne University of Technology, RMIT University, University of Ballarat, University of Newcastle and University of Melbourne.

The Panel notes the work of these institutions but, given the low number of VET students who transition to higher education, believes that more work needs to be done to improve the effectiveness of pathways between VET and higher education in addition to increasing the numbers of VET students in higher-level courses.

The Panel notes that the Tertiary Education Quality and Pathways Principal Committee of the Standing Council on Tertiary Education, Skills and Employment (SCOTESE)⁵² has been tasked with looking at pathways to higher education with a view to improving the transition between qualifications and education sectors, and will report to SCOTESE on developing the Aboriginal and Torres Strait Islander Pathways Action Plan in June 2012. The Panel believes that it would be beneficial to add to this research by engaging IHEAC to work with the National VET Equity Advisory Council to look at pathways from VET to higher education from an Indigenous-specific perspective.

Building on existing efforts

One initiative referred to in the NSW Aboriginal Land Council Northern Region Local Aboriginal Land Councils' submission involves the 'mapping of TAFE competencies onto [University of New England] degree offerings ... to [develop] a seamless progression through the tiers of the education hierarchy, with multiple entry and exit points, each with a formal qualification attached' (submission no. 23, NSW Aboriginal Land Council Northern Region Local Aboriginal Land Councils, p. 4).

As a dual-sector institution, the University of Notre Dame (a Table B higher education provider) has developed the VET Pathways in Nursing and Education program that provides multiple course entry and exit points to enable students to gain VET and higher education qualifications. After completing courses at the Certificate II, III or IV level, students can gain entry to bachelor programs in nursing and education.

Improve geographical access to higher education using the VET system

Because many Aboriginal and Torres Strait Islander people live in regional and remote areas, they have limited access to the higher education institutions and campuses that are located in just 49 cities and towns across Australia (Taylor et al. 2011, p. 21). VET providers can play a role in filling geographical gaps by working with universities to deliver credentialed units of study.

The Panel found that some universities have made arrangements to use Technical and Further Education (TAFE) or other VET provider facilities in the delivery of university courses in rural and remote areas. Some dual-sector institutions have also located some of their VET courses in different cities or towns to their main university campus to give their institution a better geographical reach.

The issue of geographical access is not limited to Aboriginal and Torres Strait Islander students, but is an issue for the broader university sector, with many non-Indigenous students also living in regional and remote areas. Working with VET providers to improve geographical access to higher education for Aboriginal and

⁵² SCOTESE is part of the Council System supporting the Council of Australian Governments (COAG). Its purpose 'is to ensure that Australia's current and future workforce needs are met through increased participation, educational attainment, skills development and skills use to achieve greater productivity' (NATESE 2012).



Torres Strait Islander students will be of benefit to the broader higher education sector and its students.

Building on existing efforts

In December 2011, the University of Ballarat received \$24.8 million from the Australian Government to make higher education programs available in regions and locations isolated from post-secondary opportunities and too distant from the University of Ballarat's six campuses through a partnership between the University of Ballarat and six regional Victorian TAFE institutes known as the 'Victorian Regional Dual-Sector University Partnership' (submission no. 29, University of Ballarat, p. 5). Through this partnership '[t]he University will recognise work experience, diplomas and advanced diplomas as pre-requisites for entry into the final years of degrees to be delivered at TAFE based higher education centres, creating a new pathway into higher education' (Evans & King 2011).

Charles Sturt University's TAFE Pathways and Partnerships program has built on the university's existing relationship with the VET sector to establish a series of university study centres in rural locations⁵³ that provide Aboriginal and Torres Strait Islander people with increased exposure to higher education opportunities.

Recommendations

Recommendation 6

That universities and the vocational education and training (VET) sectors:

- work with employers and professional associations to encourage them to support their Aboriginal and Torres Strait Islander employees to undertake higher education including through cadetship models, scholarships and flexible leave arrangements
- collaborate with professional bodies and private and public sector employers to build and extend alternative pathways into higher education, including pursuing better credit transfer arrangements between VET and universities, pursuing delivery partnerships, and ensuring that VET providers are promoting higher education as an option post-VET
- support Aboriginal and Torres Strait Islander students to enrol in and complete higher-level (at least Certificate IV and above), but also diploma and advanced diploma-level, qualifications.

Recommendation 7

That the Indigenous Higher Education Advisory Council work with the National VET Equity Advisory Council to provide joint advice to governments on how to improve pathways between VET and higher education.

1.3 Enabling programs

Many Aboriginal and Torres Strait Islander students enter university through alternative entry pathways such as special or alternative entry programs and enabling programs.

⁵³ For example, Parkes University Study Centre at Parkes, TAFE NSW – Riverina Institute at Griffith and Wagga Wagga, and TAFE NSW – Western Institute at Dubbo.

Special or alternative entry programs can be accessed by those who do not come directly from high school with an Australian tertiary admission rank (ATAR) score. A number of universities also provide this alternative pathway through differing modes, from taking tests, to interviews and essays.

Enabling programs are generally foundation courses of one or more units of study designed to get potential students ready for higher education by helping them to build the skills they need for university such as literacy, numeracy and critical thinking. They generally act as an entry point into a bachelor-level degree for those who successfully complete the course.

Current situation

Many Aboriginal and Torres Strait Islander students enter university through special entry or enabling programs

In 2010, only 47.3% of Aboriginal and Torres Strait Islander students entered university on the basis of their prior educational attainment⁵⁴ compared to 83.0% of non-Indigenous students (DIIS RTE 2012a),⁵⁵ meaning that over half of the Aboriginal and Torres Strait Islander students who gained entry to university did so through enabling or special entry programs. At some universities this proportion is much higher.

Like its Go8 [Group of Eight] counterparts it [UWA] is seen to have relatively low enrolments but good success and completion rates. To achieve this success, UWA does not merely take academically advanced students, but provides multiple alternative entry pathways to all its courses including special ATAR [Australian tertiary admission rank] provisions, enabling courses, and course specific intensive preparatory courses ... Within the UWA Indigenous student cohort 75% of students have entered bachelor's degrees through Indigenous special entry provisions and preparatory courses. For professional degree courses such as Medicine, Law and Engineering this rises to 80% or higher (submission no. 61, University of Western Australia, p. 1).

Enabling places are allocated

In December 2011, the Minister for Tertiary Education took a decision to designate places for sub-bachelor-level courses. This means that places for these courses will be allocated by the Minister rather than funded on a demand-driven basis. From 2012 onwards, the number of Commonwealth-supported places in enabling courses, diplomas, advanced diplomas and associate degrees is determined in negotiation with each university as part of annual Commonwealth Grant Scheme (CGS) funding agreements. Universities have less scope to independently increase enabling places than would be the case if these places remained completely demand driven as for bachelor-level courses.

For enabling courses, the government pays the normal contribution for Commonwealth-supported places through the CGS. Universities that offer

⁵⁴ Prior educational attainment includes higher education course, secondary education, or VET award course.

⁵⁵ Based on Table A providers and domestic students only.



Commonwealth-supported places in enabling courses cannot charge a student contribution. They receive the enabling loading instead. Enabling loading is a fixed funding pool, indexed annually. Total estimated CGS funding in 2010 for all enabling places was \$66 million, with the enabling loading accounting for \$14 million of this amount (Lomax-Smith, Watson & Webster 2011, p. 122).⁵⁶

A number of submissions argued that the current enabling loading amount was not adequate for universities to deliver the kind of support required for students undertaking enabling courses. The Panel notes that in response to the 2011 Higher Education Base Funding Review, in the 2012–13 Budget the government announced that in 2013 the enabling loading will be increased from an estimated \$1,833 to \$2,500 per place, and then from 2014 will increase to \$3,068 per place (with the rate indexed in later years) at a cost of \$41.6 million for the period 2012–13 to 2015–16.

What needs to change?

Improve the reach of enabling programs

The Panel found most universities and students were supportive of enabling programs as a way to help Aboriginal and Torres Strait Islander students to access university, with a number of university programs considered to be successful in achieving outcomes for these students.⁵⁷

Indigenous-oriented enabling programs offer students the opportunity to transition to a degree course via a challenging academic program delivered in a culturally secure manner (submission no. 5, Murdoch University, p. 2).

However, some submissions⁵⁸ argued that government should better fund enabling programs, with funding shortfalls in government contributions threatening the success of these programs. The Group of Eight noted ‘with concern and disappointment’ that funding for enabling courses has not been revised to fit the demand-driven system of funding Commonwealth-supported places in bachelor degrees.

We believe that this is short-sighted. Failure to resource foundation and enabling courses adequately will make it unnecessarily difficult for universities to increase enrolments of students from traditionally under-represented groups, and will disadvantage these students. As with other forms of disadvantage in access to university, this applies particularly to Indigenous students (submission no. 16, Group of Eight, p. 11).

This view is partly supported by the members of the Higher Education Base Funding Review Panel, who, in their final report to government, advocated funding for enabling places to be uncapped and demand driven (Lomax-Smith, Watson & Webster 2011, p. xv). The panel also argued for a review of the role of enabling courses in the tertiary education sector, including an assessment of their

⁵⁶ It should be noted that despite being able to offer fee-paying enabling places, 97% of enabling students are in Commonwealth-supported places.

⁵⁷ For example, Charles Darwin University, University of Wollongong and University of Newcastle.

⁵⁸ For example, submissions by Murdoch University (no. 5); Group of Eight (no. 16).

effectiveness, given they ‘seem not to have been subject to a targeted review of effectiveness despite having existed since 1990’ (Lomax-Smith, Watson & Webster 2011, p. 124).

The Panel agrees that government should better support universities to deliver enabling courses, given their apparent importance as non-direct entry pathways to university. The Panel also believes that universities need to better develop an evidence base for the profile and effectiveness of these courses to inform future policy and funding decisions.

Recommendation

Recommendation 8

That the Australian Government, VET providers and universities collaborate to improve the reach and effectiveness of enabling courses for disadvantaged learners, particularly Aboriginal and Torres Strait Islander students, including:

- reforming Commonwealth Grant Scheme funding so that it increases with the number of students undertaking higher education enabling courses
- facilitating tracking of students who undertake enabling courses at one university and move to and enrol at a second university so that both universities gain recognition for success.

1.4 Access to information

The Panel believes that providing potential students, their families and communities with better and more comprehensive information on the university experience and available support for Aboriginal and Torres Strait Islander students will help to increase the numbers of students who aspire to and enrol in higher education.

Current situation

Family and community views about higher education are important factors in the decision to enrol in university

Family and friends are the most frequently consulted sources for career advice for both Aboriginal and Torres Strait Islander and non-Indigenous students (Craven et al. 2005, p. 17). If family and friends do not have knowledge of or a positive perception of higher education and the opportunities it offers, it is difficult to present higher education as an option or pathway. On the other hand, family and friends with a positive perception of higher education can be the influencing factor in a person’s decision to attend university.

Research shows that regardless of a parent’s educational background, Aboriginal and Torres Strait Islander people identify their parent’s desire for and support of a better life for them as a driver to attend and succeed at university (Santoro 2010).

When I was in high school I had no idea of what I wanted to do with my life. I wanted to drop out halfway through Year 11 but my family forced me to stay in school and I never imagined being at university studying, let alone studying to become a doctor (Bianca Howard, Medicine, University of Western Australia).



On the other hand, a lack of support from parents and communities can act as a barrier to higher education. During consultations, the Panel found that some Aboriginal and Torres Strait Islander students felt actively discouraged from participating in higher education by their communities due to suspicion about higher education. Some students reported family and community members questioning why they chose to participate in higher education; others said that their decision to go to university led to others bringing into question their Aboriginality and some were asked questions about the relevance of higher education to them and their culture. These attitudes can be attributed to a lack of understanding of the benefits of higher education and to the negative perceptions of the system.

Peers are also a major influence on students' choices. Research in the United States indicates that students are four times more likely to enrol in university if a majority of their friends also plan to, than if their friends do not (Choy 2002, p. 16).

What needs to change?

Aboriginal and Torres Strait Islander people need to feel that universities are a place 'in which we belong'

Like all families, Aboriginal and Torres Strait Islander families want their children to succeed and prosper. However, many parents have not benefited from secondary education or tertiary education and so their horizons of success may not extend beyond lower-paid employment. Having not experienced the benefits of higher education themselves, parents may not associate it with positive outcomes for their children.

Of those Aboriginal and Torres Strait Islander people who do choose to enter higher education, the majority are the first in their family to ever do so. The Panel believes that we need to get to a point where university study is unexceptional for Aboriginal and Torres Strait Islander people.

To empower Aboriginal and Torres Strait Islander people to make the choice to go into higher education, the Panel believes it is vital that universities are a place where they feel they belong. The government and higher education providers need to work closely with Aboriginal and Torres Strait Islander communities to promote higher education as a natural pathway, one that is consistent with and supports Aboriginal culture and values rather than at odds with it. Promoting the links between Aboriginal and Torres Strait Islander community heroes and their engagement with higher education is just one way of doing this.

Aboriginal and Torres Strait Islander students are important role models to others in their communities, motivating them to aspire to success at school or university. As more Aboriginal and Torres Strait Islander students participate in the higher education system and have a good student experience based on a sense of belonging, the more likely they are to encourage participation in higher education by their families and friends.

Each successful first generation student can be the catalyst for more members of their family and community to take the leap into higher education. The Panel came across many examples of family members following each other into university study—a parent may follow a child into study, a sister inspire her siblings, or an uncle may provide an example for a nephew on the sort of careers a degree can support.



Better and more readily accessible information on financial and other support for Aboriginal and Torres Strait Islander students needs to be made available

For higher education to be considered as a viable option by Aboriginal and Torres Strait Islander people, potential students and their families and friends need to have a good understanding of what the university experience involves, what the benefits are, and what support, financial or otherwise, will be available once they enrol.

The Panel found that it is critical for universities to engage with local Aboriginal and Torres Strait Islander communities to help build knowledge, show university as a safe place for Aboriginal and Torres Strait Islander people, foster a better understanding of the needs of communities and how they can be met by existing support programs, and build strong working relationships.

While there are a range of programs available to Aboriginal and Torres Strait Islander students to provide them with financial, social and cultural support (addressed in Chapter 2), it is often difficult to know which program a person is eligible for and how to access it. The complexity of programs means that some people will not be aware that if they choose to enrol in university they will be eligible for support. While some career advisers may offer this information, it is often limited to students who are at school.

There is a need to improve the quality of information and communication to ensure that prospective Aboriginal students are better informed and comfortably familiar with the range of services and courses available in higher education setting (submission no. 71, New South Wales Government, p. 7).

One submission suggested that the higher education sector should:

[d]evelop a national marketing strategy that builds the awareness amongst parents and communities as well as school students of the value of a university education, what is required for entry, and the financial aid that is available to achieve success (submission no. 42, University of Queensland, p. 4).

By improving information flows to key influencers such as parents, a new cohort will grow who can provide advice and encouragement to potential students in their families or communities. The Panel agrees it would be beneficial for government to work with universities to develop a campaign that promotes the importance and relevance of higher education to Aboriginal and Torres Strait Islander people. To do this effectively, the Panel suggests that market research should be undertaken to identify strategies that will attract interest and best appeal to Aboriginal and Torres Strait Islander people.

The Panel found that some universities⁵⁹ have taken steps to demystify the university experience for potential students, their families and communities by introducing them to the advantages of higher education, ensuring a strong

⁵⁹ For example, the Queensland consortium of universities collaborating in the statewide effort to stimulate interest and widen participation in tertiary study by people from low-income and Aboriginal and Torres Strait Islander backgrounds; Curtin University; the University of South Australia; the University of Western Australia; the University of Adelaide; the University of New South Wales; Deakin University; the University of Western Sydney; the University of Newcastle.



understanding of what would be expected of them, and helping them to understand the types of financial and other support available to them, such as Indigenous Education Units or scholarships.

Building on existing efforts

Curtin University of Technology's Indigenous Australian Engineering Summer School provides a challenging environment that demonstrates to students what it means to be an engineering student and how engineering can help them and their communities.

Each year 20 students with an aptitude for science and engineering are selected from across Australia to participate in the program. The students participate in engineering laboratory activities, university visits and lectures alongside Aboriginal and Torres Strait Islander student mentors and role models, providing them with an insight into the university experience and various disciplines of engineering and related sciences. Students receive advice on study skills, scholarships, cadetships and alternative pathways into engineering at the tertiary level.

Recommendation

Recommendation 9

That universities and the Australian Government improve the access to and effectiveness of the information they provide for potential Aboriginal and Torres Strait Islander students, including through:

- dedicated contact points and Aboriginal and Torres Strait Islander higher education advisers located within universities
- a campaign in Indigenous media to promote the importance and relevance of higher education to Aboriginal and Torres Strait Islander students
- developing capacity within the MyUniversity website through which potential Aboriginal and Torres Strait Islander students can access information on scholarships, financial and other supports available to students undertaking higher education, and requirements for entry to and success in higher education.



Part II:

Supporting success and releasing capability

Introduction to Part II

Once Aboriginal and Torres Strait Islander people reach universities, there is a range of factors that can influence their success. It is critical that universities build on their existing efforts and work more closely with other institutions, businesses, professional bodies and communities to encourage and support successful students, staff and researchers within higher education.

The new paradigm needs to be built on the successful elements of the old model but provide much sharper focus on the development of institutional strategies to support the development of partnerships, pathways, productivity and Indigenous leadership (3HFKHQNLQD \$QGHUVRQ 2011, p. 2).

Once at university, the focus on support must be maintained because ‘access without effective support is not opportunity’ (Tinto 2008, cited in Pechenkina & Anderson 2011, p. 3). Recruitment to university is the entry point, while a long-term professional career contributing to our nation’s growth should be the destination for a growing number of Aboriginal and Torres Strait Islander students.

Across the sector, there will be no ‘one size fits all’ approach that can be applied as each university offers a unique environment in which to build Aboriginal and Torres Strait Islander success among its students and staff. Student enrolment and retention patterns vary greatly across universities, with some having high enrolment rates but low retention and completion rates and others having relatively low enrolment rates but achieving high retention or completion rates (Pechenkina, Kowal & Paradies 2011, p. 62, Table 2; p. 63, Table 3).

The interaction of changes in enrolments and completion rates must be carefully monitored. For example, if a university significantly increases its enrolment levels, it may achieve little improvement in completion rates without increased resourcing and additional targeted effort to ensure that Aboriginal and Torres Strait Islander students are supported to complete their qualifications. Higher numbers of completions will be critical to driving increased numbers of Aboriginal and Torres Strait Islander academic staff, senior staff and researchers.

Lasting change hinges upon the support and leadership at the highest levels within each individual university, and therefore supportive governance structures and strategies will need to underpin initiatives outlined in the following sections. In summary, Aboriginal and Torres Strait Islander staff and student issues will need to be considered as core university business, as everyone’s responsibility, and reflected and integrated across all aspects of university life—in business planning, budgets, management structures, curriculums and senior staff. Complementing this, Aboriginal and Torres Strait Islander perspectives and issues will need to be integrated and not marginalised within university administration, research and faculties.

Underpinning all these required changes for students, staff and researchers, the Panel recommends a whole-of-university approach be adopted by each university. The elements of this kind of approach are discussed in more detail in the remaining

sections of the report. Together, they will provide the strategic framework and coherent policy settings across all areas of university business to deliver success.



2 Aboriginal and Torres Strait Islander student success

Success for Aboriginal and Torres Strait Islander students within universities will mean that Aboriginal and Torres Strait Islander people are ‘just as likely to be found in any school or faculty, postgraduate as well as undergraduate ... as their non-Indigenous peers’ (submission no. 59, Universities Australia, p. 12). As outlined at the start of the report, it will mean achievement (and beyond) of the targets that the Panel has identified for all universities across enrolments, retention and completion rates.

Success will also ultimately mean that Aboriginal and Torres Strait Islander students have a similar age profile to that of non-Indigenous students. Currently, the profile is skewed to mature-age students with a much lower proportion of younger Aboriginal and Torres Strait Islander students in higher education. Mature-age students experience impacts on their long-term economic wellbeing as they have a shorter period in which to earn higher rates of professional incomes. This is further exacerbated by the lower life expectancy for Aboriginal and Torres Strait Islander people, meaning Aboriginal and Torres Strait Islander men on average expect to live 11.5 years less than non-Indigenous men and Aboriginal and Torres Strait Islander women expect to live 9.7 years less than non-Indigenous women (ABS 2009).⁶⁰

Aboriginal and Torres Strait Islander students often face multiple challenges at university, including that they:

- may find the university environment challenging, often coming through enabling programs rather than straight from school
- are more likely to come from regional and remote areas and therefore need access to housing and pastoral care
- have lower completion rates.

The Panel understands that many of the issues confronted by Aboriginal and Torres Strait Islander students often also apply to non-Indigenous students, particularly those from low SES backgrounds. Therefore, the Panel has focused its efforts on the additional or different issues confronting Aboriginal and Torres Strait Islander students based on their profile outlined above. The Panel also recognises that in proposing reforms to support Aboriginal and Torres Strait Islander students, there may be flow-on benefits for all students.

Increasing the enrolments, retention and completion rates of Aboriginal and Torres Strait Islander students will require significant work by universities. They will need the support of government to target current programs to improve student outcomes and tailor assistance to address unmet needs. It will require a whole-of-university approach, with support being integrated across the faculties and support services. Specific issues to be addressed include:

⁶⁰ Based on the national level for 2005–2007.

For universities:

- shifting the emphasis of support away from falling solely on the Indigenous Education Units to a framework of shared responsibility for Aboriginal and Torres Strait Islander students in which support is provided in partnership with Indigenous Education Units and across all faculties and other student services
- increasing the level of participation by Aboriginal and Torres Strait Islander students across faculties, focusing initially on priority discipline areas
- ensuring sufficient and appropriate support for postgraduate students, HDR students and all students from remote and regional areas
- building culturally appropriate and safe environments within universities
- building strong partnerships with Aboriginal and Torres Strait Islander communities, professional bodies, business and others to support Aboriginal and Torres Strait Islander success within their institutions.

For government:

- reform of financial support, program structures and funding arrangements, to ensure that student-focused outcomes are achieved, accountability of both government and universities is strengthened and administration is simplified.

2.1 Provision of support through Indigenous Education Units and the faculties

All Australian universities have a dedicated Indigenous Education Unit (Pechenkina & Anderson 2011) but their structure, function, status and size vary across the sector (university consultation visits; Brady 2012; Walter 2011; ACER 2012). Often, Indigenous Education Units are ‘situated in a discreet [*sic*], often purpose built, site within the campus’ (Walter 2011, p. 3). However, not all campuses within the university physically house an Indigenous Education Unit, as may be the case for multi-campus universities. The Panel also notes that with growing numbers of online students, Indigenous Education Units may need to consider alternative ways of providing support to these students.

Indigenous Education Units also vary in whether they are tasked solely with student support or whether they combine teaching and/or research as part of their core activities (university consultation visits; Brady 2012; ACER 2012).

During university visits, the Panel heard from many students regarding the importance of the Indigenous Education Units to their academic success. They saw them as offering a supportive and welcoming place to come to within an often challenging and unfamiliar environment.

The [Indigenous Education Unit] centre here is awesome; without it, I wouldn't have even gotten into law let alone be still studying it (Dylan Collard, University of Western Australia).



Current situation

Indigenous Education Units provide a number of services to students

Indigenous Education Units generally provide most of the following student support services, with some providing access 24 hours a day through swipe cards:

- enrolment and access assistance including special entry programs
- access or referral to student support/pastoral care
- provision of ITAS-TT tutoring
- accommodation support/advice (some including emergency accommodation)
- a culturally safe study and social space for students
- orientation programs for new students
- a meal preparation area
- a computer laboratory with computers, printers and photocopying
- liaison and activities with high schools to promote higher education
- Aboriginal and Torres Strait Islander events such as NAIDOC (National Aborigines and Islanders Day Observance Committee) Week, Sorry Day and Reconciliation Week
- participation in the Aboriginal and Torres Strait Islander games and social events.

(Note that some universities indicated differences in support between undergraduate, postgraduate and HDR students.)

Other services that may be provided include:

- laptop computer loans and other administrative support such as calculators, fax, audio-visual equipment, laminating, binding and telephones
- Elders in residence.

Indigenous Education Units are important sources of support

Throughout university visits, the Panel heard many views expressed about the role of Indigenous Education Units and funding provided to support them. From these visits, it became clear there is universal support within universities, and particularly from students, for the important role that Indigenous Education Units play in providing student support, including tutoring support discussed in the next section.

Even Indigenous students who only occasionally use the services provided by a centre report that the very existence of the centre is an indicator that Indigenous education matters at the university and that there is a place for them to go if they need any help (3HFKHQNLQD \$QGHUVRQ 2011, p. 13).

Indigenous Education Units generally become a focus point for Aboriginal and Torres Strait Islander students and can be particularly important for students who may not have family or support structures close by. Wollongong University's ...

Woilyungah Indigenous Centre ... is a safe and valued home base for Indigenous students. The Centre, on the main campus, offers 24/7 access to a student computer laboratory, kitchen and lounge ... The Audit Panel [appointed by the Australian Universities Quality Agency] notes the positive, family atmosphere at the Centre (AUQA 2011, p. 21).

The National Union of Students refers to the centres as the 'hub' of the university for many Aboriginal and Torres Strait Islander students (submission no. 31, National Union of Students, p. 13).

The role of the centres in delivering academic programs and undertaking research is more complex. Some centres do this well and can lead across the university. Some struggle to deliver programs and engage in research. Others leave those activities to the faculties and concentrate solely on student support. During visits to universities, it became clear to the Panel that each university needs to determine its own approach to supporting Aboriginal and Torres Strait Islander students, drawing on the strengths of both the Indigenous Education Units and the faculties. It is also clear that faculties must accept their responsibilities for the academic success of all students, including Aboriginal and Torres Strait Islander students.

Indigenous Education Units (IEU's) provide significant support to Indigenous students and are routinely credited as playing a key role in retention of students ... However, teaching and learning staff throughout universities should also invest time in supporting the academic development of students (submission no. 60, University of Sydney Students' Representative Council, p. 5).

Building on existing efforts

There are examples where strong research and academic programs within Indigenous Education Units have led to change across the universities. For example, at the University of Western Australia, the School of Indigenous Studies is responsible for the support of all Indigenous students and the Centre for Aboriginal Medical and Dental Health provides specialised support to Indigenous students enrolled in medical, dental and health courses. The university's Aboriginal Pre-Law Program is jointly taught by the School of Indigenous Studies and the Faculty of Law.

What needs to change?

Adopting a whole-of-university approach to integrated support provision by Indigenous Education Units and faculties

The Panel has concluded that Indigenous Education Units continue to play an important role in providing student support to Aboriginal and Torres Strait Islander students. However, universities need to refocus them to reduce their isolation and marginalisation and to promote them as offering value-added, specialised support over and above what should already be provided through the faculties.

Walter suggests the units should:



remain a fundamental participant in transforming outcomes and are a core resource for Aboriginal and Torres Strait Islander students and their institutions.

She proposes:

raising the recognition and valuing of Indigenous knowledges via the infiltration and integration of an Indigenous presence throughout universities and the sector (Walter 2011, p. 6).

Indigenous Education Units could play an important role in providing advice and guidance to mainstream support services to help them improve their ability to meet the needs of Aboriginal and Torres Strait Islander students. If the work of the units is valued as essential and as part of a philosophy that Aboriginal and Torres Strait Islander matters are core university business, then they will be less likely to suffer marginalisation or perceptions of not contributing to broader university business. Faculties and their related support services are well placed to accept responsibility for providing support to all students, including Aboriginal and Torres Strait Islander students, given their size and access to a broader range of resources.

There is no single best practice model for the units. Support must be tailored to best suit the student profile of the institution and be designed in close collaboration with the faculties.

Building on existing efforts

The University of Southern Queensland's Centre for Australian Indigenous Knowledge offers integrated, holistic support through its Individual Tailored Student Support Program. Student relationship officers monitor progress and provide assistance to students in a portfolio of faculties, and were supporting approximately 300 students in 2011.

Griffith University's GUMURRII Student Support Unit is located on each of the five campuses. It promotes its services to prospective students, their families and the broader community. Support provided includes individual tuition, orientation and financial support. Griffith University employs an Indigenous employment project officer to ensure that undergraduate and postgraduate students receive effective mentoring within the academic groups.

Indigenous Education Units providing better support for postgraduate and higher degree by research students

The Panel noted some evidence to suggest that Indigenous Education Units may not be able to address the needs of postgraduate and HDR students. In research undertaken by Trudgett (2009), 55 Aboriginal and Torres Strait Islander postgraduate students and HDR students were surveyed on a range of issues relating to postgraduate outcomes and the support provided by universities. Among the conclusions from that survey were:

- Many support officers in Indigenous Education Units failed to understand the needs of Aboriginal and Torres Strait Islander postgraduate and HDR students because of the lack of people with research qualifications working in the units.

- Aboriginal and Torres Strait Islander postgraduate and HDR students are not provided with collaborative academic peer support through their Indigenous Education Units.
- Many Aboriginal and Torres Strait Islander postgraduate and HDR students are not familiar with their Indigenous Education Units.
- Aboriginal and Torres Strait Islander postgraduate and HDR students experience significant levels of exclusion.
- Aboriginal and Torres Strait Islander postgraduate and HDR students are not receiving information pertaining to scholarship opportunities.

Not all the student support staff even have degrees, so how can they understand the problems of uni. As for help, they are fine I imagine for undergrads but are useless to me in academic matters. I am lucky in that I have lots of academic friends including Indigenous staff and so have access to people I can talk to. But these are personal friends, not student support (a masters student quoted in Trudgett 2009).

I visited the Aboriginal Education Unit from time to time and when they held events. But I didn't directly access services related to my PhD.⁶¹

Indigenous Education Units providing outreach into schools and other sectors

The Panel received suggestions during consultations regarding the need for Indigenous Education Units to play a greater outreach role into schools and the private and public employment sectors. Some are already doing this; for example, Southern Cross University, through its Indigenous Australian Student Services, conducts promotional visits to Aboriginal communities, high schools, TAFE institutes and the wider community. However, some universities advised the Panel that their Indigenous Education Unit resources were already stretched, particularly where they were multi-campus universities.

Universities sharing best practice

Through their visits to universities and also through submissions received, the Panel gathered many examples of good practice in relation to models of support for Indigenous Education Units within the mainstream support services provided by universities. The case studies included in this report provide some examples of this good practice. The Panel also notes that Universities Australia is establishing a website to allow universities to post their best practices and allow practitioners to share information and ideas, particularly regarding Indigenous cultural competency in universities (submission no. 59, Universities Australia, p. 7).

Recommendations

Recommendation 10

That universities adopt a whole-of-university approach to Aboriginal and Torres Strait Islander student success so that faculties and mainstream support services

⁶¹ Survey information from the IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011.

have primary responsibility for supporting Aboriginal and Torres Strait Islander students, backed up by Indigenous Education Units.

Recommendation 11

That universities:

- continue to support Indigenous Education Units to provide a culturally safe environment for Aboriginal and Torres Strait Islander students, including postgraduate and higher degree by research students
- review whether their Indigenous Education Units have appropriate objectives, funding, structures and accountability measures to ensure quality student outcomes with a focus on:
- outreach work with schools and other sectors
- improvements in retention and completion rates
- access to quality tutoring services
- collaborate with each other and government to build an evidence base and share good practice.

2.2 Building professional pathways and responding to community need

The Panel's vision is:

The higher education sector needs to take an active role in: Producing Aboriginal and Torres Strait Islander graduates across the spectrum of academic disciplines who are equipped to enter professional practice, build the capacity of their communities and revitalise professions through their involvement (DEEWR 2011n, p. 2).

This vision is underpinned by the Panel's strong view that Aboriginal and Torres Strait Islander professionals have great potential to both respond to the high-priority needs of their own communities and to make a deeper contribution to the wellbeing and prosperity of the nation through their diverse views, professional expertise and knowledge. Achieving these two complementary objectives will involve concerted efforts by schools and their communities, universities, professions and employers.

The Panel is aware of good collaboration already taking place across these sectors and notes that, in the health and education sectors in particular, there are various government and other strategies that include specific targets to increase the Aboriginal and Torres Strait Islander professional workforce.⁶²

Building on these efforts, faculties within universities will need to play a central role in supporting Aboriginal and Torres Strait Islander students graduating as professionals

⁶² As cited in Anderson (2011, pp. 10–12) with reference to the National Aboriginal and Torres Strait Islander Education Policy (DEEWR 2011m); the *Aboriginal and Torres Strait Islander Education Action Plan 2010–14* (MCEECDYA 2010); the *National Strategic Framework for Aboriginal and Torres Strait Islander Health* (NATSIHC 2003); the National Indigenous Health Equality Council (NIHEC 2010); the Australian Congress of Deans of Nursing with the Indigenous Nursing Education Working Group exemplified in their report *Gettin em n keepin em* (2002); and the Australian Indigenous Doctors' Association with the Medical Deans Australia and New Zealand (Mackean et al. 2007).

in their chosen disciplines. Professional bodies connect into universities through the faculties, rather than through specialised Indigenous Education Units. Therefore, the faculties are well placed to provide appropriate professional support and teaching for Aboriginal and Torres Strait Islander students. Professional bodies can drive demand for more Aboriginal and Torres Strait Islander professionals and can support students to excel in their fields of study. They can also work closely with Aboriginal and Torres Strait Islander professional networks and bodies that have been emerging and growing over the past few decades to support Aboriginal and Torres Strait Islander students to complete their studies.

Increasing the number and breadth of Aboriginal and Torres Strait Islander professionals will potentially provide benefits to all Australians through a larger and more diverse pool of professionals driving research, ideas development and professional services as evidenced in the work of the Indigenous Master of Applied Epidemiology (MAE) scholars at the Australian National University.⁶³

At the same time, Aboriginal and Torres Strait Islander professionals will benefit through improved career choices and career pathways leading to greater economic and professional empowerment. The broader Aboriginal and Torres Strait Islander population will also benefit through recruitment of Aboriginal and Torres Strait Islander professionals into specific high-priority fields responding to community needs and reflecting the COAG targets.

Anderson, in his research paper, provided evidence and strong argument to the Panel on the benefits of growing the number and breadth of Aboriginal and Torres Strait Islander professionals. He proposes that strategies to deliver this outcome need to be conceptualised within a 'broader framework of Indigenous social and economic development and as a part of a comprehensive Indigenous human capital strategy' (Anderson 2011, p. 26). He argues that Aboriginal and Torres Strait Islander professionals can support the 'development and realisation of social policy objectives, Indigenous political leadership and the development of the Indigenous economy' (Anderson 2011, p. 8). However, he acknowledges the contributions already made to Indigenous development by non-Indigenous professionals and highlights that they will continue to play a major role going forward. Working collegiately with them, growing numbers of Aboriginal and Torres Strait Islander professionals can 'deepen and extend' those contributions and can help to reform existing professional practices to deliver high-quality services to Indigenous clients (Anderson 2011, pp. 8–9).

Anderson also highlights the 'many examples of Indigenous people with professional training who have made significant contributions to Indigenous development ... [before] moving on to make significant and enduring political and social contributions more broadly in Indigenous affairs' (Anderson 2011, p. 9). The Panel agrees with Anderson's analysis of the importance of supporting the growth of Aboriginal and Torres Strait Islander professionals and looks forward to their future contributions in leadership roles across political, social, economic, academic and other fields of endeavour.

⁶³ A key output of the work of Indigenous MAE scholars is their contribution to scientific publications and conferences, with scholars contributing to one book chapter and 27 peer-reviewed publications directly emanating from projects completed during their enrolment (submission no. 53, Australian National University – National Centre for Epidemiology and Population Health, p. 5).

Current situation

In commissioned research provided to the Review by the Australian National University's Centre for Aboriginal Economic Policy Research (CAEPR), Taylor et al. defined professions 'as essentially the knowledge-based category of service occupations that usually follow a period of tertiary education and vocational training and experience' (Evatts 2006, p. 135, cited in Taylor et al. 2011, p. 1). They go on to note that the Australian and New Zealand Standard Classification of Occupations (ANZSCO) 'include a requirement for a skill level commensurate with a bachelor degree or higher qualification as part of their definition of the skill set necessary to be classified as a professional or manager' (Taylor et al. 2011, p. 1).

Aboriginal and Torres Strait Islander professionals are growing in number

Taylor et al. provided the Review with an analysis of recent trends in the growth of Aboriginal and Torres Strait Islander professionals and managers and also compared their characteristics with those of non-Indigenous professionals. On a per capita basis, in 2006, 4.8% of Aboriginal and Torres Strait Islander adults aged 20 to 64 were in professional occupations compared to 15.4% of non-Indigenous adults (Taylor et al. 2011, p. 2). Interestingly, the research by Taylor et al. shows that between 1996 and 2006, there has been a significant increase (74.3%) in the number of Aboriginal and Torres Strait Islander professionals, although from a relatively low base, increasing from 8,033 to 14,002 (based on ANZSCO) (Taylor et al. 2011, p. 2). Also of note is that Indigenous females are 'now far more likely than their male counterparts to be in a professional job' (Taylor et al. 2011, p. 2).

Aboriginal and Torres Strait Islander professionals enjoy economic and social benefits

There are a range of positive economic and social benefits for Aboriginal and Torres Strait Islander professionals and their families. Not surprisingly, Aboriginal and Torres Strait Islander professionals (including managers) have a much higher personal income (\$943 per week for females and \$1,082 for males) than those employed in non-professional occupations (\$509 per week for females and \$682 per week for males) (Taylor et al. 2011, p. 15).

In addition, home-ownership rates among Aboriginal and Torres Strait Islander professionals and managers is much higher than for other Aboriginal and Torres Strait Islander people (Taylor et al. 2011, pp. 14–15).

Aboriginal and Torres Strait Islander professionals and managers are more likely to report that their work allows them to meet their cultural obligations. The same applies for Aboriginal and Torres Strait Islander employees in workplaces with high concentrations of professionals (such as the public service) where cultural obligations are recognised in workplace agreements (Taylor et al. 2011, p. 16).

Aboriginal and Torres Strait Islander professionals are clustered at lower levels and in certain fields

Notwithstanding these positive impacts of the growing Aboriginal and Torres Strait Islander professional workforce, the CAEPR research highlights that the clustering of Aboriginal and Torres Strait Islander higher education enrolments in limited fields of study identified earlier, flows through into similarly limited professional occupations, a

point also made in submissions to the Review.⁶⁴ It also restricts their access to possible higher-paying and/or managerial positions that tend to be associated with more scientific-based professions (Taylor et al. 2011, p. 21).

Further, the CAEPR research, based on earlier analysis, noted the relative status of Aboriginal and Torres Strait Islander professionals. They ‘tended to occupy lower prestige jobs than their non-Indigenous counterparts ... [This may reflect] a lag in work experience and seniority, but it may also reflect an older age at completion of tertiary qualifications for Indigenous students’ (Taylor et al. 2011, p. 21).

Lack of Aboriginal and Torres Strait Islander representation across professions limits access to alternative perspectives and knowledge

The lack of presence of Aboriginal and Torres Strait Islander graduates and postgraduates across the spectrum of professions limits the professions’ access to alternative perspectives, knowledge and skills held by these graduates. Anderson observed that outside of Australia, Indigenous health professionals contributed to Indigenous policy and social development more widely and that there exists a remarkable historical depth of contribution in countries like Canada, the United States and New Zealand (Anderson 2011, p. 8).

What needs to change?

A coordinated approach to professional pathways for Aboriginal and Torres Strait Islander people

Anderson argues that there are several strategies that must be put in place to develop professional pipelines and a number of these have been picked up earlier in the report with reference to schools, the VET sector and developing mathematics and science capabilities.

He advocates stronger partnerships among universities and their faculties and schools, the VET sector, Aboriginal and Torres Strait Islander communities and professional bodies; the Panel has made a similar proposal earlier in the report. In discussing the good practice partnership example involving the Australian Indigenous Doctors’ Association, the medical colleges and the medical professions, Anderson reflects:

it is the role of Faculties that seem to be important—and Faculty leadership may be a significant reason why some Universities have led the field in terms of Indigenous students and others have not (Anderson 2011, p. 12).

This further underscores the Panel’s view that faculty leaders and other senior leaders within universities must drive the institutional change required to deliver the kind of transformation that Anderson and others note has already occurred within the medical profession.

The Panel believes that there must be a coordinated approach involving Aboriginal and Torres Strait Islander people and their communities, universities, the professions

⁶⁴ For example, the Law Council of Australia argues that ‘the disparity in access and outcomes for Aboriginal and Torres Strait Islander peoples at universities and technical colleges is almost certainly reflected in the proportion of Indigenous people who are recruited into professional careers’ (submission no. 70, Law Council of Australia, p. 1).

and employers all working together to ensure that Aboriginal and Torres Strait Islander people are:

- better prepared for professional careers through appropriate course selection in secondary school
- encouraged to enrol in a broad range of disciplines at university leading to a broader range of professional career options outside the current ones of health, education, and arts and society
- able to see a career pathway from university into a profession
- able to fully contribute and pursue more senior and prestigious professions within their chosen fields.

Professional bodies are in a powerful position to both promote the presence of Aboriginal and Torres Strait Islander people in the professions and to promote their professions to Aboriginal and Torres Strait Islander students.

The Panel believes that professional bodies and peak organisations also have a responsibility to ensure the appropriate provision of quality services to Aboriginal and Torres Strait Islander people and communities.

There is scope for the professions to engage more closely with universities to explore and map professional developmental pathways for Aboriginal and Torres Strait Islander students. The Panel would like to see a focus on those disciplines where there is a current underrepresentation of Aboriginal and Torres Strait Islander professionals and on those disciplines that will support the Closing the Gap agenda.

A concerted effort to recruit professionals into these and other areas will need to take account of the market-driven environment that the higher education sector operates within. The Panel notes that the demand for courses from students and professions may not always match community need and Closing the Gap targets. Planning processes will need to involve communities working with universities to plan future needs for professionals such as teachers, social workers, environmental managers and businesspeople. Working together, universities can be responsive to community needs and communities can learn how universities can be an important vehicle for building capacity.

Professional bodies could work with employers and encourage their professions to set goals for Aboriginal and Torres Strait Islander peoples' representation across their disciplines or specialisation. Such representation should be from all geographic areas and across positions at all levels. This representation should also be built up among researchers within a profession.

Building on existing efforts

The Royal Women's Hospital in Melbourne has been exploring opportunities through its Aboriginal and Torres Strait Islander Workforce and Staff Exchange Project to improve the support that they provide to Aboriginal students of nursing and midwifery and to increase their Aboriginal workforce (submission no. 32, Royal Women's Hospital, p. 5).

The Panel notes the work of the Expert Working Group on Indigenous Engagement with Sciences (as part of the Inspiring Australia strategy), which has identified a clear need to employ more Aboriginal and Torres Strait Islander Australians as scientists,

engineers and doctors and increase the capacity of the Australian science workforce (IAEWGIES 2012, p. 6).

Another recent initiative has been the Accounting and Architecture Discipline Leaders Forum held on 30 March 2012. The forum produced draft national accountant and architecture-specific strategies for addressing the shortfall of Aboriginal and Torres Strait Islander participation in higher education and the professions in both disciplines. In addition, the forum was designed to help coordinate efforts, share knowledge and promote successes.

The draft strategies from the forum build on existing activities in the Aboriginal and Torres Strait Islander higher education and employment sectors and work with existing Aboriginal and Torres Strait Islander and non-Indigenous groups such as the Aurora Project and Students in Free Enterprise. Strategies include:

- national student 'camps' to build national networks of learning and support in professions
- the creation of virtual networks
- work integrated learning programs
- professional mentoring programs
- paid cadetships and internships.

Better connection of Aboriginal and Torres Strait Islander professional networks into professional bodies

The Panel found that there is a growing emergence of Aboriginal and Torres Strait Islander professional networks or organisations, but they are not yet well connected with national professional bodies. For many professions, this means that Aboriginal and Torres Strait Islander professionals are absent from the elite levels of a profession and professional bodies.⁶⁵ Anderson suggests that bodies such as Australian Indigenous Doctors' Association, the Council of Aboriginal and Torres Strait Islander Nurses and others have 'proved to be important for the embedding and advocacy of reform within professional systems and structures' (Anderson 2011, p. 12).

In the Panel's view, greater connection between the Aboriginal and Torres Strait Islander professional networks and these bodies could increase opportunities for network members to:

- inform the profession's education and workforce development strategies
- advocate for Aboriginal and Torres Strait Islander people considering or pursuing careers in the profession
- highlight issues relevant to those who should be able to benefit from the services that the profession offers.

In its submission to the Review, Victoria University suggested that professional associations could also provide mentoring, scholarships, cadetships and work

⁶⁵ The Indigenous Lawyers Association of Queensland argues that the Australian Government should ensure that there are Indigenous-led professional organisations to liaise with government on improving Indigenous outcomes in higher education and the professions (submission no. 52, Indigenous Lawyers Association of Queensland, p. 2).

placements to Indigenous students to support them to secure employment (submission no. 11, Victoria University, p. 2).

Building on existing efforts

While not yet common, there are examples of success in this area and the Australian Indigenous Doctors' Association (AIDA) could provide a model for Aboriginal and Torres Strait Islander professional organisations in other sectors.

Since 1998, AIDA has developed into a strong and influential national body representing Aboriginal and Torres Strait Islander doctors and medical students. AIDA developed a strategy for the recruitment and retention of Aboriginal and Torres Strait Islander students into medical education, which AIDA has subsequently used to frame its collaborative engagement across the health sector and the Committee of Deans of Australian Medical Schools.

Since 1998, there has been a five-fold increase in Aboriginal and Torres Strait Islander doctors, with the number reaching 150 in 2010. In 2011, there were 160 medical students enrolled in medical schools across the country (AIDA 2011, p. 44).

Building on existing efforts among public and private sector employers to support Aboriginal and Torres Strait Islander students

Given the benefits that ultimately flow to employers from access to larger pools of trained professionals, the Panel welcomes the strong engagement of public and private sector employers. The Panel notes particularly the work of the mining sector and more recently financial services, law, retail and other sectors, in supporting Aboriginal and Torres Strait Islander higher education.

The Panel wants to encourage employers to continue to build partnerships with professional bodies and universities to consider ways to support Aboriginal and Torres Strait Islander students, as suggested by Victoria University.⁶⁶

Many employers have included cadetships, internships and graduate programs within their Reconciliation Action Plans.⁶⁷ Further, the Business Council of Australia has supported its members' efforts to share best practice in Indigenous employment through its Indigenous network.⁶⁸ The Minerals Council of Australia submission to the Review outlined the minerals industry's longstanding engagement with Aboriginal and Torres Strait Islander communities and with supporting Aboriginal and Torres Strait Islander education. They emphasised the need for whole-of-education pathways as is demonstrated, for example, through The Aspiration Initiative (submission no. 21, Minerals Council of Australia, p. 7–8). The BHP Billiton Iron Ore Scholarship programs includes 30 Aboriginal and Torres Strait Islander university students studying in a range of fields, including mechanical engineering and

⁶⁶ Victoria University suggested that professional associations could also provide mentoring, scholarships, cadetships and work placements to Indigenous students to support them to secure employment (submission no. 11, Victoria University, p. 2).

⁶⁷ For example, NAB, ANZ and Lend Lease Reconciliation Action Plans, based on information provided to the Review Secretariat by the Business Council of Australia.

⁶⁸ Three years ago, the Business Council of Australia (BCA) established a network of people from within member companies who are responsible for Indigenous engagement efforts. The network meets five times a year to share experience and best practice, and conduct workshops on areas of shared interest or concern. Network membership has grown significantly in the last 12 months and now numbers 54 (almost 50% of BCA member companies).

commerce and finance, where Aboriginal and Torres Strait Islander people have been underrepresented.

Building on existing efforts

Lend Lease is offering internships to Aboriginal and Torres Strait Islander university students through a partnership with CareerTrackers. The law firm Ashurst Australia has partnered with the University of New South Wales to provide financial support for a range of activities that have contributed to the growth of Aboriginal and Torres Strait Islander students in degrees (including engineering and business) from 211 in 2010 to 276 in 2012. The Commonwealth Bank also aims to provide two to four cadetships to university students each year.⁶⁹

The University of Western Sydney and the University of Newcastle both engage industry in developing the academic workforce by partnering with industry, government and the community on projects which improve opportunities for Aboriginal and Torres Strait Islander research. Both universities commented in consultations that working with industry contributes greatly to the success of their programs.

Recommendation

Recommendation 12

That universities, professional bodies, employers and Aboriginal and Torres Strait Islander professional organisations better support Aboriginal and Torres Strait Islander communities by:

- refining university planning processes to take account of the likely future needs of Aboriginal and Torres Strait Islander communities for a professional workforce
- developing innovative local partnerships to drive and support demand for growing the number and breadth of Aboriginal and Torres Strait Islander professionals
- encouraging Aboriginal and Torres Strait Islander membership of professional bodies and the establishment of Aboriginal and Torres Strait Islander professional and student associations within professions.

⁶⁹ Based on information provided to the Review Secretariat by the Business Council of Australia on its members' activities.

3 Provision of Aboriginal and Torres Strait Islander-specific support to universities and students

Various funding mechanisms are used to provide specific support for Aboriginal and Torres Strait Islander students. Some of the support is provided directly to universities to fund programs such as scholarships and for broader Indigenous higher education participation, while other payments are made directly to students. A brief summary follows.

Funding provided *directly to universities* includes:

- Away-from-Base funding for 'mixed mode' program delivery (\$23.6 million in 2011) to support travel and accommodation costs for students in approved 'mixed mode' courses⁷⁰
- funding for tutorial assistance through the Indigenous Tutorial Assistance Scheme – Tertiary Tuition (ITAS-TT) program (\$8.2 million in 2011)
- five scholarship categories (funding of \$12.8 million in 2012)
- supporting the participation of Aboriginal and Torres Strait Islander students in higher education through the Indigenous Support Program (funding of \$37.4 million in 2012).

Funding provided *directly to students* includes:

- ABSTUDY Tertiary and ABSTUDY (Away-from-Base) (\$72.4 million in 2011–12)
- Indigenous Staff Scholarships (\$183,945 in 2011).

Other funding provided *to third parties or employers* include:

- Indigenous Cadetship Support⁷¹ program funding of \$8 million in 2011–12
- Indigenous Youth Leadership Program funding of \$17.2 million in 2012 (referred to earlier in the report)
- Indigenous Youth Mobility Program⁷² funding of \$16.2 million in 2012.

⁷⁰ \$23.6 million includes Away-from-Base funding provided to Batchelor Institute of Indigenous Tertiary Education, Charles Darwin University and the University of Notre Dame for VET courses provided by these universities.

⁷¹ Indigenous Cadetship Support is aimed at improving the job prospects of Indigenous Australian students. It links full-time Indigenous students undertaking a diploma, an advanced diploma or their first undergraduate degree with employers who can give them work placements and ongoing employment once they finish their studies (DEEWR 2011d).

⁷² The Indigenous Youth Mobility Program (IYMP) helps young Aboriginal and Torres Strait Islander people move away from home to gain the skills they need to get a job in their community or elsewhere. Indigenous people aged 16 to 24 from remote areas can relocate to an IYMP host location

This funding to universities is on top of their base funding, some of which is used to support all students, including Aboriginal and Torres Strait Islander students. Base funding can and should also be used to provide specific, targeted support to Aboriginal and Torres Strait Islander students.

The following sections of this chapter discuss selected programs in more detail and recommend changes to them. The Panel selected these programs for reform on the basis of its consultations and submissions it received.

Overall, the feedback to the Panel from submissions and consultations was that the programs needed to strengthen their focus on student outcomes and, within this focus, there should be room for individual universities to tailor support to best meet the needs of their student cohort. In addition, universities supported the need to improve retention and completion rates, not just enrolment rates, once again noting the differing missions and strategic directions of individual universities. The Panel heard the concerns of universities regarding the 'red tape' and often duplicative reporting requirements applied by government across programs. While the Panel supports simplified administration and reporting requirements, this must be balanced with the need to maintain outcome-driven accountability by universities and government. Each of these issues and the feedback from submissions and consultations are discussed in more depth within the selected programs below.

On the basis of this feedback, the Panel recommends a set of principles be used to guide the reform of selected programs.

3.1 Indigenous Support Program funding

Current situation

The Indigenous Support Program assists eligible Table A higher education providers to meet the needs of Aboriginal and Torres Strait Islander students and advance the National Aboriginal and Torres Strait Islander Education Policy. The Panel understands that this is the main source of funding for most Indigenous Education Units.

Eligible universities must meet quality and accountability requirements stipulated in the *Other Grants Guidelines (Education) 2012*, section 1.20.1, of the *Higher Education Support Act 2003*. These requirements state that universities must satisfy the government that they meet all of the following criteria:

- a) the provider has implemented strategies for improving access, participation, retention and success of Indigenous Australian students;
- b) the provider has demonstrated increased participation of Indigenous people in the provider's decision-making processes; and
- c) the provider has an Indigenous employment strategy.

to undertake post secondary education and training options. Training options include Australian Apprenticeships, Vocational Education and Training (VET) and Higher Education that leads to qualifications in nursing, teaching, business administration and accounting, to name but a few possibilities' (DEEWR 2011j).

Funding provided to individual universities in 2011 ranged between \$118,000 and \$2.64 million.

What needs to change?

Improving accountability for Indigenous Support Program funding

An internal review by the Department of Education, Employment and Workplace Relations in 2011 found that the accountability and reporting provided by universities on this program was highly variable and could be considerably improved. Activities are not often described well and rarely in quantitative terms, making it difficult to assess the overall efficiency and effectiveness of the program (DEEWR 2011k).

While the current arrangements allow universities considerable flexibility in how they use the funds to best meet the needs of their students, the Panel heard during consultations that there is confusion about what can and cannot be funded under the program. In particular, there was confusion regarding whether restrictions on the use of funds was a requirement of the program or the university.

In addition, the department's review and the Panel's consultations highlighted that further transparency and accountability is required regarding how universities determine their Indigenous Support Program funding allocations. An earlier submission by the National Union of Students to the Bradley Review suggested a more transparent system of universities reporting funding of Indigenous Education Units, to provide students and staff with a better understanding of the reasons for changes, reduction and limitations to services as they happen (Indigenous Branch, National Union of Students submission to the Bradley Review, submission no. 327 (Watt & Smith 2008, p. 14)).

The Panel is also keen to see a greater focus on improvements in both retention and completions in addition to enrolments.

The way in which ISP [Indigenous Support Program funding] is provided to universities can be problematic. Currently it provides an incentive for universities to enrol students, but there is little incentive to have them complete. Changing the way ISP is calculated could assist in encouraging universities to support Indigenous students more holistically to ensure an increase in completions (submission no. 30, Australian National University, p. 2).

The Panel proposes a revised approach to the Indigenous Support Program which would involve:

- re-weighting of the Indigenous Support Program formula towards retention and completions to provide a clear incentive to institutions to increase successful course completions by their Aboriginal and Torres Strait Islander students
- greater transparency and accountability by universities regarding their Indigenous Support Program funding and expenditure.

The Panel is also interested in exploring with universities in a transparent manner how universities are using their Indigenous Support Program funding to boost their other efforts to support Aboriginal and Torres Strait Islander students through their mainstream funding support from the government.

3.2 Indigenous Tutorial Assistance Scheme – Tertiary Tuition

Tutoring and study skills assistance can provide valuable support to university students, particularly in the crucial early years of their qualifications. In recognition of the educational disadvantage still experienced by many Aboriginal and Torres Strait Islander people, the Australian Government provides supplementary funding to universities to arrange tutorial support for Aboriginal and Torres Strait Islander students through the Indigenous Tutorial Assistance Scheme – Tertiary Tuition (ITAS-TT).

Current situation

ITAS-TT provides for up to two hours tutorial support per subject per week for undergraduate students who have been assessed as:

- failing
- just passing and who would improve with additional tuition
- previously performing satisfactorily but who are having difficulty with a new component of the course
- requiring tutorial support to achieve an academic level or ranking required to proceed to a subsequent stage or course of study.

ITAS-TT support is also available to postgraduate students in limited circumstances. The support is specific for the course of study. ITAS-TT provided tutorial support to 2,654 Aboriginal and Torres Strait Islander students in 2010 (24% of all Indigenous students). More than 123,000 hours of one-on-one tuition and more than 5,000 hours of group tuition was provided to Aboriginal and Torres Strait Islander students across a range of fields. In 2010, \$11.9 million was allocated in ITAS-TT funding to 38 eligible higher education institutions.

While ITAS-TT is popular with students, a number of issues with the program have been identified

The Panel found that ITAS-TT is a popular program in the sector and recognised that it provided essential support to students in terms of developing their academic skills and their understanding of course content. ‘Delegates at the [National Union of Students] Indigenous Conference expressed their support for the ITAS scheme and believed that it was a [*sic*] vital in enhancing the retention of many Indigenous students’ (submission no. 31, National Union of Students, p. 10). Students referred to the benefits of the support in interviews conducted for this Review.

It’s pretty much what has seen me through a lot of my units (Billy Kickett Morris, University of Western Australia).

Without my tutor I would have failed a few of my subjects ... They have been really supportive (Jordan Raymond-Monro, Queensland University of Technology).

However, the Panel also found that institutions that deliver the program saw it as administratively burdensome, with guidelines that do not allow the kind of flexibility

needed to support students in innovative ways (Brady 2012, p. 21). Several submissions commented on the administrative issue:

ITAS is administratively onerous and in its present form disadvantages a number of Aboriginal and Torres Strait Islander student cohorts (submission no. 26, NATSIHC, p. 8).

Greater flexibility is required in the Indigenous Tutorial Assistance Scheme (ITAS). This program has been a great support to students over many years. However, the regulations governing its delivery and the administrative burden of its management do not provide enough flexibility for institutions in delivering tuition services to those students in need (submission no. 20, La Trobe University, p. 5).

The Department of Industry, Innovation, Science, Research and Tertiary Education manages ITAS-TT and a number of issues were raised by stakeholders in the course of a review of the program in 2011:

- The level of support was not always viewed as sufficient (i.e. two hours' tuition support per subject per week).
- The rules around access to tuition were inflexible (i.e. students were unable to 'stockpile' their tuition hours under current program guidelines; however, in exceptional circumstances, providers could aggregate the maximum weekly assistance over a month to allow some flexibility).
- There was a lack of support for HDR and other postgraduate students (i.e. ITAS-TT funding could not be used to support them).
- The ability of institutions to attract high-quality, suitably qualified and culturally aware tutors and also more Aboriginal and Torres Strait Islander tutors was questioned.

In addition, there are issues with recruitment of tutors, which a number of institutions attributed to the low rates of pay to tutors applied in the formula to calculate ITAS-TT funding. In 2012, these rates are \$39.71 per hour for individual tuition and \$46.74 per hour for group tuition. Universities informed the Panel that they view these rates as too low and not reflective of market rates for tutors.⁷³ The panel notes that the ITAS-TT guidelines state these rates are used to calculate institutional funding entitlements and that institutions are responsible for paying tutors in accordance with agreed employment arrangements.

What needs to change?

The main message from the Panel's consultations and the submissions to the Review was the ITAS-TT program is highly valued but needs to be simplified in its administration and better targeted on student outcomes.

This one program has made a difference for Indigenous students over several decades ... It would be helpful if ITAS guidelines were less prescriptive and allowed Centres to use the funds to best suit their cohort of students (Brady 2012, p. 4).

⁷³ Mentioned in submissions by James Cook University (no. 14) and Charles Darwin University (no. 75).

Therefore, the Panel has focused its consideration on how best to simplify the current arrangements with a stronger focus on achieving quality outcomes for students.

Refocus ITAS-TT funding on student needs and outcomes

The Panel supports a refocusing of the ITAS-TT program to ensure that it achieves the following outcomes for students and universities:

- an improved capacity to focus on student outcomes through funding incentives for completions
- Aboriginal and Torres Strait Islander students who were previously unable to be supported under the program (including students who are doing enabling courses, students who are not at risk of failing and also postgraduate students) are able to access tutorial support
- reduced administrative burden on providers
- greater flexibility for providers and Indigenous Education Units, as requested during consultations, to develop tailored tutoring and other programs to support Aboriginal and Torres Strait Islander students
- exploration of a national database of tutors
- greater accountability through universities' overall performance measures for student retention, progress and success
- clearer departmental guidelines and better information sharing with participating institutions.

To implement this approach, government and universities should negotiate a new funding model that has a set of key performance indicators focused on the above outcomes.

Recommendations

Recommendation 13

That the Australian Government reform funding for supplementary Aboriginal and Torres Strait Islander support programs, including the Indigenous Support Program and the Indigenous Tutorial Assistance Scheme – Tertiary Tuition (ITAS-TT), in time for the 2013 academic year, based on the following design principles:

- Allow universities greater flexibility to provide locally relevant, tailored support for Aboriginal and Torres Strait Islander students and staff.
- Target available funding to achieve an improvement in current enrolment levels but also with a greater emphasis on retention and completion rates.
- Ensure that funding would be simple to administer.
- Ensure that funding would support clear outcome-focused accountability for universities.

The new funding model should include consideration of tutoring support for students who were previously ineligible for ITAS-TT assistance.



Recommendation 14

That universities collaborate to share tutoring (ITAS-TT) best practice and explore the establishment of a national tutor database.

3.3 Support for Aboriginal and Torres Strait Islander students from regional and remote areas

Current situation

According to ABS data, in 2008, 44% of the Aboriginal and Torres Strait Islander population lived in regional areas and 24% in remote (or very remote) areas (ABS 2008a). Departmental data in 2010 indicated that 60.0% of all Aboriginal and Torres Strait Islander students enrolled in university came from an urban residence, 31.9% came from a regional residence and 8.1% from a remote residence. A greater proportion of Aboriginal and Torres Strait Islander students come from remote locations (8.1%) compared to non-Indigenous students (0.9%) (DIISRTE 2012a).⁷⁴

Given the relatively high proportion of Aboriginal and Torres Strait Islander students from regional and remote locations (40%) (DIISRTE 2012a),⁷⁵ the Panel believes that it is important to consider their particular support needs, beyond those already identified for other Indigenous students, to maximise their success.

The Panel heard in its consultations with universities, particularly those in Western Australia, and through submissions, about the additional challenges that these students can face.

We acknowledge that there can be different issues for students from regional or metropolitan areas ... We urge the maintenance of a strong focus on support for these students, which should not be seen as the province only of Indigenous Support Units (submission no. 64, University of Queensland – Emmanuel College, p. 3).

One of the challenges is the costs of relocating and finding suitable and affordable accommodation. Housing costs are an issue for many students. However, regional and remote students often do not have the option of living with family so housing and relocation costs can be an additional burden for them. Students who relocate not only face financial pressure but may also face challenges of feeling isolated and removed from their families.

Everyone says that education is the key but they don't understand that for a typical Torres Strait Islander kid to get that education we have to travel many miles and leave family and friends behind (Adeah Kabai, engineering student, CQUniversity).

Some students may need to return home more often than non-Indigenous students to participate in ceremonies and other cultural activities within their communities.

Consultations with Aboriginal and Torres Strait Islander PhD holders also pointed to HDR students from regional or remote locations requiring similar additional support.

⁷⁴ Based on Table A providers and domestic students only.

⁷⁵ Based on Table A providers and domestic students only.

All of the challenges faced by Aboriginal and Torres Strait Islander HDR students more broadly are particularly difficult when faced at a distance.

Mixed mode and reverse block release programs

The Panel is aware of existing initiatives to deliver courses to communities, or allow students to travel to university for short periods to complete their study and return to their community. These courses are usually referred to as ‘mixed mode’ and ‘reverse block release’ programs. They can be particularly important for students from regional and remote areas as they remove the financial burden of relocation and the feelings of cultural isolation by allowing students to continue to live at home.

A ‘mixed mode’ course is a nationally accredited course delivered through a combination of distance education and intensive residential blocks or periods of face-to-face teaching. This mode of study allows students to complete courses in their home communities with occasional time on campus, and is well suited to some Aboriginal and Torres Strait Islander students who otherwise may not be able to access tertiary education.

‘Reverse block release’ is a form of mixed mode Away-from-Base (AFB) delivery where a provider representative travels to students’ home community or communities to deliver on-site training. The provider must demonstrate that this is a more cost-effective option than if students were to travel to the provider.

The mixed mode AFB delivery is one of two Australian Government programs that provide support for eligible Aboriginal and Torres Strait Islander students to undertake mixed mode delivery courses within the VET or higher education systems.

Under the mixed mode AFB program, funding is paid directly to eligible institutions that then manage program delivery. Mixed mode AFB provides funding to cover travel costs (including fares, meals and accommodation) for eligible Aboriginal and Torres Strait Islander students studying approved mixed mode courses where those courses require students to travel away from their permanent home for a short period of time. AFB funding is calculated using either an ‘established’ Education Provider Unit Cost (EPUC) determined on the basis of institutional expenditure in 1998, or for courses established after 2000, a ‘median’ EPUC determined on the basis of overall expenditure in 1998. Established rates vary from around \$577.26 to \$15,816.73 per student, with the median EPUC at \$5,542.82, in 2011. Following revision of courses, institutions move from the established rate to the median rate, with most established rates below the median—along with a number above the median—no longer in operation.

The second program, ABSTUDY Away-from-Base, is administered by Centrelink with funding paid to the individual or their institution. Both programs share the same overarching goals but differ in program design and administration. Students may only receive assistance under one Away-from-Base program for their course.

What needs to change?

Access to high-speed technology and virtual networks for regional and remote students

Students from regional and remote areas require access to technology to support their distance learning. The consultations with HDR students indicated that the main forms of communication are often telephone and Skype (a voice-over-internet



protocol service), but in many instances, telephone communications are considered unsatisfactory.

Distance Education is very lonely and isolating. I would definitely have enrolled as an internal student if I could have. I saw my supervisor once or twice a year.⁷⁶

Students often face challenges in gaining sufficient access to university services. One student relates:

I was unaware of any scholarships as I was living out on my homeland in a remote locality.⁷⁷

Virtual networks would help higher-degree students based in remote or regional areas to better access peers and academics. Suggested approaches during consultations included establishment of online forums and regionally based networks.

The National Broadband Network will play a critical role in increasing functionality of online support and the Academy of the Social Sciences in Australia has suggested that the needs of remote communities should be addressed in the rollout of the National Broadband Network (submission no. 65, ASSA, p. 6).

More affordable housing options need to be provided

The Panel learned that many students experience problems finding appropriate and affordable housing when they move to a new city to study and that student housing is also a problem for non-Indigenous students. However, given that many Aboriginal and Torres Strait Islander students come from regions where they may have to move away from home to attend university, access to affordable housing may be more important for them. The Department of Industry, Innovation, Science, Research and Tertiary Education has recognised a shortage of safe, affordable and accessible student accommodation, particularly in Australia's major cities (DIISRTE 2012e, p. 1). 2006 Census data indicates that Aboriginal and Torres Strait Islander students are more likely to be renting (53%) compared with non-Indigenous students (38%).

While the government provides income support to students to assist with the cost of living and also provides some capital funding, universities and the private sector are best positioned to supply student housing.

The need for more affordable housing for students was raised in various submissions received by the Panel.⁷⁸ For example, the Australian Indigenous Education Foundation (AIEF) stated that:

[i]n all of our experience and discussions about Indigenous students' experiences at university post-school, securing affordable and suitable accommodation is by far one of the biggest obstacles to access to

⁷⁶ Survey information from IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011.

⁷⁷ Survey information from IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011.

⁷⁸ For example, submission no. 7, Penrith, p. 3.

university and successful completion for those who do gain access (submission no. 57, AIEF, p. 1).

The University of Western Sydney noted that

many of the trainees/students do not have affordable accommodation in the [Greater Western Sydney] area and ... successful study or employment is not feasible if they remain at home. Such accommodation could be linked to cultural and academic support [through] Elders on campus programs and mentoring (submission no. 62, University of Western Sydney, p. 8).

Some universities are already providing housing on campus to support their Aboriginal and Torres Strait Islander students either through accommodation that they own or in partnership with others. The Department of Industry, Innovation, Science, Research and Tertiary Education (DIISRTE) has identified that in recent years there has been:

an increase of student accommodation development financed through public private partnership (PPPs) and private sector involvement ... These developments also appear to be predominantly situated in inner metropolitan centres rather than outer metropolitan or regional areas (DIISRTE 2012e, p. 3).

The Panel supports these initiatives and believes that universities should look at opportunities to develop and expand creative approaches to student housing. The Panel is particularly interested to see more opportunities that draw on philanthropic support for student housing as featured in the University of New South Wales Shalom College model. This model allows students to live in a residential college on campus—something that is beyond the financial reach of many students.⁷⁹ The Council of Australian Postgraduate Associations (CAPA) proposed that universities should address this issue:

[A]ll universities should have a number of rooms available at a reduced rate, if only a token rent, specifically for [I]ndigenous students, both covering those travelling on block release⁸⁰ and those working with the University on a part-time basis (submission no. 56, CAPA, p. 11).

Building on existing efforts

The University of New South Wales Shalom College accommodation support program involves a partnership between the college and the Australian Indigenous Education Foundation. The Shalom Gamarada Scholarship Program offers residence at Shalom College to Aboriginal and Torres Strait Islander students

⁷⁹ The ABSTUDY Residential Costs Option pays an ABSTUDY-eligible student's full cost of university residential expenses while the student receives a reduced living allowance during the semester. During breaks when residential costs are not charged, the student's ABSTUDY reverts back to their normal entitlement. Around 200 university students utilise this option.

⁸⁰ The Panel notes that ABSTUDY can pay the full cost of accommodation, meals and travel for students undertaking block release activities—this assistance is non-means tested and available to both full-time and part-time students. In addition, many universities receive direct funding for their students' block release activities under contracts with DIISRTE.

studying at the University of New South Wales. The scholarships are funded by a range of corporate, private and philanthropic donors. In 2012, 24 Aboriginal and Torres Strait Islander students will be studying and living at the college as part of the program.⁸¹

Deakin University's Institute of Koorie Education, which has operated for over 25 years, provides an on-campus residential facility through the Kitarra Centre which provides accommodation, food and extensive in-house support including access to in-house tutors for Aboriginal and Torres Strait Islander students.

Ensuring the quality of mixed mode Away-from-Base courses

Previous departmental reviews have identified that the mixed mode Away-from-Base program 'has the potential to play an important role in increasing Indigenous [students' choices] as well as participation in and access to VET and Tertiary education' (Department of Finance and Deregulation 2010, p. 165). They have also highlighted that it is difficult to quantitatively assess the program's contribution to higher education access and outcomes for Aboriginal and Torres Strait Islander students based on the performance indicators used and the inability to track the outcomes of students once they are no longer supported by the program.

Given the potential value of this form of course delivery for Aboriginal and Torres Strait Islander students, particularly those from remote and regional areas, the Panel considers that steps should be taken to develop quality standards for the courses of study supported by the program. Once developed, these should be used to revise the funding criteria for this program. The standards should cover the following elements:

- quality delivery and graduate attributes
- track record of retention and completion rates
- relevance of programs to community need demonstrated through evidence of research into community needs
- academic and student support plans
- ways to promote greater collaboration between institutions to support the viability of mixed mode courses in critical fields of education
- Away-from-Base course rates standardised.

Continuity of support to students changing universities

During the consultation process, two regional universities⁸² noted that students may start studying at their university and then switch to a preferred university. The universities that the students transferred away from were concerned that the sector's system did not adequately recognise their efforts in enrolling the student and preparing them for the university to which they transferred. Therefore, it may act as a disincentive for universities to collaborate and facilitate such transfers, which are often in the student's best interests.

In consultations, the University of New England noted the need for exit surveys to better understand motivations for student movements. The university understood

⁸¹ Data provided by University of New South Wales.

⁸² The University of New England and Charles Sturt University.

that many students leave regional universities to attend universities in the city, often feeling better prepared based on their initial experience at the regional university. The University of New England outlined their trial project with the University of Sydney targeting low SES students. The University of Sydney will be offering students a placement regardless of their university admission score if they can complete their first year at the University of New England. While this approach may reduce the University of New England's retention rates, the university believes that it is important to encourage these students through their university studies.

While the issue was raised by regional universities, the proportion of Aboriginal and Torres Strait Islander and non-indigenous students who transfer to a different provider varies widely across universities. At the majority of universities, a greater proportion of Aboriginal and Torres Strait Islander students transfer to a different university compared to non-Indigenous students (DEEWR n.d.).⁸³

For those students who were enrolled in a bachelor course in 2005 and had completed it by 2010, 8.4% of Aboriginal and Torres Strait Islander students completed their course at a different provider compared with where they originally enrolled. For non-Indigenous students the figure was 5.9%, with larger differences occurring at individual universities (DEEWR n.d.).⁸⁴

The Panel suggests that universities may wish to explore initiatives similar to the University of New England – University of Sydney trial project to support Aboriginal and Torres Strait Islander students, particularly from regional and remote areas, who may seek to transfer between providers.

Recommendations

Recommendation 15

That universities consider how best to support the needs of regional and remote Aboriginal and Torres Strait Islander students, including through:

- the use of virtual networks and other technology-based solutions to provide greater access to universities by remote and regional students
- options to provide additional and affordable housing specifically for Aboriginal and Torres Strait Islander people relocating away from their families. These options could include developing further partnerships and philanthropic support to deliver affordable accommodation on campus.
- working with the Higher Education Standards Panel to develop quality standards for Away-from-Base education delivery
- collaboration to allow recognition of the effort of universities that may enrol students who then go on to complete their degrees at different universities.

Recommendation 16

That the Australian Government revise the Away-from-Base funding guidelines to align with the quality standards developed in response to Recommendation 15.

⁸³ Data includes both the student ID and Commonwealth Higher Education Student Support Number components to pick up students who may switch providers during their course.

⁸⁴ Data includes both the student ID and Commonwealth Higher Education Student Support Number components to pick up students who may switch providers during their course.

3.4 Other non-financial support for students

Current situation

The Panel identified other non-financial issues that may prevent Aboriginal and Torres Strait Islander students from doing well at university or completing their degrees. Based on the consultations and submissions received by the Review, the Panel identified the need for further investigation into how Aboriginal and Torres Strait Islander students access pastoral care and support networks.

What needs to change?

Audit of support/pastoral care services

The Panel found that culturally sensitive Aboriginal and Torres Strait Islander counselling services are offered at a few universities. However, students do not always have access to culturally safe pastoral care. 'Elders in residence' counselling services are included in several pastoral care activities undertaken in some universities, but once again student access to this service is limited.

Given that a relatively high proportion of Aboriginal and Torres Strait Islander students are likely to be from regional and remote areas and therefore may be engaged in remote access study, pastoral support aimed at these distance learners is also important. For older female students who may be supporting children and extended family in their communities, they need good access to culturally sensitive health services, counselling, childcare and family assistance.

The Panel notes the National Union of Students recommendation that universities audit support services available to Aboriginal and Torres Strait Islander students both within Indigenous Education Units and the broader university support service provision, noting that:

[t]he findings of such an audit would enable institutions to understand the level of access for Indigenous students to support services at universities with lower retention rates, and how to encourage more students to access these services through examining practices at other universities with higher retention rates (submission no. 31, National Union of Students, p. 12).

Universities may wish to examine the adequacy of services they provide to their Aboriginal and Torres Strait Islander students, including looking at the findings of National Union of Students surveys.

Networks are important

3HFKHQNLQD \$QGHUVRQ highlighted in their commissioned report to the Review that:

[a] recurring topic in the author's [*sic*] research around factors of success among Indigenous students is that students seek out or create informal support networks and maintain their links with other students, academics and support staff throughout the duration of their degrees and often beyond (Pechenkina & Anderson 2011, p. 13).

They also referred to the existence of strong networks of HDR students and the role of external networks such as Tarwirri, the Indigenous Law Students and Lawyers Association of Victoria (Pechenkina & Anderson 2011, p. 17).

Their findings were backed up by similar input to the Panel during consultations and from submissions, where the role of both informal and formal support networks were mentioned as important factors in student success.

It is important that Aboriginal and Torres Strait Islander students have access to formalised support networks where they have access to a number of resources designed to assist them throughout their course. Students in remote and regional areas may not have access to online resources or IT support. They require a higher level of lecturer/tutor communication and commitment in order to complete their assignments to the best of their ability (submission no. 47, Curtin University Student Guild, pp. 6–7).

Universities may wish to consider how their informal and formal networks can be facilitated and strengthened to further support Aboriginal and Torres Strait Islander students, without placing any extra burden on Aboriginal and Torres Strait Islander academic staff. As noted later in the report, Aboriginal and Torres Strait Islander staff often take on extra representative and support responsibilities within universities. The Panel suggests that such support responsibilities and development of networks should be coordinated across the faculties and mainstream support services.

3.5 Recognising and broadening student choices

Current situation

Aboriginal and Torres Strait Islander students were clustered in society and culture (32.5%), health (19.1%) and education (18.1%) fields of study at university in 2010 (DIISRTE 2012a).⁸⁵ Encouraging Aboriginal and Torres Strait Islander students into broader fields of study will be important to grow the depth and breadth of the Indigenous professional and academic base over time.

In addition, the Panel heard during consultations that Aboriginal and Torres Strait Islander students are more likely to drop out of university without completing their degree. The Panel examined the need for institutional support to respond to both of these issues.

What needs to change?

Aboriginal and Torres Strait Islander students need to be encouraged into broader fields of study

In research commissioned for the Review, Anderson highlighted the ‘need to focus, in particular, on maths and science literacy, as success in these disciplines is critical for access into a cluster of professional fields in which Indigenous Australians are significantly under-represented (accounting and commerce, engineering, veterinary science etc.)’ (Anderson 2011, p. 28). In addition to secondary school interventions, Anderson identified that:

⁸⁵ Based on Table A providers and domestic students only.

[i]nterventions are required that support the development of maths and science capabilities for those secondary school student[s] and adults who transition into higher education but who require additional development of these capabilities in order to succeed in the program in which they are enrolled (Anderson 2011, p. 28).

The recent 2012–13 Budget initiatives discussed earlier should help to improve the mathematics and science capabilities of secondary school students but they do not specifically address the needs of university students.

Submissions to the Review did not refer to this matter in detail, and the Panel believes that it is an issue that requires further consideration and examination by universities. The Panel would like to see more work done by universities on how best to develop such interventions and to share best practice on how to encourage broader fields of study among Aboriginal and Torres Strait Islander students.

Recognition of part completions of study

The Panel found some evidence to suggest that Aboriginal and Torres Strait Islander students' engagement with education involves dropping out at various points and can be 'cyclical rather than linear' (submission no. 23, NSW Aboriginal Land Council Northern Region Local Aboriginal Land Councils, p. 4). The Indigenous Higher Education Advisory Council submission refers to data that shows:

that the retention rate for first year Aboriginal and Torres Strait Islander students is estimated at 67.6 percent, compared to 79.2 percent for all other domestic students. This translates to the sector losing one in three Aboriginal and Torres Strait Islander students, compared to the one-in-five dropout rate that occurs for all domestic students. Similarly, overall completion rates for Aboriginal and Torres Strait Islander students are reported to be 22 per cent less than for non-Indigenous Australian students (submission no. 73, IHEAC, p. 4).

Unpublished data from the Department of Education, Employment and Workplace Relations similarly indicates higher rates of both first-year dropouts and lower rates of completions among Aboriginal and Torres Strait Islander students compared with non-Indigenous students. For example, among students who enrolled in a bachelor course in 2005, by 2010 45.7% of Aboriginal and Torres Strait Islander students dropped out compared with 22.6% of non-Indigenous students (DEEWR n.d.).⁸⁶

Throughout the report, the Panel is recommending a number of strategies to support retention and completion rates among Aboriginal and Torres Strait Islander students. A further approach that could be explored by universities would be to recognise the achievement of students who leave part way through their courses and to encourage them to return. One approach could include providing an accredited qualification, for example a diploma after one or two years. This approach would be similar to that used for postgraduate students who are able to achieve varying levels of completion including graduate certificate, graduate diploma or a master's degree.

Any initiative would need to be applied to both Aboriginal and Torres Strait Islander and non-Indigenous students and be based on each university's assessment of how

⁸⁶ Data includes both the student ID and Commonwealth Higher Education Student Support Number components to pick up students who may switch providers during their course.

best to recognise courses or units completed by the students without in any way compromising academic standards. It also needs to be recognised that this is still a poor second best to supporting students to complete their entire course of study.

3.6 Financial support for Aboriginal and Torres Strait Islander students

The Panel understands the critical importance of financial support for all students to succeed in higher education. For Aboriginal and Torres Strait Islander students, the reduction or removal of financial barriers to participation in higher education has been deemed crucial to widening their participation (James & Devlin 2006, p. 7; Pechenkina & Anderson 2011, p. 11).

Given the relatively high proportion of Aboriginal and Torres Strait Islander people from low SES backgrounds and with children to support, a progressive income support system and other forms of student financial assistance is essential to their access to and completion of university courses. The Panel believes that while recent reforms will have provided a much needed boost in support to those on the lowest incomes, more can be done to simplify financial support arrangements, remove existing anomalies and monitor the ongoing needs of Aboriginal and Torres Strait Islander students.

3.6.1 Income support

Current situation

Australian higher education students have enjoyed bipartisan support over many decades for progressive financial support programs enabling lower-income students to attend universities. The introduction of income-contingent loans through the Higher Education Contribution Scheme in 1989, followed by the Higher Education Loan Program in 2005, were world-leading policy initiatives that have been maintained by successive governments for over 20 years.

Student income support

The ABSTUDY scheme is an ongoing special measure to assist in addressing the educational disadvantage of Aboriginal and Torres Strait Islander people. It provides a means and income-tested living allowance and a range of supplementary benefits for Aboriginal and Torres Strait Islander students. Some supplementary benefits are also available to part-time students.

Eligible Aboriginal and Torres Strait Islander higher education students may, however, choose to access mainstream student income support payments through Austudy and Youth Allowance. They may also be eligible to apply for mainstream scholarships, Postgraduate Award payments and Higher Education Loan Program support, all of which provide various kinds of financial support to undergraduate and postgraduate students, not specifically targeted to Aboriginal and Torres Strait Islander students.

Student income support payments were recently reformed

Following the Bradley Review and the Review of Student Income Support Reforms in 2011, over \$2 billion in income support payments have been retargeted to students in greatest need.

The recent reforms have provided additional financial support to student income support recipients through the lowering of the age of independence, an increase to the parental income test threshold, new student start-up and relocation scholarships, amendments to criteria to determine independence from the parental means tests, an increase to the personal income threshold, and the extension of mainstream income support to masters by coursework students (from 1 January 2014). These reforms are still being progressively implemented, yet the Panel notes that many submissions to the Review commented that financial hardship remains an issue for Aboriginal and Torres Strait Islander students succeeding at and completing university courses. Some students may not have yet benefited from the most recent reforms, some may not be aware of them and for others there may still remain issues of adequacy of income support, particularly for those with children.

What needs to change?

Ensuring ongoing access to and adequacy of Centrelink-based income support payments

The Panel notes that, notwithstanding recent reforms, Aboriginal and Torres Strait Islander students are more likely to have additional financial needs compared with non-Indigenous students due to their higher incidence of mature-age students with dependants.

The Panel wants to ensure that students are not missing out on access to appropriate levels of income support and that they are well informed about the range of options available to them. The Panel notes that while some forms of support such as ABSTUDY payments can be made direct to students, others such as compulsory tuition scholarships are paid to universities. The interaction of these payments needs to be monitored by the government to ensure that Aboriginal and Torres Strait Islander students are adequately supported throughout their studies.

The National Union of Students submission notes that the last survey of student finances was conducted before the changes flowing from the Bradley Review and the Review of Student Income Support Reforms. The National Union of Students highlighted that:

early data indicates that more Indigenous students are receiving at least some of the benefits of the Commonwealth income support reforms. DEEWR's Annual Report mentions: 'The number of students receiving ABSTUDY increased by 4.6 per cent between 2010 and 2011 ... The increase was mainly attributable to an increase in higher education recipients after more dependent young people qualified for ABSTUDY under changes to the Parental Income Test implement on 1 July 2011' (submission no. 31, National Union of Students, p. 6).

There are other changes from the Bradley Review still to flow through in July 2012 and it will therefore be important to review the circumstances of Aboriginal and Torres Strait Islander students once all changes are in place, as suggested by the National Union of Students. The Panel understands that Universities Australia is planning to do another student finance survey this year. The Panel also suggests that there may be options for universities to provide additional support to meet the specific needs of Aboriginal and Torres Strait Islander students through further developing creative partnerships with private sector revenue sources including

philanthropy, business and others. The University of Queensland's submission to the Review made a similar suggestion:

With government and philanthropic organizations develop scholarships that will cover the cost of fees, books/computers, and accommodation and living expenses for students with financial need (submission no. 42, University of Queensland, p. 4).

Additional bursaries, cadetships and scholarships could provide incentives for Aboriginal and Torres Strait Islander people to take up higher education and this idea is explored further in section 2.2 on the professions.

Removing existing and potential anomalies in financial support arrangements

Two anomalies within the existing financial support arrangements were drawn to the Panel's attention through the National Union of Students submission to the Review. These anomalies are: (i) the tax treatment of ABSTUDY living allowances for postgraduate students; and (ii) the potential impact on income support payments due to the reclassification by some universities of their law courses to postgraduate levels. Both issues were also raised by the Indigenous Higher Education Advisory Council in earlier tax and income support reviews.

In the first case, the issue is that the living allowance rate for ABSTUDY living allowance recipients is treated as taxable income while the Australian Postgraduate Awards (APAs) awarded to HDR students are treated as exempt income under section 51-10 of the *Income Tax Assessment Act 1997*. This is in recognition that ABSTUDY living allowance is an income support payment and an APA is a competitive merit-based scholarship.

The Panel notes that ABSTUDY postgraduate award recipients are entitled to a range of tax-free supplementary benefits that are not available to APA recipients including: Relocation Scholarships, Student Start-up Scholarships, Incidentals Allowance, Away-from-Base assistance and payment of their student contributions (HECS-HELP) or tuition fees. ABSTUDY recipients may also be eligible for Crisis Payment, Bereavement Allowance and Advance Payment.

Australia's future tax system – report to the Treasurer recommended that income support and supplementary payments should be tax exempt, noting that government payments that are similar in nature to income support, such as scholarships, should be exempt from tax to align their treatment with that of income support. The report notes that one of the main objectives of cash transfer payments is to increase poor households' real income, and taxing transfer payments can interfere with this objective. It notes further that taxing transfer payments also complicates individuals' interaction with the tax and transfer systems (Australian Treasury 2010).

The Panel recommends that the government further consider Recommendation 4 from *Australia's future tax system – report to the Treasurer* in relation to ABSTUDY and APAs.

In the second case, the National Union of Students has highlighted to the Panel that the reclassification of law courses at the University of Melbourne and the Australian National University from Bachelor of Law courses to Juris Doctor courses may lead to potentially negative income support consequences including diminished eligibility for income support, diminished access to ITAS-TT tutoring programs and loss of or

reduced access to alternative entry programs (submission no. 31, National Union of Students, p. 5).

All university masters degrees and doctoral courses are approved courses for ABSTUDY. Both Juris Doctor courses from the University of Melbourne and the Australian National University are approved courses for the payment of mainstream student income support payments of Youth Allowance and Austudy, meaning that eligible students may currently undertake these courses and qualify for assistance. In addition, from 1 January 2014, mainstream student income support will be extended to all eligible students undertaking masters degrees by coursework.

Some of these impacts may apply to all students, while diminished access to ITAS-TT and alternative entry programs will impact most heavily on Aboriginal and Torres Strait Islander students. Given that other universities may adopt a similar approach in the future, as suggested by the Indigenous Higher Education Advisory Council, the Panel recommends that the government ensure that Aboriginal and Torres Strait Islander students and other students undertaking these courses do not suffer reduced support.

3.6.2 Commonwealth scholarships

Current situation

The Commonwealth Scholarships Program is made up of five different scholarships all aimed at improving access to, and participation in, higher education for Aboriginal and Torres Strait Islander students from low SES backgrounds and from regional and remote areas.

- Indigenous Commonwealth Education Costs Scholarships provide annual funding (\$2,290 per student in 2011) to assist undergraduate students with general education costs for up to eight semesters.
- Indigenous Enabling Commonwealth Education Costs Scholarships provide annual funding (\$2,290 per student in 2011) to assist eligible enabling course students with general education costs for up to two semesters.
- Indigenous Commonwealth Accommodation Scholarships provide annual funding (\$4,580 per student in 2011) to assist undergraduate students from regional and remote areas (who need to move away from home to commence higher education) with accommodation costs.
- Indigenous Enabling Commonwealth Accommodation Scholarships provide annual funding (\$4,580 per student in 2011) to assist enabling course students from regional and remote areas who need to move away from home to commence higher education with accommodation costs for up to two semesters.
- Indigenous Access Scholarships provide a one-off payment (\$4,321 per student in 2011) to assist commencing students to undertake an eligible enabling course or undergraduate course.

The first four scholarship types listed above provide students with financial assistance with education costs and accommodation costs if they are enrolled in enabling courses, undergraduate courses (not limited to areas of national priority) or

postgraduate courses (in an area of national priority required for initial registration to practice in the chosen priority area). These scholarships interact directly with the student income support system administered by Centrelink. Indigenous Access Scholarships are not systematically connected to the student income support system.

Program data suggests that in 2010 there was a significant level of variability in take-up rates across institutions. Using the Indigenous Commonwealth Education Costs Scholarships as an example, 16 institutions awarded their full allocation or more, another six institutions awarded close to their full allocation and the remainder awarded below their allocation (DEEWR 2011o, pp. 7–9).

Although the situation varies between universities, and despite a growing number of Indigenous-specific scholarships, bursaries and grants designed to relieve financial burdens of Indigenous students, a worryingly large number of scholarships remain untaken. The conflicting deadlines and modes of distribution of various sources of funding and dissonance between the scholarships and actual students' needs are among explanations of this discrepancy (Pechenkina & Anderson 2011, p. 11, citing James & Devlin 2006).

Universities and government may wish to further explore the incidence of low take-up of scholarships and consider options for increasing it, including supporting better access to information on them. In this context, the Panel welcomes the recent initiative of the Aurora Project to provide consolidated information to students on the full range of scholarship programs (Aurora Project 2011a).

What needs to change?

Simplifying the Commonwealth Scholarships Program

The Panel believes that simplifying the existing range of scholarships and consolidating them into one program may also help more students to access them. RMIT University suggested that:

An important driver of access [to higher education] is students' financial security, and we consider that current Commonwealth scholarship arrangements could be simplified to improve this (submission no. 67, RMIT University, p. 1).

The Panel proposes that the existing funding allocations for each of the above five categories of scholarships be rolled into one new Indigenous Access Scheme. It could be renamed from scholarship to program as the Panel heard some anecdotal evidence during consultations that some students do not apply for a scholarship because they think that they are not 'smart enough' to win a scholarship. Referring to it as a payment might avoid this issue.

The new scheme would be developed in accordance with the funding principles outlined earlier in the report to apply to all Aboriginal and Torres Strait Islander-specific funding, including strong accountability mechanisms for universities to ensure a transparent and accountable process for awarding of payments/scholarships to Aboriginal and Torres Strait Islander students. At the same time, greater flexibility would allow universities to tailor the scholarships to better

meet the needs of the students, which may also increase take-up rates.

Recommendation

Recommendation 17

That the Australian Government and universities, in consultation with Aboriginal and Torres Strait Islander student representatives:

- examine any outstanding issues regarding government income support payments for Aboriginal and Torres Strait Islander students, including issues relating to ABSTUDY, Australian Postgraduate Awards and income support for students undertaking postgraduate degrees that were formerly undergraduate degrees, focusing on the needs of students with children, and explore opportunities to partner with philanthropic and private sector organisations to provide additional income support for students
- amalgamate existing Commonwealth scholarships for Aboriginal and Torres Strait Islander students into one program based on the overarching reforms outlined in Recommendation 13.



4 Aboriginal and Torres Strait Islander knowledge and research

Aboriginal and Torres Strait Islander knowledge and perspectives can and are already playing a critical role in building new and dynamic approaches to learning, research and innovation.

Building opportunities for Aboriginal and Torres Strait Islander knowledge to be used creatively not only benefits Aboriginal and Torres Strait Islander students and researchers; it also has the potential to make a significant contribution to closing the gap and to economic growth.

To close the gap, the Panel considers that universities should better equip professionals with the skills and knowledge to meet the needs of Aboriginal and Torres Strait Islander clients, communities and other professionals with whom they will come in contact. They should also increase the number and capability of Aboriginal and Torres Strait Islander researchers who can bring a diversity of expertise and skills to the broader research agenda. The research agenda should, in turn, include Closing the Gap–related priorities.

Indigenous knowledge, translated into practical curriculum, teaching practices and graduate attributes, makes important contributions to helping professionals meet the needs of Indigenous communities (one of the Review’s terms of reference). Where professionals are being trained to work in fields with Aboriginal and Torres Strait Islander clients and business partners, they should learn relevant knowledge such as different disease rates or legal issues and understand contemporary issues impacting on Indigenous people’s lives.

Researchers produce knowledge and ideas that translate into innovation, drive productivity and improve the wellbeing of all Australians. The Panel believes it is imperative that Aboriginal and Torres Strait Islander perspectives are included in this process by growing the number of Aboriginal and Torres Strait Islander people completing higher degrees by research, and ensuring that there is adequate support for Indigenous research and researchers within publicly funded research. Related to this last point, the Panel has recommended a review of the Australian Institute of Aboriginal and Torres Strait Islander Studies to examine its future strategic direction, its role and functions, governance structures and levels of resourcing with a view to strengthening its capacity to preserve Indigenous knowledge and support research by Aboriginal and Torres Strait Islander people.

4.1 Aboriginal and Torres Strait Islander knowledge and perspectives

The Panel considers it imperative that graduates across a range of faculties are exposed to and build their understanding of Aboriginal and Torres Strait Islander contemporary issues and perspectives. Such knowledge will help to equip them as professionals to better meet the needs of Aboriginal and Torres Strait Islander people and organisations with whom they will be doing business and to whom they

will be providing services. In this context, the Panel highlights again the importance of improving the capacity of teachers to provide high-quality and effective teaching to Aboriginal and Torres Strait Islander schoolchildren if they are to succeed at school and move into higher education.

Aboriginal and Torres Strait Islander perspectives can bring a diversity of approaches to old problems and can help to tap into potential existing Aboriginal and Torres Strait Islander talent that is currently underutilised. The application of Aboriginal and Torres Strait Islander perspectives to learning activities should be done in a way that maintains rigorous academic standards. Complementary efforts outlined elsewhere in this report to increase the number of Aboriginal and Torres Strait Islander students, academic staff and researchers will assist in embedding Indigenous knowledges across the higher education and research sectors.

Current situation

Aboriginal and Torres Strait Islander knowledge and perspectives are contested concepts within the academy

With the growth of Aboriginal and Torres Strait Islander enrolments in universities since the 1980s (Lane 2009) and the emergence of Aboriginal and Torres Strait Islander academic centres at higher education institutions, Aboriginal and Torres Strait Islander knowledge frameworks have emerged across a diversity of disciplines (Anderson et al. 1998). The legitimacy and acceptance of this embedding of Aboriginal and Torres Strait Islander perspectives within Australian universities is a matter of ongoing and current debate, with divergent viewpoints being expressed among both Aboriginal and Torres Strait Islander and non-Indigenous academics, particularly regarding curriculums (Anderson et al. 1998; Nakata 2007).

While Indigenous knowledge has been given attention in other countries, most notably the United States, First Nations values and philosophies in the academy, to date, have been insufficiently theorised in Australia (Biermann & Townsend-Cross 2008). At the international level, the growing interest in Indigenous knowledge and studies has been reflected globally in the proliferation of publications in the past decade and a half. Battiste describes '[t]he recognition and intellectual activation of Indigenous knowledge today [as] an act of empowerment' (2002, p. 4) by indigenous people that challenges Western knowledge, particularly in the area of educational reform.

Regardless of how this debate unfolds, Aboriginal and Torres Strait Islander students and staff have unique knowledge and understandings that must be brought into the curriculum for students and must inform Australian research and scholarship (Bradley et al. 2008, pp. 32–3).

The Panel suggests that Aboriginal and Torres Strait Islander academics will need to further debate the concept of Aboriginal and Torres Strait Islander knowledge within the academy. It is not a matter on which the Panel felt it was particularly useful or appropriate for the Panel (or government) to pronounce.

Aboriginal and Torres Strait Islander knowledge is not evenly built into university curriculums

As outlined in Rigney's (2011) paper to the Review, there is an uneven commitment by universities in teaching of Indigenous knowledges that generally falls into three categories:

- Category 1: invisible, marginalised, limited, non-existent
- Category 2: Indigenous studies as single, separate and discrete unit of work focusing on Indigenous peoples
- Category 3: Indigenous perspectives are embedded in relevant degrees and topics, for example science, environment studies, law, education, medicine, psychology, art, etc.

Rigney draws a distinction between 'Indigenous studies' that he describes as discrete units of study (either as separate subjects or part of other subjects) and 'Indigenous perspectives' that are integrated into units of work. He notes that currently 'Australian schools and universities are in a[n] "Indigenous perspectives across the curriculum" historical moment' (Rigney 2011, p. 13). This means that there is great potential for universities to share experiences and develop their own good practice in embedding Aboriginal and Torres Strait Islander perspectives in curriculum. It may also provide an opportunity to ensure that Aboriginal and Torres Strait Islander knowledges are 'built in not bolted on' to the university curriculums, as suggested by Rigney (2011, p. 13).

Universities are being encouraged to share best practice through the Universities Australia – IHEAC *National best practice framework for Indigenous cultural competency in Australian universities* (2011, p. 181) which recommends, among other things, that:

- Indigenous knowledges and perspectives be included in all curriculums to provide students with the knowledge, skills and understandings which form the foundation of Indigenous cultural competency
- Indigenous Australian knowledges and perspectives be incorporated into programs (submission no. 59, Universities Australia, p. 15).

What needs to change?

The development of Aboriginal and Torres Strait Islander teaching and learning strategies within universities

The Panel has explored the need for Aboriginal and Torres Strait Islander knowledge, issues and perspectives to be included in curriculums, graduate attributes and teaching practices as discussed in a number of commissioned research papers (Rigney 2011; Walter 2011; Wilson & Battiste 2011) and submissions⁸⁷ to the Review. The Panel believes that these issues would be best addressed by universities developing and implementing their own Aboriginal and Torres Strait Islander teaching and learning strategies. These strategies would encompass as the minimum elements:

- quality teaching of Aboriginal and Torres Strait Islander perspectives within curriculums
- graduate attributes to include an understanding of Aboriginal and Torres Strait Islander issues

⁸⁷ The majority of submissions discussed this when responding to one of the Panel's key questions in the *Context paper and call for submissions*: 'How should mainstream research and learning practices take account of Aboriginal and Torres Strait Islander perspectives?' (Rigney 2011n, p. 31).

- improving school teaching attributes
- inclusion of Aboriginal and Torres Strait Islander perspectives in teaching practices.

Each of these minimum elements is discussed below.

Quality teaching of Aboriginal and Torres Strait Islander perspectives should be embedded in curriculums

The Panel supports the *National best practice framework* referred to above and emphasises that it is similarly motivated to recommend the inclusion of Indigenous knowledge and perspectives in curriculums because it will help non-Indigenous students to do their professional jobs better. Learning about Aboriginal and Torres Strait Islander issues, perspectives and values will help graduates to more capably work with Aboriginal and Torres Strait Islander clients and communities and to better address their needs.

The Panel suggests that Aboriginal and Torres Strait Islander knowledge should not be isolated or clustered in humanities and social sciences, as has historically been the case, but should be spread more widely across the disciplines. Faculties could apply Aboriginal and Torres Strait Islander perspectives to a range of areas including, for example, Aboriginal knowledge in environmental management, mining, the law and Aboriginal approaches to health.

Universities could also actively seek out and engage Aboriginal and Torres Strait Islander experts in the development and delivery of course curriculums including as guest lecturers/speakers on subject matter expertise and in their capacities as private/public sector employees.

Building on existing efforts

The University of South Australia and Charles Sturt University have policies in place requiring the incorporation of Aboriginal and Torres Strait Islander perspectives into the curriculum of all undergraduate programs and a pedagogical framework to guide curriculum development and knowledge assessment.

At Griffith University, the involvement of Elders has grown over the last decade from one of student support to guest speaking, research and the development of policies. The Elders-in-Residence program and Council of Elders provide a mechanism for Elders to support curriculum development, teaching, research and student support.

Four universities undertook pilot projects in 2010 as part of the joint IHEAC – Universities Australia Indigenous Cultural Competency in Australian Universities Project:

- Edith Cowan University undertook a project ('Cultural Competency@ECU') to develop a culturally competent university curriculum for law, physiotherapy and public health. This included offering cultural competency units to law and physiotherapy students in 2010 and negotiations to include cultural competency in public health courses. The project also included workshops for university staff, the establishment of guidelines for curriculum authors on culturally competent pedagogy, and content and assessment.
- The University of Newcastle undertook a project ('University of Newcastle Cultural Competency Model') to implement a culturally competent

curriculum in the Faculty of Business and Law, and to develop business partnerships to promote the value of culturally competent university graduates. It included the development of online teaching and learning resources and the development of a framework for business partnerships.

- The University of Western Australia undertook a project ('Indigenous Dialogues: Towards Cultural Competence') to produce an Indigenous cultural competency resource kit including teaching and learning protocols, cultural policy and a curriculum development framework.
- The University of Wollongong undertook a project ('Using Indigenous ways of knowing and learning to encourage storytelling about Country with student-created animations') to incorporate an innovative approach to storytelling, referred to as a 'relational knowledge approach', into primary education and early childhood courses to encourage pre-service primary and early childhood teachers to use Indigenous ways of knowing and learning as a teaching tool. Students were encouraged to develop their own stories of country and to represent these in the form of narrated animations through the use of ground-breaking Slowmation technology (Universities Australia 2011).

Aboriginal and Torres Strait Islander content in curriculums must meet rigorous standards

In developing these strategies, it is important that universities adhere to standards of excellence, ensuring that Aboriginal and Torres Strait Islander content in curriculums meets the same rigorous standards required of other curriculum content.

'Universities and academics must have a reason to teach Indigenous perspectives and recognize quality teaching in this area' (Rigney 2011, p. 13). Rigney notes that 'the quality and standards of teaching and learning of Indigenous knowledges in Australian universities are uneven, poorly resourced and suffer lack of policy support in universities' (Rigney 2011, p. 12). He argues that there is a need to establish an Indigenous education quality and standards framework to overcome this uneven quality. The recently established Tertiary Education Quality and Standards Agency (TEQSA) has responsibility for regulating and assuring quality in the higher education sector, as assessed against a Higher Education Standards Framework. While the framework does not include Indigenous-specific standards, the Panel understands that the teaching and learning standards provide TEQSA with sufficient power to evaluate and monitor the quality of Indigenous-specific curriculums and teaching.

Given that TEQSA is yet to undertake such evaluation and monitoring, the Panel considers that it is too early to determine if there is a need for an Indigenous-specific framework, as suggested by Rigney. If, following its evaluation and monitoring, TEQSA identified quality issues within the higher education sector's teaching and learning of Indigenous knowledges, then it may wish to consider the development of an Indigenous-specific framework.

Expanding graduate attributes to ensure that students graduate with an understanding of contemporary issues confronting Aboriginal and Torres Strait Islander people

Within the Australian higher education sector, 'graduate attributes' generally refers to learning outcomes in more generic skills and competencies; 'they have been a focus of considerable attention, debate, research and resourcing for the past 15 years' (Barrie 2004; Campbell 2010; Hager 2006, all cited in Oliver 2011, p. 9). They are in essence the descriptions of the core abilities and values a university community agrees all its graduates should develop as a result of successfully completing their university studies.

An example of the kinds of skills included in graduate attributes is Flinders University's bachelor's degree programs. They aim to produce graduates who:

- are knowledgeable
- can apply their knowledge
- communicate effectively
- can work independently
- are collaborative
- value ethical behaviour
- connect across boundaries (Rigney 2011, p. 15).

Much of the debate on graduate attributes appears to be about:

how they can be contextualised and embedded in a discipline area, and taught and assessed by subject specialists who do not necessarily feel equipped for those tasks (Green, Hammer & Star 2009; Radloff et al. 2009) ... Students enrol in discipline-based courses, and generic skills therefore must be embedded in a course and interwoven with the discipline and from the perspective of that discipline. The generic outcomes are therefore often inseparable from the discipline (Oliver 2011, p. 9).

Notwithstanding this complexity of graduate attributes, universities are in a good position to educate non-Indigenous professionals on Aboriginal and Torres Strait Islander issues through curriculums. Graduate attributes can be a key driver to achieve this outcome (consultations; IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011).

The Universities Australia – IHEAC *National best practice framework for Indigenous cultural competency in Australian universities* (2011) also provides another opportunity to embed Indigenous knowledge into curriculums as one of its guiding principles is that 'all graduates of Australian universities should be culturally competent' (submission no. 59, Universities Australia, p. 7).

The Panel suggests that universities should not attempt to cover all graduates but should initially focus on those priority disciplines whose graduates are most likely to contribute to closing the gap. Professional bodies can also help in identifying where it would be most relevant for graduates to have a good understanding of Aboriginal

and Torres Strait Islander issues. For example, the Law Council of Australia has stated that:

[a] further issue arises with respect to the training of law students to advise and understand Aboriginal and Torres Strait Islander clients, colleagues, witnesses and those with any other role in the justice system. The legal profession is presently taking steps to encourage practitioners to undertake Indigenous cultural awareness training in satisfaction of compulsory continuing legal education, which is a requirement of renewal of legal practising certificates in all jurisdictions.

Consideration should be given to including Indigenous cultural awareness training, directed specifically at students completing practical legal training or articles, as a compulsory requirement for admission to practice (submission no. 70, Law Council of Australia, pp. 3–4).

Building on existing efforts

Some universities are already including Indigenous knowledge within their graduate attributes. For example, the University of Western Sydney has included 'Indigenous Australian knowledge' as a graduate attribute for all students. The Australian Medical Council requires that its accredited health professionals have knowledge about and understanding of Aboriginal and Torres Strait Islander health matters, including the history, cultural development and health of Aboriginal and Torres Strait Islander people. It aims to ensure that medical professionals are equipped to service and work with Aboriginal and Torres Strait Islander people, communities and other professionals.

The Panel again notes the work of Inspiring Australia's Expert Working Group on Indigenous Engagement with Sciences. Valuing and promoting Indigenous knowledges supports the group's objective of increasing the engagement of Aboriginal and Torres Strait Islander peoples in the development and communication of sciences in Australia (IAEWGIES 2012, p. 6).

Improving secondary school teacher attributes

As discussed earlier in the report, Aboriginal and Torres Strait Islander students must first succeed at school if they are to go on to succeed at higher education. The Panel received many submissions that emphasised the importance of the quality and capacity of teachers to student success.

[A] quality teaching workforce that understands and acknowledges Aboriginal cultures, histories and perspectives is best able to effectively work towards improving education outcomes for Aboriginal students. By employing a workforce that is culturally competent and holds high expectations for Koorie students, benefits can be expected in areas of attendance, retention, engagement and achievement (submission no. 38, Victorian Aboriginal Education Association Inc., p. 8).

It is critical that universities invest in training good teachers ... Pre-service teacher education courses should incorporate compulsory Aboriginal and Torres Strait Islander culture and history subjects and



other curriculum and professionals studies include Aboriginal and Torres Strait Islander perspectives as well as content on what is working in Indigenous education (submission no. 37, Australian Catholic University, p. 3).

The earlier references to the National Professional Standards for Teachers includes a requirement for teachers to get to know their Aboriginal and Torres Strait Islander students and how they learn. Translation of these standards into practical tools is critical to helping teachers to be culturally competent in delivering optimal learning outcomes for Aboriginal and Torres Strait Islander students. The Panel notes that the Australian Institute for Teaching and School Leadership has commenced development of such tools to help prepare new teachers and existing teachers.

Universities can play a role through improving teacher education training curriculums at universities. Universities could better prepare teacher education graduates through their curriculums and practicum for their ongoing and professional commitment and responsibility to Aboriginal and Torres Strait Islander student achievement. In addition, the university teacher education curriculums needs to assist teacher education students to translate the National Professional Standards for Teachers, alongside respective state and territory curriculums and syllabuses, into structured lesson planning processes inclusive of measurable outcomes for Aboriginal and Torres Strait Islander students.

Aboriginal and Torres Strait Islander perspectives should be valued in academic teaching practices

The Panel recognises that current tertiary teaching practices may be contributing to Aboriginal and Torres Strait Islander student perceptions that they do not feel welcome at universities and that they continue to be dominated by non-Indigenous approaches to teaching and learning. A number of submissions to the Panel referred to this feeling of alienation and isolation by students.⁸⁸ Some suggested that access to training of academic staff in Aboriginal and Torres Strait Islander knowledges and perspectives was important ‘to ensure pedagogy at this level maximises retention and completion rates of [Aboriginal and Torres Strait Islander] students’ (submission no. 46, University of New England, p. 2).

According to the Indigenous Higher Education Advisory Council:

Aboriginal and Torres Strait Islander pedagogies (i.e. methods of teaching and learning) and epistemologies (i.e. systems for recognising knowledge) remain at the periphery of academic practice. As a result, universities are in danger of being viewed as non-Indigenous spaces where the traditional knowledge and cultural practices of students from a non-Western background are not valued (submission no. 73, IHEAC, p. 12).

The Panel explored whether there were other approaches to tertiary teaching that had been more successful in engaging Indigenous students. In this context, the Panel examined the New Zealand secondary teaching methodology that could possibly be applied in the higher education teaching environment. Te Kotahitanga is

⁸⁸ For example, submissions by Bond University (no. 66); National Union of Students (no. 31); Aboriginal and Torres Strait Islander Healing Foundation (no. 27).

a teaching method whereby the teacher recognises the importance of the student's own cultural identity and therefore learning experiences are designed and shaped by experiences of Indigenous (Māori) students. Practitioners of this method are required to express their professional commitment and responsibility to bringing about change to student educational achievement by accepting professional responsibility for the learning of their students (Te Kete Ipurangi n.d.).

The Panel believes that similar principles could be applied to tertiary teaching, noting that Dr Chris Sarra's Stronger Smarter Leadership Program uses a similar approach of creating high expectations among school leaders and principals. Individual universities may wish to explore their own approach to teaching methods at the same time as they increase their efforts to embed Aboriginal and Torres Strait Islander knowledge and perspectives into their curriculums.

Greater Aboriginal and Torres Strait Islander presence in university academic staff profiles will help non-Indigenous staff to reflect on their own teaching practices and use of Aboriginal and Torres Strait Islander knowledge and perspectives within their teaching approaches. As noted in its submission to the Review, the Group of Eight reinforces the view that:

[w]hen any academic designing a course or looking for more effective teaching methods can get expert advice on Indigenous perspectives by asking the lecturer in the next office, ... [t]he result will be an enrichment of higher education that benefits both Indigenous and non-Indigenous Australians, as well as international students (submission no. 16, Group of Eight, p. 25).

Recommendations

Recommendation 18

That universities develop and implement an Aboriginal and Torres Strait Islander teaching and learning strategy applicable across a range of curriculums, focused on standards of excellence as applied to other curriculum content and feeding into descriptions of graduate attributes, with an initial focus on priority disciplines to close the gap such as teaching and health professions.

Digitising Aboriginal and Torres Strait Islander knowledge and data

Digitised archival collections are a crucial modern tool for undertaking research, and provide many opportunities to researchers both in Australia and internationally. eResearch infrastructure, including the digital tools and resources which enable digitised collections to be managed and accessed remotely, increases both the efficiency and effectiveness of research and opens up new and innovative research possibilities across all disciplines. eResearch infrastructure is enabling the development of virtual communities able to share information, with many beneficiaries including Aboriginal and Torres Strait Islander researchers. The Australian Government is working to expand Australia's eResearch capacity, including its capacity to manage digitised information.⁸⁹

⁸⁹ A benefit of this will be the continued expansion of networked collections and the development of research collaboration tools. This is being achieved through investments which: develop eResearch collaboration tools and resources; enhance bandwidth capability through the Australian Education and Research Network; provide high-performance computing; and support research communities to store,

Digitisation is also a critical means of preserving knowledges and stories for future generations, not just to make information more widely available to students and researchers. This includes the large collection of Aboriginal and Torres Strait Islander archival material held by the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) as well as within national and state institutions such as the National Museum of Australia, state libraries, museums and galleries, as well as in Aboriginal and Torres Strait Islander communities.

The Panel is pleased that AIATSIS has received funding for the 2012–13 financial year to progress the important work of digitising Australia's largest collection of Aboriginal and Torres Strait Islander knowledges and artefacts. It notes that in the case of the AIATSIS collection, there are approaching deadlines for the disintegration of analogue magnetic tape collections which makes the need for digitising the collection critical.

The digitising of collections involves complexities that need to be managed appropriately by all organisations with collections. For example, to ensure ethical management of digitisation, it is important that Aboriginal and Torres Strait Islander people who provide knowledge for such recordings are deeply involved, and give consent to both providing the information and, most importantly, how it is stored and used.

As well as these fundamental principles, Aboriginal and Torres Strait Islander people and organisations with collections would all benefit from a better understanding of other laws and policies. For example, the publication of digitised knowledge could prevent a patent being granted which may disadvantage the knowledge holder if they wish to create a patent for economic benefit. Conversely, the knowledge holder may be able to use the publication to protect the knowledge from being patented by another person.

A number of Aboriginal and Torres Strait Islander groups are using digitisation to preserve their cultural heritage while maintaining control over their knowledges. For example, the Ara Irititja project is an example of Indigenous people controlling access to digitally stored information. The Ara Irititja project has designed a purpose-built computer archive that digitally stores repatriated materials and other contemporary items of importance to the Anangu people. The database includes photographs, films, sound recordings and documents. The database is owned by the community and can only be viewed by the Anangu. The Ara Irititja project helps other organisations to build their own archives using the Ara Irititja software and team expertise. More than 20 unique projects commenced by separate Indigenous language groups in Australia use the Ara Irititja approach and database software. The group also works with partner institutions such as the State Library of South Australia and the National Film and Sound Archive to provide advice on appropriate protocols and practices in relation to Indigenous knowledges and museums (Ara Irititja Project 2011).

access, analyse and reuse data. Australian Government priorities for research infrastructure, including eResearch infrastructure, are detailed in the 2011 *Strategic Roadmap for Australian Research Infrastructure* (DIISR 2011c).

There is growing interest and concern about how to protect Aboriginal and Torres Strait Islander peoples' culture and knowledges. A consultation is currently underway by the Australian Government to examine how the intellectual property system can best work to protect Indigenous knowledge (refer to *Quality of ethical research practices* in section 4.3).

The Panel is concerned that when Indigenous knowledge and culture (including stories, dance, languages, images, governance, crafts, cosmology, medicine and environmental knowledge) are the subject of research and subsequently recorded for the first time in material form, there is a risk of mistreatment of this information. While ethical research guidelines can go some way in protecting Indigenous knowledge (discussed further in section 4.2), the rights of traditional owners of knowledge may not be adequately acknowledged or protected in Australia by law, nor is their right to share in the benefits reaped from the uses of this knowledge.

IP Australia, the Office for the Arts and the Attorney-General's Department are consulting on intellectual property and Indigenous knowledge to gain a better understanding of the views of Aboriginal and Torres Strait Islander people and other stakeholders regarding the protection of Indigenous knowledge. Policies should aim to facilitate access to guidelines, protocols and model contracts that can provide a resource for both owners and possible users of Indigenous knowledge. This could include dedicated best practice guidelines for different categories of users, and provide advice on existing legislation.

The Panel commends the Australian Government for engaging in a consultation process and encourages further guidance and leadership on protecting Indigenous knowledge systems.

Recommendation 19

That the Australian Government continue to support the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) to digitise and thus preserve its collection for future generations and particularly for use in higher education, and encourage the development of a national approach to data digitisation working with states, territories and community groups to ensure that Indigenous knowledge be digitised appropriately and preserved.

4.2 Higher degrees by research and research training

Growing the number of Aboriginal and Torres Strait Islander people successfully completing higher degree by research (HDR) study and moving on to careers in academia is critical to supporting future generations of Aboriginal and Torres Strait Islander people to access and succeed in higher education and in professional pursuits.

Aboriginal and Torres Strait Islander people should also be able to benefit more from the many personal and professional rewards that higher degree studies and academic careers provide.

Publicly funded research plays a fundamental role in building Australia's future prosperity. Researchers in Australian universities and research agencies are key in translating knowledge and ideas into innovation that drives Australian productivity and improves the wellbeing of all Australians. Researchers in universities also play a



fundamental role in teaching and training the next generation of workforce professionals including researchers and university academics.

Higher degrees by research provide the entry point to careers in research, and engagement with research communities in Australia and overseas. Therefore, research and research training policies play a key role in building Australia's current and future research workforce.

Aboriginal and Torres Strait Islander researchers who have contributed to the Review have described many benefits from embarking on careers in research, for themselves and their communities.

Dr Michelle Trudgett, of Macquarie University, describes:

My work has provided me with a great sense of accomplishment and satisfaction. I have had the opportunity, among other things, to design a new Masters of Aboriginal and Torres Strait Islander Education degree, supervise four fantastic students and to present my research to leading international and Aboriginal and Torres Strait Islander Australian scholars.

Though the academy can definitely be demanding, the intellectual rewards are endless. I would strongly encourage any Aboriginal and Torres Strait Islander Australian person who is interested in an academic or research career to pursue these dreams.

The sense of transformation and empowerment from the research efforts of Aboriginal and Torres Strait Islander researchers in Professor Fiona Stanley's Telethon Institute for Child Health Research – Centre for Research Excellence in Aboriginal Health and Wellbeing is illustrated by Cheryl Kickett-Tucker and Juli Coffin:

Alone we are one, together we are a critical mass, a group to be listened to, acknowledged and respected for our knowledge and skills in promoting and advocating our influence for change. Such a bond is formed for life as are our links back to our family, kin, culture and country. We have all shared this time of collective growth and development and we will make a difference (quoted in Bessarab et al. 2009, p. 3).

It is also illustrated in survey research conducted by Christine Asmar et al. in 2009:

We should not lose sight of the fact that [Aboriginal and Torres Strait Islander researchers] are lit from a fire within by the fires of their intrinsic motivation and their personal commitment to the ongoing development of their peoples. As one Indigenous researcher put it, 'I'm trying to write the thesis as if I'm writing to the community' (Asmar, Mercier & Page 2009, p. 156).

Current situation

Numbers of Aboriginal and Torres Strait Islander HDR students

Aboriginal and Torres Strait Islander HDR enrolments have increased over the last decade, albeit from a low base. Aboriginal and Torres Strait Islander HDR student enrolments increased by 27.8% between 2005 (334) and 2010 (427) compared to only a marginal increase (2.0%) for non-Indigenous HDR students (39,318 and 40,097 respectively) during the same period. However, the increase in completions for Aboriginal and Torres Strait Islander students has been relatively small with 15 more students completing their studies in 2010 (43) compared to 2005 (28) (DIISRTE 2012a).⁹⁰

The number of Aboriginal and Torres Strait Islander HDR enrolments as a proportion of all domestic HDR enrolments has grown from 0.8% in 2005 to 1.1% in 2010 (DIISRTE 2012a)⁹¹ but is still well below the parity rate of 2.2%. Aboriginal and Torres Strait Islander HDR student enrolments would need to double to achieve population parity.

HDR retention rates for Aboriginal and Torres Strait Islander students are also higher than for any other course level at 80.1%.⁹² Retention remains, however, just marginally lower than for non-Indigenous domestic students (80.1% compared to 83.9%) (DIISRTE 2012a).⁹³

What needs to change?

Consultations⁹⁴ and submissions emphasised a number of additional needs of Aboriginal and Torres Strait Islander HDR students. Cultural competency across supervisors, academic staff and general staff, particularly outside of the Indigenous Education Units, was one of the most often raised issues. Recognition of Indigenous knowledge and perspectives is also seen as critical to providing both a conducive environment and providing academic support.

To increase the pipeline of Aboriginal and Torres Strait Islander students able to pursue HDR study, a number of submissions emphasised the importance of capacity-building courses, master classes, mid-degree support and pre-PhD courses.⁹⁵ Building a student cohort across universities was seen as a beneficial way to provide essential emotional and academic support. The need for mentoring was also raised in many submissions.

Feedback from Aboriginal and Torres Strait Islander PhD holders indicated that many felt a great sense of isolation while undertaking their research degrees. While feeling isolated is common to many HDR and other students, Aboriginal and Torres Strait Islander HDR students feel it acutely as they are often the only Aboriginal and

⁹⁰ Based on Table A providers and domestic students only.

⁹¹ Based on Table A providers and domestic students only.

⁹² 'Rate of retention' is defined as the number of domestic students who studied in 2008 and studied again in 2009 at the same provider (excluding any students who completed in 2008) as a proportion of domestic students who studied in 2008 (excluding any who completed in 2008).

⁹³ Based on Table A providers and domestic students only.

⁹⁴ IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011.

⁹⁵ For example, submissions by the Group of Eight (no. 16); the National Tertiary Education Union (no. 45); Council of Australian Postgraduate Associations (no. 56); Australian Catholic University (no. 37); Bronwyn Fredericks (no. 48); University of Queensland (no. 42).

Torres Strait Islander student continuing to HDR study. Other issues raised by them were similar to those raised by other students.

Consultations also indicated that appropriate financial support was essential to the success of Aboriginal and Torres Strait Islander HDR students. The Panel heard that financial assistance could be better targeted to support the needs of HDR students, particularly given that, as for undergraduate Aboriginal and Torres Strait Islander students, many are mature age and have family obligations.

The Panel believes that all of these issues need to be addressed to better support Aboriginal and Torres Strait Islander success in HDR study.

Increase the number of Aboriginal and Torres Strait Islander HDR students

As the low numbers of Aboriginal and Torres Strait Islander HDR students are partially due to poor transitions from undergraduate studies (and in turn from school and vocational education), there are no quick fixes to increasing the number of Aboriginal and Torres Strait Islander HDR students.

Part of the solution to lift student numbers is a national approach to improving access and outcomes for all Aboriginal and Torres Strait Islander students through strategic agreements between the Australian Government and universities. The Panel recommends national and institutional targets be negotiated for improved enrolments and completions for HDR students, alongside targets for other students, and that these targets be similarly agreed and reported through university mission-based compacts. This is discussed in section 6.3.

Improve supervision of Aboriginal and Torres Strait Islander HDR students

It is well established that high-quality supervision is the critical foundation of a successful HDR experience for all HDR students (DIISR 2011a, p. 14). Supervisors provide the academic guidance, teaching, capacity building and mentoring, as well as the emotional support, to assist a student to produce high-quality research.

A 2004 report on the pedagogy of research supervision found that 'supervisors who are more "hands-on" in their approach to supervision tend to be associated with faster and more completions'. Keywords were availability, reliability, trust, reciprocity and teamwork (Sinclair 2004, p. vi, cited in DIISR 2011a, p. 16).

Consultations and submissions reinforced that the quality of supervision is a critical element of the postgraduate experience.⁹⁶ They also indicated a need for supervisors to provide guidance, expert knowledge and assistance in developing research skills, while taking into account the student's cultural background.

Cultural differences can affect expectations, chosen fields of research and instinctive learning approaches and methods. Aboriginal and Torres Strait Islander HDR students whose academic focus is Aboriginal and Torres Strait Islander knowledge had some specific issues identifying, as a priority, methods that are culturally acceptable to communities (for example, a preference for allegory and extended conversation, deference to authority and avoidance of critique). As one PhD holder described:

⁹⁶ For example, submissions by the National Tertiary Education Union (no. 45); Council of Australian Postgraduate Associations (no. 56); Deann Grant (no. 15); Bronwyn Fredericks (no. 48).

I had to approach my work in ways that had not been done before because existing methodologies were offensive to our mob and theories did not do the right job in explaining who we are. I could not find anyone in my field to talk it through with.⁹⁷

Another student noted:

Based on my experience it is more important that you have a good supervisor that understands you and works in the same way you do ... One bad supervisor could be the critical thing that loses 'us' (Trudgett 2011, p. 392–393).

These are important reflections for supervisors because, of course, it is also their job to ensure that advanced training in disciplinary methods is provided. This is true in both cultural studies and in medicine. Empathy must be combined with rigour for an effective supervisory relationship.

Many present and past Aboriginal and Torres Strait Islander HDR students consulted as part of the Review have had positive experiences with supervision. For example, a survey respondent at the IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum reported:

My supervisor was caring and committed to my project—open and keen to learn.⁹⁸

A number of submissions spoke of the considerable goodwill of non-Indigenous supervisors. A submission, for example, indicated that some academics were reluctant to take on Aboriginal and Torres Strait Islander students 'through fear of "getting it wrong"' (submission no. 16, Group of Eight, p. 21).

Survey work on this issue undertaken as part of a doctoral thesis in 2008 also showed a general consensus among Aboriginal and Torres Strait Islander students that supervision played an important role in the academic experience (Trudgett 2008, p. 140, cited in Trudgett 2011, p. 392).

In 2008, according to the survey of 55 students, 70.9% had a non-Indigenous supervisor; 21.8% had an Aboriginal and Torres Strait Islander supervisor (and 7.3% had no supervisor as they were masters by coursework students). Interestingly, those students who identified as being part of a local Aboriginal and Torres Strait Islander community thought it was extremely important to have an Aboriginal and Torres Strait Islander supervisor (47%), while only 14% of those who did not identify as part of a local community expressed a similar view. This illustrates a diversity of needs depending on the student, location, the field of interest and thesis topic (Trudgett 2011, pp. 391–2).

This research also found that most students prefer an Aboriginal and Torres Strait Islander supervisor where their research deals substantially with Indigenous subject matter (Trudgett 2011, p. 391).

⁹⁷ Survey information from IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011.

⁹⁸ Survey information from IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011.

While there were many instances of supervisors who were able to support student achievement, generally the ability of university supervisors to understand student needs in a culturally sensitive way was regarded as lacking. This suggests a need to better understand Aboriginal and Torres Strait Islander students in the university context.

Through consultations, the Indigenous Higher Education Advisory Council and PhD holders suggested that:

- Aboriginal and Torres Strait Islander supervision be a competency within a university's internal accredited supervisor training. Training should include information on the types of barriers Aboriginal and Torres Strait Islander students face and how supervisors can best support them.
- universities ensure that co-supervision arrangements are available for Aboriginal and Torres Strait Islander HDR students, utilising the appropriate Aboriginal and Torres Strait Islander expertise for the thesis. Aboriginal and Torres Strait Islander co-supervisors could support the application of appropriate epistemologies, data collection and working with communities. Consideration could also be given to having Elders and community members as co-supervisors.
- a national register of supervisors be developed listing researchers with the necessary skills to supervise Aboriginal and Torres Strait Islander research students
- better mechanisms be developed for Aboriginal and Torres Strait Islander students to provide feedback on support and supervision, such as student surveys and exit statements
- a national research supervision award be created to acknowledge outstanding research supervisors of Aboriginal and Torres Strait Islander research students.

The Panel believes it is critical that attention be given to supervision to ensure that Aboriginal and Torres Strait Islander HDR students receive the support they need to produce high-quality research that is able—should they choose—to engage energetically with Indigenous knowledges and perspectives. Supervisors also need to be provided with better models to embrace their role. This is particularly important as the vast majority of supervisors are non-Indigenous (Trudgett 2011, pp. 391–2).

Good practice models should be disseminated nationally, for example, through a national project on good practice supervision or through AIATSIS providing a role in supporting good practice for universities. The Indigenous Higher Education Advisory Council could also initiate an annual award for supervision of Aboriginal and Torres Strait Islander HDR students.

Building on existing efforts

The University of Melbourne's Aboriginal and Torres Strait Islander postgraduate summer school is designed to provide not just Aboriginal and Torres Strait Islander HDR students with introductory information but also their supervisors. Initially based on the summer school and mentoring program of the Academy of the Social Sciences in Australia, the University of Melbourne also provides cohort support

through its Postgraduate Summer Schools for Aboriginal and Torres Strait Islander Students initiative.

For universities and supervisors looking for guidance, the Lowitja Institute has produced a very comprehensive guide, *Supporting Indigenous researchers: a practical guide for supervisors*, which provides advice for researchers and supervisors on building culturally appropriate and ethical research approaches including supervision. Many Aboriginal and Torres Strait Islander and non-Indigenous researchers were consulted in the development of this guide.

Capacity building and cohort support for Aboriginal and Torres Strait Islander HDR students

Building capacity and cohort support for Aboriginal and Torres Strait Islander students is another key element in raising HDR enrolments and completions.

A number of submissions emphasised the importance of capacity-building courses, master classes and mid-degree support to both assist existing HDR students, as well as to build a pipeline of students prepared for HDR study.⁹⁹ The Indigenous Higher Education Advisory Council and many PhD holders indicated that there was a strong need to provide guidance to Aboriginal and Torres Strait Islander research students and supervisors.¹⁰⁰

Short programs or master classes were suggested. Issues to be covered could include information sharing among Aboriginal and Torres Strait Islander researchers in relation to Aboriginal and Torres Strait Islander research practices, for example, ethics, intellectual property issues and fieldwork practices. Dr Bronwyn Fredericks indicated in a private submission to the Review that a three-year competitive research funding program for young Aboriginal and Torres Strait Islander academics was needed to provide the training for HDR study and develop competitiveness for Australian Research Council and National Health and Medical Research Council grants.

Consultations with PhD holders also indicated the majority of HDR students experience a sense of isolation relating to time spent on research. For Aboriginal and Torres Strait Islander HDR students, this is compounded because often they are the only, or one of only a few, Aboriginal and Torres Strait Islander students undertaking HDR study at their institution.

In its submission, the Council of Australian Postgraduate Associations noted that:

[o]ne significant issue with completing research has often included a feeling of isolation from the Indigenous community following a period of study, particularly where the results are seen to be a Western recognition of knowledge, and thus causing separation from a candidate's community (submission no. 56, Council of Australian Postgraduate Associations, p. 8).

⁹⁹ IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011. Submissions from Group of Eight (no. 16); National Tertiary Education Union (no. 45); Australian Catholic University (no. 37); Bronwyn Fredericks (no. 48).

¹⁰⁰ Survey information from IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011.

A central part of support provided by the New Zealand Government to support Māori and Indigenous HDR students is the Māori and Indigenous program. This program both builds capacity in Māori and Indigenous students while providing means to connect with their student cohort nationally. New Zealand has had high levels of success in increasing the number of Māori and Indigenous New Zealanders with PhDs in the last two decades with the assistance of this network.

A national body to oversee the development of postgraduate students and a national online network for Aboriginal and Torres Strait Islander research students in Australia, along the lines of the Māori and Indigenous network in New Zealand, was suggested at a consultation with Dr Michelle Trudgett.

Indeed, a number of Australian universities are initiating cohort support approaches to support within their institutions, which provide important capacity-building and emotional support. For example, Queensland University of Technology's Indigenous Student Research Network and Postgraduate Research Capacity Program and James Cook University's postgraduate program appear to be effective cohort support models. A number of participants from the IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum and submissions to the Review provided particularly positive feedback regarding Queensland University of Technology's model (submission no. 48, Fredericks).

The Panel commends universities initiating cohort support programs for Aboriginal and Torres Strait Islander HDR students. The Panel encourages other universities to explore these approaches and consider how they might be able to share or implement similar strategies in their own institutions.

The Panel also notes that the Australian Research Council's Aboriginal and Torres Strait Islander Researchers' Network—expected to be operational in 2012—may assist in providing Aboriginal and Torres Strait Islander students with cohort support and capacity-building opportunities. The Australian Research Council is providing funding of up to \$3.2 million for four years under its Special Research Initiatives scheme, to be led by experienced Aboriginal and Torres Strait Islander researchers. The network's core functions will include building Aboriginal and Torres Strait Islander research capacity, mentoring new researchers and advancing research in Indigenous knowledge systems. A key objective will also be to improve the retention and completion rates of Aboriginal and Torres Strait Islander HDR students.

The network itself will have a dispersed presence, administered from a central 'hub' working with collaborative 'spokes' of Aboriginal and Torres Strait Islander researchers throughout Australia. Each spoke will be linked to a node. The network will have at least four nodes in two or more states and/or territories.

The Panel looks forward to seeing benefits from this national initiative.

Targeting Research Training Scheme funding for Aboriginal and Torres Strait Islander HDR students

The main source of funding for supporting the tuition costs of domestic students in universities undertaking HDR courses is the Australian Government's Research Training Scheme (RTS). The RTS is paid as a block grant to universities, which are provided significant autonomy in the administration of this funding, including determining the number of students supported through the funding provided (DIISR 2011a).

In 2010, 344 Aboriginal and Torres Strait Islander students received RTS funding, representing 1.0% of all students receiving RTS funding. In 2010, 9.3% of all Aboriginal and Torres Strait Islander HDR students receiving RTS funding received an Australian Postgraduate Award scholarship, compared with 24.1% of non-Indigenous HDR students (DIISRTE 2012a).¹⁰¹ Up to 2.2% of total RTS funding at 2012 rates for the RTS would be \$14.2 million from total funds of \$643.5 million.

As discussed previously, there is a clear imperative that Aboriginal and Torres Strait Islander HDR student numbers increase. Data also suggests that higher completion rates need to be achieved and thus that there needs to be greater focus by universities to ensure effective support.

There is some support in the sector for further RTS funding to be allocated to support Aboriginal and Torres Strait Islander students. The Group of Eight asserted that a proportion of funding for research training should be utilised to provide additional resources to supervision to ensure that this critical support is provided to students (submission no. 16, Group of Eight, p. 20).

Directing funding from their RTS allocation in line with the targets set for Aboriginal and Torres Strait Islander HDR student participation would allow universities to do more to support existing Aboriginal and Torres Strait Islander HDR students and provide a higher-quality research experience. This would also enable universities to more adequately support the research and development needs of students in the pipeline.

Universities will then report through the mission-based compacts on the use of RTS funding, including the strategies and outcomes to support Aboriginal and Torres Strait Islander people undertaking HDR study. It may be necessary to amend the RTS guidelines to take account of these changes.

A separate issue raised in consultations was the need to ensure that the real cost of fieldwork in communities is provided, as well as sufficient support for living costs and travel in ways that allow sufficient consultations with communities (whether this be via research training block grants or separate university research funding).

Consultations with Aboriginal and Torres Strait Islander PhD holders indicated that adequately resourcing fieldwork in regional and remote localities is an ongoing issue. As one PhD holder related:

Researching in rural and remote Aboriginal communities is expensive due to transport but also expensive in terms of time as building trust in the community is essential to the data collection ... I travelled to the remote Aboriginal community six months prior to conducting the fieldwork, as it proved impossible to obtain permission from the community to undertake my fieldwork over the phone and via email as they wanted to meet with me. This trip took five days and cost \$1100. At the meeting I was advised that I would be required to be in the community for approximately eight weeks. I had to seek additional funding for this from the university. I was fortunate and able to receive \$8,000 from a university fund to meet these expenses. I had to take

¹⁰¹ Based on Table A providers and domestic students only.

leave from work, while my family of seven got by on an Indigenous Staff Scholarship (Dr Peter Radoll, Australian National University).¹⁰²

The Review found it difficult to ascertain the size and scale of this issue and suggests that it be examined in the context of the current review of research training arrangements.

Targeting Australian Postgraduate Awards for Aboriginal and Torres Strait Islander HDR students

Financial support is critical for a HDR student to be able to undertake and complete a PhD. It is also a key lever to fast-track PhD completions, as without the necessary support, PhDs can take upwards of five years.

The Group of Eight and several other submissions outlined that better financial support, as well as the number of scholarships, should be increased to acknowledge the additional challenges faced by Aboriginal and Torres Strait Islander students.¹⁰³

A key mechanism for supporting Aboriginal and Torres Strait Islander HDR students is through the Australian Postgraduate Awards (APA) scheme. The scheme provides financial support for HDR students who undertake their research degree at an Australian higher education provider. These awards are provided as stipends at the rate of \$23,728 for 2012, which are available for a period of two years for a research masters degree or three years for a research doctorate (with the possibility of a six-month extension for a research doctorate). In contrast to non-government scholarships, subject to the agreement and capacity of the institutions concerned, an APA is transferable across universities and is not tied to a particular field of research.

Consultations and a number of submissions also highlighted that the award amount is insufficient to provide support for most Aboriginal and Torres Strait Islander students as most are mature age and supporting families; and that the three-year timeframe for duration of the award does not realistically allow the student to receive support through to completion. Curtin University of Technology stated in its submission:

It is highly unlikely that an Indigenous Honours graduate would apply to enrol in an HDR course without a scholarship. Indigenous HDR applicants tend to be older students supporting themselves and their families. The APA ... scholarships are insufficient for HDR students to do this, and financially represent a substantial reduction in expenses when compared to a working wage. In addition, the three-year duration of most HDR scholarships is unrealistic for students undertaking interpretive research, where it is vital to spend time building relationships with communities and research participants (submission no. 49, Curtin University of Technology, p. 6).

The total number of APAs supported within the system in 2010 was 8,352. In 2010, Aboriginal and Torres Strait Islander students accounted for only 0.4% of all APA students enrolled. The Panel supports a greater proportion of APA funding being

¹⁰² Australian National University consultations.

¹⁰³ Submissions by the National Tertiary Education Union (no. 45); Curtin University (no. 49); Council of Australian Postgraduate Associations (no. 56); Bronwyn Fredericks (no. 48); Group of Eight (no. 16); University of Queensland (no. 42).

used to assist Aboriginal and Torres Strait Islander HDR students given the need to increase participation and outcomes of Aboriginal and Torres Strait Islander people in HDR study. If, for example, 2.2% (the parity rate) of funding currently provided for the APA scheme was to be provided for Aboriginal and Torres Strait Islander HDR students, this would provide \$5.2 million in funds at 2012 rates (total funds for APAs in 2012 are \$236.6 million).

As with the allocation of RTS funding, the Panel believes that universities should allocate funding from their existing APA allocation to Aboriginal and Torres Strait Islander HDR students that is commensurate with their specified HDR targets. Universities will then report through the mission-based compacts on the use of APA funding. It may be necessary to amend the APA guidelines to take account of these changes.

Strengthened pathways to higher degrees by research for Aboriginal and Torres Strait Islander students

To increase the number of Aboriginal and Torres Strait Islander people undertaking a higher degree by research, universities will need to consider how they strengthen pathways to higher degrees from within the university, the workforce and the broader community.

Submissions and consultations indicated that there is a need for better preparation for HDR study for Aboriginal and Torres Strait Islander HDR students. In its submission, the Indigenous Higher Education Advisory Council emphasised that better research methodology training was needed prior to commencing HDR study and that this training should incorporate the particular requirements for Indigenous-related research and research practices that relate to ethics, intellectual property issues and fieldwork practices.¹⁰⁴ This was supported by a number of submissions and was also a recommendation of PhD holders at consultations.¹⁰⁵

In its submission, the Group of Eight emphasised the importance of universities strengthening pathways into HDR study from the workforce as well as developing supportive pathways for general staff (submission no. 16, Group of Eight, p. 7).

Indeed, some Aboriginal and Torres Strait Islander academics have been highly successful in developing research courses specifically for Aboriginal and Torres Strait Islander people from the workforce. In information provided to the Review Secretariat in 2011, Emeritus Professor Judy Atkinson states:

In putting together the Doctorate of Indigenous Philosophies, I became aware that you did not have to have an undergraduate degree for entry into the MBA, or DBA (Doctorate of Business Administration), but entry was considered on industry experience and an entry application (research proposal).

With the support of the school of business, I crafted a document to progress the Doctorate of Indigenous Philosophies through academic board, to allow entry to people who might have 20 years field

¹⁰⁴ Submission no. 73. See also the submission by the Council of Australian Postgraduate Associations (no. 56).

¹⁰⁵ Submission no. 56, Council of Australian Postgraduate Associations, p. 8; submission no. 22, Arnold & Peters, p. 1; consultations with PhD holders at the IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011.

experience in a government department, at a senior public service level, but no undergraduate degree.

Other postgraduate pathways can also provide important entry and re-entry points from the workforce that can lead to longer-term HDR studies. Universities may need to look at support to students in these courses. According to 2010 data, retention rates¹⁰⁶ for a number of postgraduate courses are the lowest of any course level. Retention in masters degrees and doctorates by coursework is 61.9% for Aboriginal and Torres Strait Islander people compared to 74.8% for non-Indigenous students. Retention rates are particularly low for Aboriginal and Torres Strait Islander students for other postgraduate courses (46.4%) compared to non-Indigenous students (63.3%) (DIISRTE 2012a).¹⁰⁷

Universities may also need to consider what strategies and pathways are needed to support community members with non-traditional backgrounds to undertake HDR study. A number of submissions referred to the need to support non-traditional pathways to recruiting Indigenous people into academia. For example, the Group of Eight in its submission indicates:

Entrenched educational disadvantage is another reason why universities will not be able to rely solely on conventional academic pathways to build an Indigenous academic workforce. On the other side of this coin, exclusive reliance on conventional academic pathways would exclude many Indigenous experts and practitioners in various fields whose perspectives would be very useful to university teaching and research, including those experienced in various professions as well as those with strong traditional knowledge (submission no. 16, Group of Eight, p. 22).

One submission also observes that good practice in conducting research with Aboriginal and Torres Strait Islander communities encourages the participation and development opportunities afforded by research in communities (submission no. 22, Arnold & Peters, p. 1).

Recommendations

Recommendation 20

That universities incorporate Aboriginal and Torres Strait Islander supervision in their planning and as a competency within their internal training for higher degree by research (HDR) supervisors, and consider, where appropriate, flexible co-supervision arrangements that provide for Aboriginal and Torres Strait Islander supervisors who are not necessarily academic staff in a university.

Recommendation 21

That the Australian Research Council consider conducting an early review of implementation of the Aboriginal and Torres Strait Islander Researchers' Network to ensure that it is appropriately targeting HDR students.

¹⁰⁶ Based on 2009 retention rates, i.e. 2009 students who returned in 2010.

¹⁰⁷ 'Other postgraduate' as defined in DIISRTE data includes postgraduate qualifying/preliminary, graduate/postgraduate diploma and graduate certificate courses. Based on Table A providers and domestic students only.

Recommendation 22

That the Australian Government work with universities through compact negotiations to ensure that they:

- allocate Research Training Scheme funding equivalent to a university's Aboriginal and Torres Strait Islander HDR student target to support Aboriginal and Torres Strait Islander research training and a pipeline of Aboriginal and Torres Strait Islander HDR students. Universities will need to report on their strategy and level of funding as well as report on outcomes through the compact.
- allocate Australian Postgraduate Award funding equivalent to a university's Aboriginal and Torres Strait Islander HDR student target to support the completion of degrees by Aboriginal and Torres Strait Islander HDR students and a pipeline of Aboriginal and Torres Strait Islander HDR students. Universities will need to report on their strategy as well as on outcomes through the compact.

4.3 Aboriginal and Torres Strait Islander research capability

The vision of this Review is that Aboriginal and Torres Strait Islander people are pursuing education and research across all fields and that both understanding of Indigenous knowledges and Aboriginal and Torres Strait Islander research capability are deepened.

There is considerable research undertaken in Australia that affects Aboriginal and Torres Strait Islander people across many fields, such as health, education, history, anthropology and the spectrum of sciences. However, comparatively little of this research is undertaken by Aboriginal and Torres Strait Islander people themselves.

This means Aboriginal and Torres Strait Islander people are not directing and guiding research to most benefit their communities. It means loss of opportunity in terms of the creation of new knowledge that may emerge from the interface between Indigenous and Western knowledge systems.

It also means a loss of ideas and human potential to undertake research in communities, and means that Australia is not experiencing the full social, economic and environmental benefits of its investments in science and research.

The Panel believes that the potential for the broader Australian research system to impact on the higher education outcomes of Aboriginal and Torres Strait Islander people is immense. This can be achieved in a variety of ways, including fostering in Aboriginal and Torres Strait Islander school students an interest and enthusiasm in research through work experience, capacity building, and agency targets for Aboriginal and Torres Strait Islander HDR students and early career researchers.

Supporting and fostering research produced by Aboriginal and Torres Strait Islander people is the critical element in realising this potential. This is the challenge for governments, universities and research organisations in a system where excellence is driven by the highly competitive nature of research funding. Strategies and approaches are needed that support Indigenous researchers to undertake research specifically relevant to Aboriginal and Torres Strait Islander people.



Current situation

While there is a great deal of research undertaken on Aboriginal and Torres Strait Islander people, the footprint of Aboriginal and Torres Strait Islander people on the world of research in Australia is small, except in small isolated programs such as Aboriginal and Torres Strait Islander fellowships. Individual researchers with research interests that intersect with Aboriginal and Torres Strait Islander communities occur across the system; however, these interests are ad hoc and relatively few outside of priority areas such as health and education.

At the university level, strategies to build Aboriginal and Torres Strait Islander research capability vary considerably. Currently there are only a few Indigenous research units at universities that are led by Aboriginal and Torres Strait Islander researchers. This situation further exacerbates the current low levels of Aboriginal and Torres Strait Islander research capacity.

What needs to change?

The Panel suggests a range of initiatives be put in place to support Aboriginal and Torres Strait Islander-led research. Australia's national research priorities need to appropriately value and enhance the contribution of Aboriginal and Torres Strait Islander people to research. Work is required to ensure that research practices when dealing with Aboriginal and Torres Strait Islander people are respectful of Indigenous ownership and knowledge and foster engagement and participation.

The Panel believes that there is a need for universities to adopt strategic approaches to supporting Aboriginal and Torres Strait Islander researchers and their research, considering elements of good practice identified in this report, and that these strategies should be reported throughout compacts.

Australia's universities need to give due consideration to ensure that Aboriginal and Torres Strait Islander students and early career researchers are well trained and competitive in selective research funding processes and that there are opportunities for high-quality research to be undertaken. Across all universities and research agencies, this involves recruitment and employment policies that foster development.

These elements of work should be part of a national approach that is visible and understood to drive outcomes.

Aboriginal and Torres Strait Islander research strategies in universities

In their *National best practice framework for Indigenous cultural competency in Australian universities*, Universities Australia and the Indigenous Higher Education Advisory Council have made four recommendations to support research involving Aboriginal and Torres Strait Islander people. These are:

- creation of an adequately funded Indigenous research strategy to build Aboriginal and Torres Strait Islander research capacity
- appointment of an Aboriginal and Torres Strait Islander senior executive or professorial-level position to lead and coordinate Aboriginal and Torres Strait Islander research
- identification of Aboriginal and Torres Strait Islander issues as key research themes within the university

- creation of mechanisms, guidelines and protocols to ensure that Aboriginal and Torres Strait Islander research is culturally safe and methodologically sound (Universities Australia 2011).

These are good starting points for universities. This high-level support is needed to change the culture of universities and ensure that Aboriginal and Torres Strait Islander research issues are part of core research business. Intentions and objectives need to be clear and visible to all staff to help turn Aboriginal and Torres Strait Islander research policy into appropriate behaviour and effective practice. Leadership within universities is particularly critical to driving change.¹⁰⁸

Quality of ethical research practices

Ethical research practice in research involving Aboriginal and Torres Strait Islander communities and their knowledge refers to the conduct of research that ensures that Aboriginal and Torres Strait Islander people and their cultural materials and knowledge are treated respectfully and that research is acceptable to all involved (Laycock et al. 2009, p. 12).

Importantly, ethical research practice ensures that the rights of Aboriginal and Torres Strait Islander people to their stories and knowledge is respected and the ownership over the products of the research is negotiated and agreed with community members at the beginning of the research process.

Fundamental to the practice of ethical research is that the research is undertaken in partnership with communities and that communities should be informed and consent to all phases of the research. The research should also be of benefit to the Aboriginal and Torres Strait Islander communities involved.

In the *National best practice framework* mentioned above, the Indigenous Higher Education Advisory Council and Universities Australia recommended that universities 'create mechanisms, guidelines and protocols to ensure that Indigenous research and research with Indigenous participants is culturally safe and methodologically sound' (Universities Australia 2011, p. 184).

The main sources of guidance in the research sector are the AIATSIS (2011) *Guidelines for ethical research in Australian Indigenous studies*, and the NHMRC's *Values and ethics: guidelines for ethical conduct in Aboriginal and Torres Strait Islander health research* (2003). The AIATSIS guidelines were reviewed in 2011 to reflect advances in practice, particularly in health and the social sciences, the impact of the digital era, and significant legislative changes impacting on treatment of Aboriginal and Torres Strait Islander cultures.¹⁰⁹

¹⁰⁸ As stated in submissions by the National Aboriginal and Torres Strait Islander Higher Education Consortium (no. 26); University of Newcastle (no. 28); University of Sydney (no. 33). It was also a key recommendation from the IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011.

¹⁰⁹ Recent developments in law and policy internationally include the adoption by the United Nations General Assembly in September 2007 of the United Nations Declaration on the Rights of Indigenous Peoples (UN 2007). It presents a significant incentive for countries to strengthen their mechanisms for recognition and protection of Indigenous rights. In the area of Indigenous cultural heritage, the adoption by UNESCO in October 2003 of the Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO 2003), and in October 2005 of the Convention on the Protection and Promotion of the Diversity of Cultural Expressions (UNESCO 2005) creates impetus to develop better ways of recognising and protecting Aboriginal and Torres Strait Islander intangible heritage. Australia supports the UN Declaration on the Rights of Indigenous Peoples (Human Rights and Equal

The uptake and support for ethical research practice is evident in broad terms wherever there is research being undertaken with Aboriginal and Torres Strait Islander communities, whether in universities or within competitively funded research. However, it appears that the quality of practice may be patchy across the system.

Consultations indicated, for example, that the methods used to approve research involving Aboriginal and Torres Strait Islander communities varies considerably across the sector. For example, the University of New England has a specific ethics panel to consider Indigenous research; and Charles Sturt University and Charles Darwin University have Aboriginal and Torres Strait Islander representation on human ethics committees. A number of other universities such as Flinders University and the University of South Australia require research proposals to be submitted to directors of Indigenous research areas. Some universities rely on ethics committee processes that are not specifically designed to consider issues relating to Aboriginal and Torres Strait Islander people. AIATSIS also has an ethics committee to review the ethical aspects of research projects, including ethical suitability and oversight as appropriate during the course of a project to be funded under the AIATSIS Indigenous Research Grants program.

The issue of culturally appropriate assessment of research is a critical one to ensuring that an Aboriginal and Torres Strait Islander world view is taken into account when assessing the quality and merit of a research project. To this end, the Panel recommends ensuring that there is a specific body linked to all university human ethics committees to assess Indigenous research drawing on expertise from Aboriginal and Torres Strait Islander people.

As indicated in the *National best practice framework for Indigenous cultural competency in Australian universities*, establishing dedicated subcommittees of human research ethics committees:

would stimulate Indigenous peoples to consider [the University] as a preferred education provider, especially at the post-graduate level, as Indigenous peoples would gain not only a greater sense of true cultural safety, they would also feel empowered to work within the framework of their own cultural intellectual paradigm (Universities Australia 2011, p. 98).

The National Health and Medical Research Council (NHMRC) Indigenous Grant Review Panels ensure that applications for research are assessed against the 'criteria for health and medical research of Indigenous Australians'.

The NHMRC strongly recommends the use of ethical research practices, with some mandatory elements, for example the construction of ethical relationships between

Opportunity Commission 2009), has invited submissions to consider ratifying the convention on intangible cultural heritage (Human Rights and Equal Opportunity Commission 2008), and has become party to the UNESCO convention on cultural diversity (Garrett 2009).

Aboriginal and Torres Strait Islander people and the research community, taking into account the principles and values of Aboriginal and Torres Strait Islander cultures.¹¹⁰

Feedback from submissions and consultations suggests that there is room for improvement in most universities and publicly funded research agencies and a need for further national conversations on what represents good practice.¹¹¹

Given this feedback, the Panel considers that there may also be value in an organisation such as AIATSIS extending its role to provide more formal guidance to universities on ethical research practice. This could include, for example, information on the AIATSIS website such as case studies and materials to assist Australian researchers.

Valuing and elevating Indigenous knowledge and Aboriginal and Torres Strait Islander research within the National Research Priorities

The Panel found there was support for increasing understanding of Indigenous knowledge and research as knowledge systems. This was evident in submissions from Universities Australia, the Council of Australian Postgraduate Associations, the National Tertiary Education Union, the Indigenous Higher Education Advisory Council, and a number of universities and private submissions; as well as in the Panel's consultations, including its consultative forum with Aboriginal and Torres Strait Islander PhD holders. Some argue for an equivalence of such knowledge systems and academic disciplines. As discussed earlier, the Panel identified this as a matter for debate among academics, not one on which it felt appropriate for the Panel to pronounce.

An important way to afford higher recognition of the value of research for and by Aboriginal and Torres Strait Islander people is through the National Research Priorities.

The National Research Priorities are a national statement of the outcomes that the Australian Government seeks to realise from publicly funded research. The 2011 *Focusing Australia's Publicly Funded Research Review* considered the National Research Priorities and found that they are generally appropriate as a broad articulation of Australia's key interests in public research. To continue to be relevant, however, the review concluded that the description of the National Research Priorities needs to be refreshed and, in particular, that the priorities should be augmented to better reflect the importance of the humanities, arts and social sciences disciplines to the national research enterprise.

A process to update and refine the National Research Priorities is underway (DIISRTE 2012d).¹¹²

A consultation paper, *Refreshing the National Research Priorities*, was released in February 2011. Among other changes, the consultation paper proposes the

¹¹⁰ Information provided by the NHMRC.

¹¹¹ For example, submissions by Universities Australia (no. 59); Council of Australian Postgraduate Associations (no. 56); Australian Catholic University (no. 37). It was also raised at the IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011.

¹¹² In 2011, the Australian Government undertook a review of the publicly funded research system to examine the degree to which the current public investment model for research is effective in meeting the government's aspirations, as well as to examine opportunities to further maximise the returns from the government's investment in research.

introduction of new priority goals on Indigenous knowledge and research and supporting the health and wellbeing of Aboriginal and Torres Strait Islander people.

The Panel supports the inclusion of priority goals on Indigenous knowledge, closing the gap and strengthening the capacity of Aboriginal and Torres Strait Islander people to deliver better outcomes for their communities.

Excellence of Research in Australia and measuring research impact

The Excellence of Research in Australia (ERA) initiative assesses research quality within Australia's higher education institutions using a combination of indicators and expert review by committees comprising experienced, internationally recognised experts (ARC 2011b). In 2010, the Australian Research Council conducted the first full ERA evaluation across all eight discipline clusters. Outcomes of the ERA 2010 evaluation, which applied to research undertaken between 1 January 2003 and 31 December 2008, were published in January 2011 (ARC 2011b).

In 2012, the eight clusters of disciplines for ERA evaluation are:

- mathematical, information and computing sciences
- physical, chemical and earth sciences
- engineering and environmental sciences
- biological and biotechnological sciences
- medical and health sciences
- humanities and creative arts
- education and human society
- economics and commerce.

'For the purposes of ERA, "disciplines" are defined as four-digit and two-digit Fields of Research (FoRs) as identified in the Australian and New Zealand Standard Research Classification (ANZSRC)' (ARC 2011a, p. 9).

The Review heard concerns of Aboriginal and Torres Strait Islander PhD holders during consultations that the ERA as a framework does not sufficiently provide for the assessment of research regarding Aboriginal and Torres Strait Islander people.

The National Tertiary Education Union's submission argues that Aboriginal and Torres Strait Islander research should be treated separately from ERA because it:

may not conform with Western research methodologies and protocols ... [and] is applied ... and motivated by achieving practical outcomes rather than prioritising publication in prestigious international journals (submission no. 45, National Tertiary Education Union, p. 8).

Whether or not one accepts this view, there is an issue in the counting of Indigenous research towards rankings. There are currently no two- or four-digit Fields of Research codes within ANZSRC pertaining to Indigenous-specific topics, and the ANZSRC therefore does not explicitly or separately identify research as relating to Aboriginal and Torres Strait Islander people.

A preliminary Australian Bureau of Statistics (ABS) review of its research classification system is due to be undertaken in 2013. The Panel notes that there

would be value in the ABS, in consultation with the Australian Research Council, considering the viability of including an Indigenous knowledge research code as a separate field of research to then be utilised in future ERA collections.

There are limitations in the sorts of adjustments that can be made to the ERA framework. However, as the ERA initiative is increasingly influential in driving support for research in universities, it reinforces a culture that gives priority to the production of research that is published in high-ranking journals.

There is a risk that while a number of universities have a focus on Aboriginal and Torres Strait Islander research, without levers to balance the ERA mechanism, such research may not receive sufficient ongoing support to make it viable or productive in the longer term, which could result in further degradation of Aboriginal and Torres Strait Islander research capacity.

Aboriginal and Torres Strait Islander research in its many forms has important value for communities.

The Panel supports effort to balance university research culture to ensure that the social, economic and environmental impacts of research are measured and valued along with excellence to ensure that Aboriginal and Torres Strait Islander research is appropriately valued and recognised.

It is relevant that the Research Workforce Strategy notes that a key factor that may discourage the transition of researchers between the broader workforce and higher education institutions is a lack of reward structures for non-academic research and innovation contributions.

The strategy also notes that the Australian Government will investigate metrics for measuring excellence in applied research and innovation activities in order to encourage research transitions between sectors. The government has accepted a recommendation from the *Focusing Australia's Publicly Funded Research Review* to conduct a feasibility study on possible approaches for developing a research impact assessment mechanism to evaluate the wider benefits of publicly funded research. The Panel supports these efforts to find additional system levers that will support better recognition and reward of Aboriginal and Torres Strait Islander research and researchers.

The Panel also notes that there are alternative ways to evaluate research and that these methods should be explored to ensure that the economic, social and environmental impact of research undertaken by Aboriginal and Torres Strait Islander people is taken into account when allocating funding for research. For example, New Zealand's Māori Knowledge and Development research evaluation model provides a system of performance evaluation and recognition of Māori knowledge (both traditional and contemporary) and research methodologies. A separate and dedicated Māori Knowledge and Development panel is used to consider and assess research where there is evidence of Māori world views across all research topics. The Panel would like to see this approach considered by universities, the wider research community and government in assessing the quality and impact of research.



Strategic approach to support Aboriginal and Torres Strait Islander researchers and their research

In 2012–13, the Australian Government will spend \$8.9 billion to support publicly funded science, innovation and research activities through funding to universities, industry research partnerships and to business for research and development (Australian Government 2012a). Australia's universities and publicly funded research agencies, the largest of which is the Commonwealth Scientific and Industrial Research Organisation (CSIRO), carry forward Australia's diverse and extensive research interests.

A strategic approach encompassing all of the national research system can complement and reinforce the work of universities. This approach has been discussed in the previous section.

Such a strategy could consider opportunities for publicly funded research agencies to significantly support Aboriginal and Torres Strait Islander researchers and their research. These include:

- establishing protocols for ethical research practices and community engagement adopting benchmark standards (discussed earlier in this section)
- recruitment policies fostering opportunities for Aboriginal and Torres Strait Islander people
- collecting data identifying Aboriginal and Torres Strait Islander people
- building on successful models and approaches to support
- promoting Aboriginal and Torres Strait Islander engagement in science through the work of Questacon and activities such as supporting work experience and placements and collaborative research models that build the capacity of Aboriginal and Torres Strait Islander people.

Research agencies can also make large contributions to fostering interest in science and mentoring both young people and new researchers. Dr Megan Clark, CSIRO's chief executive, remarked to the Chair of this Review during consultations:

The problem we have in supporting Aboriginal and Torres Strait Islander people into science careers is getting students with enthusiasm early enough to come here for example for work experience placements. High school science is desirable for study in the sciences so we need to get to students early. We can give lots of support and guidance once they are with us—and we can be pretty persuasive.

Building on existing efforts

CSIRO has an agency-wide Aboriginal and Torres Strait Islander engagement strategy to foster capacity and deepen engagement with Indigenous knowledges and perspectives. The four areas of the strategy are:

- a 2.5% target for Indigenous employment in CSIRO to be achieved incrementally

- engagement in research using ethical practice that benefits Aboriginal and Torres Strait Islander communities
- broadening the knowledge among scientists of Aboriginal and Torres Strait Islander people, issues and cultures in CSIRO
- education outreach to increase the participation and education outcomes of Aboriginal and Torres Strait Islander school-age children and beyond within science.

Questacon—the National Science and Technology Centre—has a vision for a better future for all Australians through engagement with science, technology and innovation. Questacon’s outreach programs take to the roads each year to bring science and technology to Australians across the country. Questacon ScienceLines is one of Questacon’s outreach programs dedicated to working with Aboriginal and Torres Strait Islander students, teachers and community members all over Australia. Questacon has developed and provided presentations and workshops for regional and remote Aboriginal and Torres Strait Islander communities since 1988.

Competitive funding arrangements

The Panel considers that competitive grant funding bodies should adopt strategic approaches to ensure that high-quality research by Aboriginal and Torres Strait Islander people is being fostered and encouraged. Strategies can be implemented to improve Aboriginal and Torres Strait Islander researchers’ ability to gain access to competitive funding without compromising quality or the merit-based principle.

The National Health and Medical Research Council and the Australian Research Council are well placed to reward research teams achieving results in capacity building for Aboriginal and Torres Strait Islander HDR students and early career researchers and to make funding options responsive to take advantage of successful team models and research endeavours. There needs to be sufficient flexibility within funding mechanisms to be able to direct funding to successful research team models and approaches.

The Panel notes the work of the National Health and Medical Research Council in this regard.

The National Health and Medical Research Council

The National Health and Medical Research Council has made considerable commitments to supporting capacity building and participation of Aboriginal and Torres Strait Islander people in research over a number of decades as part of its work to close the gap in Aboriginal and Torres Strait Islander health. Current approaches include:

- the development of a strategic roadmap for improving the health of Aboriginal and Torres Strait Islander people
- ensuring that a minimum of 5% of all research NHMRC funding is dedicated to Aboriginal and Torres Strait Islander health
- capacity-building programs for Aboriginal and Torres Strait Islander people
- an Aboriginal and Torres Strait Islander advisory panel that provides advice to the NHMRC on issues relating to research on Aboriginal and Torres Strait Islander communities

- a separate Indigenous Research Grant Panel that considers grants relating to Aboriginal and Torres Strait Islander health.

Since the launch of *The NHMRC road map: a strategic framework for improving Aboriginal and Torres Strait Islander health through research* (NHMRC 2002; see also NHMRC 2010), funding directed at Indigenous health research has increased from \$20 million in 2006 to almost \$44 million in 2011, representing 5.8% of research funded by NHMRC.

The NHMRC has, through its main council and Research Committee, implemented several aspects of its research funding schemes that support Aboriginal and Torres Strait Islander researchers. These additional elements of support include consideration of community and policy contribution, specific peer review processes and additional funding to enable travel to conferences or to support short-term exchanges for Postgraduate Scholarship holders and Early Career Fellows. In 2011, the Postgraduate Scholarship and Early Career Fellowship schemes awarded specific Indigenous Researcher grants.

In terms of its scholarships and fellowships, the NHMRC also takes into account the potentially different entry points to research that Aboriginal and Torres Strait Islander people might have experienced. For example, in applications from Aboriginal and Torres Strait Islander people, valuable information about applicants' knowledge and experience of Aboriginal and Torres Strait Islander health and community, as well as formal academic and research achievements, is sought. Community contributions made by Aboriginal and Torres Strait Islander people are also expressly recognised in assessments of an applicant's track record.

The NHMRC has also enacted a change in its approach to public release of publications, which has a beneficial application for Aboriginal and Torres Strait Islander communities in terms of ensuring that Aboriginal and Torres Strait Islander people are aware of and can benefit from research involving their communities. From July 2012, the NHMRC will mandate the deposit of publication outputs arising from NHMRC-funded research into an institutional repository within 12 months of publication. This brings the NHMRC into alignment with the practices of other international health and medical research funders such as the US National Institutes of Health, the UK Medical Research Council and the Wellcome Trust in the United Kingdom.

The Australian Research Council

The Australian Research Council's main source of targeted support for Aboriginal and Torres Strait Islander researchers is the Discovery Indigenous scheme. The scheme provides funding to support research programs led by Aboriginal and Torres Strait Islander researchers, build research capacity of HDR and early career researchers and expand Australia's knowledge base and research capability.¹¹³ The program in its various forms has allocated funding of \$9.45 million through 121 grants from 1996 to 2011.

¹¹³ Changes were made to the previous scheme and released as the Discovery Indigenous scheme in 2011 to better tailor the grants to meet the needs of Aboriginal and Torres Strait Islander researchers. Notably, a more flexible Discovery Indigenous award is now available at five academic salary levels to support researchers at all career stages. Also, the project leader must now be an Aboriginal and Torres Strait Islander researcher.

The Aboriginal and Torres Strait Islander Researchers' Network, recently established by the Australian Research Council under its Special Research Initiatives scheme, has the potential to fill an important gap and is likely to significantly contribute to the council's efforts to build the capacity of Aboriginal and Torres Strait Islander researchers.

The Panel suggests that there would be considerable value in the Australian Research Council examining the adoption of a strategic approach to capacity building for Aboriginal and Torres Strait Islander researchers across its funding programs. Such an approach could be used to drive greater contributions to research by Aboriginal and Torres Strait Islander people across all fields of research, as the NHMRC has done in health.

In examining a strategic approach, the Australian Research Council could consider:

- approaches to addressing current barriers to research outcomes for Aboriginal and Torres Strait Islander people (for example, assistance with grant application processes)
- the effectiveness of the revised Discovery Indigenous scheme and the Aboriginal and Torres Strait Islander Researchers' Network at regular intervals
- the appropriateness of availability of opportunities across scholarships and grant categories, and grant funding mechanisms to support Aboriginal and Torres Strait Islander researchers to achieve research outcomes
- identifying funding across funding categories (for example, Linkage grants could be considered to ensure that a diversity of opportunities exist for different Aboriginal and Torres Strait Islander researchers at different career points).

Increasing the amount of research undertaken in relation to Indigenous knowledges and perspectives by Aboriginal and Torres Strait Islander researchers

Consultations and a number of submissions supported the building of an Indigenous institute or centre of excellence dedicated to supporting high-quality Indigenous research.¹¹⁴ While concepts such as establishing an Indigenous centre of excellence or academy may have merit, the Panel strongly favours an incremental approach at this time, given the current lack of critical mass. The Panel believes that it is more important to focus on better support in universities and more focused capacity building for research in universities and across the research system.

Growing Aboriginal and Torres Strait Islander researcher communities is best undertaken across all universities, not just in isolated parts of the system. It is undesirable to divert effort from the excellent work already happening in the sector and other centres of expertise already being established such as the Australian Centre for Indigenous Knowledges and Education at Charles Darwin University and the endeavours of a number of other universities.

Contributions from the broader research system are also important. The two Cooperative Research Centres (CRC) that work with Aboriginal and Torres Strait

¹¹⁴ For example, submission no. 42, University of Queensland; and a number of participants of the IHEAC Aboriginal and Torres Strait Islander Academic Doctors' Forum, November 2011.

Islander people, the CRC for Aboriginal Health and the CRC for Remote Economic Participation, are excellent examples.

A 'hub and spoke' approach and a focus on building the capacity particularly of young Aboriginal and Torres Strait Islander researchers needs to be the current focus, building on successful models for supporting such researchers.

Building on existing efforts

The research model and outcomes produced by the work of the Telethon Institute for Child Health Research—led by Professor Fiona Stanley AC—in Aboriginal health in Western Australia are impressive. The institute received an NHMRC Capacity Building Grant in Population Health Research (*Not just scholars but leaders: learning circles in Indigenous health research*) of \$2.5 million in 2005 for a period of five years with the aim of graduating 10 Aboriginal doctoral candidates and supporting their postdoctoral experiences. Partly based on the outcomes being achieved, in 2010, the National Health and Medical Research Council awarded a grant (*From marginalised to empowered: transformative methods for Aboriginal health and wellbeing*) to fund the Centre for Research Excellence in Aboriginal Health and Wellbeing with a group of 10 chief investigators headed by Professor Stanley. This is a collaborative research venture between seven research institutions, and is funded with a grant of \$2.5 million over five years.

Through the work of the institute, four Aboriginal research participants have completed their PhDs through the Indigenous Capacity Building Grant. One participant is about to submit their PhD from the Centre for Research Excellence. Also, several researchers have gone on to set up independent research groups of their own as a result of the endeavours of the institute.

The Telethon Institute for Child Health Research attributes its success to:

- the assistance and support of the National Health and Medical Research Council
- Aboriginal research leadership and community partnerships
- strong and trusting partnerships with non-Indigenous colleagues to access expertise, support advocacy and mentoring
- non-Indigenous mentors and supervisors with cultural competency
- collaborative team models which provide Aboriginal and Torres Strait Islander HDR students and postdoctoral researchers to support each other
- the provision of professional development and research opportunities (for example, to attend international conferences or to undertake leadership courses)
- a culturally safe research environment and commitment to equal partnerships with Aboriginal communities.

The role of the Australian Institute of Aboriginal and Torres Strait Islander Studies

Since its establishment, the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) has helped build the capacity of a high-quality cadre of Aboriginal and Torres Strait Islander researchers through its research grant programs and fellowships such as the Indigenous Visiting Research Fellowship.

Its cultural collection represents one of the most important archives of Aboriginal and Torres Strait Islander artefacts in Australia. The histories contained in its collection have been critical for thousands of Aboriginal and Torres Strait Islander people and others seeking to learn about their heritage and connect with their families.

Under its legislation AIATSIS has a wide range of functions that include:

- conducting research in fields relevant to Aboriginal and Torres Strait Islander studies and encouraging other persons or bodies to conduct such research
- undertaking and promoting Aboriginal and Torres Strait Islander studies
- publishing research relating to Aboriginal and Torres Strait Islander studies
- assisting in training persons, particularly Aboriginal and Torres Strait Islander people, as research workers in fields relevant to Aboriginal and Torres Strait Islander studies
- establishing and maintaining a cultural resource collection consisting of materials relating to Aboriginal and Torres Strait Islander studies
- encouraging understanding in the general community of Aboriginal and Torres Strait Islander societies.

AIATSIS identified a number of challenges and opportunities relevant to the Review in its recent budget statements. Some of the challenges include:

- maintaining its capacity and reputation for conducting and supporting rigorous ethical, community-based research in Indigenous studies. As a publicly funded research institute, AIATSIS is uniquely placed in the nexus between Aboriginal and Torres Strait Islander communities, the research sector and public policy. Its reputation, built over 50 years, continues to set the standard for research in Aboriginal and Torres Strait Islander studies.
- maintaining commensurate levels of service in relation to requests for access and information generated from academia, Aboriginal and Torres Strait Islander communities and the general public, and compliance reporting
- suspension of the AIATSIS research grant program pending a review of the effectiveness of the funding and where the funding may be better utilised.

Some of the opportunities include:

- the increasing demand for AIATSIS to conduct research to underpin or support policy development, program design and delivery and evaluation. Requests for assistance from government and community far outstrip the institute's capacity.
- the success of the Indigenous Visiting Research Fellowships program, which has revealed the need for targeted support to facilitate Aboriginal and Torres Strait Islander participation in the research sector and the direct impact this can have on Indigenous research output and higher degree completion



- developing new tools and resources for access, repatriation and discovery of collections and information and developing information and educational material for schools and general public on Aboriginal and Torres Strait Islander issues. Digitisation of the institute's collections has generated advantages in the discoverability and reuse of its collection materials.

It is perhaps timely to consider how best to maintain the institute's unique place in developing Aboriginal and Torres Strait Islander academic and research activities and the relationship it has with universities.

The Panel recommends there be a review of AIATSIS to examine its future strategic direction, its role and functions, governance structures and levels of resourcing with a view to strengthening its capacity to preserve and disseminate Indigenous knowledge and support Aboriginal and Torres Strait Islander research. The review could also examine its role, including advisory roles, in relation to:

- supporting networks of researchers and HDR students
- providing services to universities, particularly in relation to supervision
- developing Aboriginal and Torres Strait Islander research capacity, particularly early career Aboriginal and Torres Strait Islander researchers and HDR students
- research on Indigenous knowledge and community-based research such as language collection and revival, family history, native title and other cultural information
- maintaining a digital collection.

As noted by AIATSIS, there may also be merit in the government working with the universities and AIATSIS on the future role of the Indigenous Visiting Research Fellowship (IVRF) program and the AIATSIS Indigenous Research Grants.

AIATSIS has offered support for PhD and research masters students and postdoctoral researchers since 2008 through the IVRF program. The objective of the fellowships is to support Aboriginal and Torres Strait Islander researchers to visit AIATSIS for short periods to further their research, access national collections, including that of AIATSIS, or to engage with current policy debates. Successful applicants are paid at Lecturer A or B level, taking into account their experience over and above their qualifications. Each researcher has access to research funds of up to \$8,000 per annum. The IVRF program is designed to complement, not compete with, university programs and supervision. The fellowships are predominantly accessed by postgraduate students and early career researchers requiring intensive supervision and coaching. The fellowships are regarded by many Aboriginal and Torres Strait Islander researchers as a successful model, meeting important needs. Many Aboriginal and Torres Strait Islander academics indicated, for example, lack of time to complete their PhDs and publish from their research because of heavy teaching loads.

The AIATSIS Indigenous Research Grants filled an important role in supporting research by Aboriginal and Torres Strait Islander researchers, for example, for work requiring large amounts of fieldwork in communities. The Panel notes that this program is not available in 2012. The role of this program should also be examined in the context of a review of AIATSIS.

Recommendations

Recommendation 23

That universities develop Aboriginal and Torres Strait Islander research strategies within their business planning processes, for inclusion in their mission-based compacts. Strategies should include increasing the number of Aboriginal and Torres Strait Islander academics with completed higher degrees by research and the use of ethical research practices when undertaking research involving Aboriginal and Torres Strait Islander communities.

Recommendation 24

That the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) provide more formal guidance to publicly funded research agencies, universities and researchers on ethical research practice. This could include, for example, information on the AIATSIS website of case studies and materials to assist Australian researchers.

Recommendation 25

That the Australian Government consider revisions to the National Research Priorities that recognise the importance of:

- closing the gap between Aboriginal and Torres Strait Islander people and all other Australians
- protection of Indigenous culture and knowledge.

Recommendation 26

That the Australian Research Council and the Australian Bureau of Statistics work together to create an Indigenous research code to better identify research relating to Indigenous knowledges.

Recommendation 27

That the Australian Research Council (ARC) examine the adoption of a strategic approach to building capacity in Aboriginal and Torres Strait Islander researchers across its funding programs, building on the experiences of the National Health and Medical Research Council. The ARC should examine:

- current barriers to winning competitive grants experienced by Aboriginal and Torres Strait Islander people
- whether available funding programs can better assist in supporting Aboriginal and Torres Strait Islander researchers achieve research outcomes, particularly early career researchers
- the performance of the new Discovery Indigenous scheme
- whether ethical research practices are sufficiently supported within its competitive grants and grant approval processes.

Recommendation 28

That the Australian Government undertake a review of the Australian Institute of Aboriginal and Torres Strait Islander Studies to consider how best to maintain the



institute's unique place in developing Aboriginal and Torres Strait Islander academic and research activities and the relationship it has with universities.



5 Supporting Aboriginal and Torres Strait Islander staff

Indigenous people do not come empty handed to Australia's higher education system but bring significant strengths, both in knowledge capital and human capital that enriches higher education in Australia (IHEAC submission to Bradley Review (Thomas 2008, p. 8)).

The Australian Technology Network's submission to the Bradley Review noted that the recruitment and retention of high-quality academic staff is 'the single biggest issue confronting the sector over the next decade' (ATN 2008, p. 14, cited in Bradley et al. 2008, p. 22). Workforce renewal in general, and specifically in replacing an ageing Aboriginal and Torres Strait Islander university workforce, is crucial for the continuation of a thriving university sector.

About a quarter of all submissions to the Review indicated that increasing the number of Aboriginal and Torres Strait Islander staff was critical to increasing access and outcomes for Aboriginal and Torres Strait Islander students (both undergraduate and postgraduate).¹¹⁵

The Indigenous Higher Education Advisory Council's submission to the Panel noted the benefits that flow from increasing the Aboriginal and Torres Strait Islander workforce within universities:

From the perspective of students, the Aboriginal and Torres Strait Islander [university] workforce provides education role models, helping young people to lift their aspirations towards going to university, doing well, and continuing on to further study. Similarly, in non-academic positions Indigenous staff members play a crucial role in creating a safe and inclusive academy for capable students who may not otherwise feel that university is the place for them.

At an institutional level, Aboriginal and Torres Strait Islander staff members enrich the content of their universities, exposing all students to different perspectives and modelling the forms of cultural competency needed by our graduates in contemporary Australia (submission no. 73, IHEAC, p. 9).

The Panel notes the importance of the recent National Indigenous Higher Education Workforce Strategy, which was prepared by the Indigenous Higher Education Advisory Council, endorsed by Universities Australia and launched in June 2011 (IHEAC 2011). The Panel's recommendations are consistent with the thrust of the strategy, which Universities Australia hopes will 'assist in bringing Indigenous staff to population parity by 2020' (submission no. 59, Universities Australia, p. 5).

The Panel believes that increasing the number of Aboriginal and Torres Strait Islander staff will involve two key strategies—universities 'growing their own' among

¹¹⁵ Twenty-six submissions raised issues concerning needs for further Aboriginal and Torres Strait Islander staff.

existing university staff, and recruiting new Aboriginal and Torres Strait Islander staff to join their teams. Universities will need to consider creative approaches to recruitment and back that up with positive retention strategies to avoid churn of staff through the workplace. Such strategies may include mentoring, professional development and flexible study leave options.

5.1 Growing and retaining the general Aboriginal and Torres Strait Islander university workforce

Current situation

The proportion of non-academic positions held by Aboriginal and Torres Strait Islander people is below parity and growing slowly

The report earlier highlighted the very low numbers of Aboriginal and Torres Strait Islander staff across the sector, representing 1.0% of all full-time equivalent staff. However, there has been some limited growth in the proportion of non-academic positions held by Aboriginal and Torres Strait Islander people (from 0.9% of all non-academic positions to 1.2% between 2004 and 2010) (DIISRTE 2012a).¹¹⁶

Staff face challenges in the workplace

Challenges confronting Aboriginal and Torres Strait Islander staff include the following:

- Aboriginal and Torres Strait Islander staff may 'by default' take on responsibility for Aboriginal and Torres Strait Islander matters outside their job description and duties (submission no. 16, Group of Eight, p. 8).
- Older women with children and other dependent family members often have insufficient support for these family responsibilities.
- The Panel received reports that suggested university staff continue to experience racism.^{116F117} The IHEAC National Indigenous Higher Education Workforce Strategy states that 'the burden of stress from racism that some Indigenous academics reportedly experience in their teaching roles ... needs to be acknowledged and addressed' (IHEAC 2011, p. 9). Students also report ongoing racism, with delegates at the National Union of Students 2008 Indigenous Student Conference saying that 'racism on campus is a stark reality' (submission no. 31, National Union of Students, p. 12).

What is being done to increase the numbers of Aboriginal and Torres Strait Islander staff at universities?

The National Indigenous Higher Education Workforce Strategy (NIHEWS) provides universities with a guide to help them develop their own Aboriginal and Torres Strait Islander employment strategies and employment targets with a particular emphasis on academic staff. The NIHEWS provides useful guidance for universities on core objectives and related actions to achieve their overall aim 'to bring the number and

¹¹⁶ Based on Table A providers and domestic students only.

¹¹⁷ According to a National Tertiary Education Union member survey, 71.5% of survey respondents had experienced direct racial discrimination and racist attitudes in the workplace and just over half (55.3%) had experienced racial discrimination and racist attitudes at the hands of their colleagues in the workplace (NTEU 2011, p. 4).

dispersion of Indigenous employees within the higher education sector to population parity within 10 years' (IHEAC 2011, p. 11). In particular, the Panel supports the emphasis placed on growing the numbers of academic staff and that deans of faculties should be held responsible for achievement of staffing targets within their individual performance plans and/or the university compacts (IHEAC 2011, p. 15).

Universities Australia reports that many universities have already established their own workforce strategies in alignment with the NIHEWS (submission no. 59, Universities Australia, p. 6). While some submissions suggested that the NIHEWS is too prescriptive and in need of a resourcing plan,¹¹⁸ the Panel notes that it is intended to be a guide only for universities and they should approach it as such.

As noted earlier, under the Indigenous Support Program guidelines, universities are required to have Indigenous employment strategies, although universities' reporting of them to the Department of Industry, Innovation, Science, Research and Tertiary Education appears to be weak. Many universities have developed Reconciliation Action Plans that include Aboriginal and Torres Strait Islander employment strategies and these must be publicly reported on annually.

The current Indigenous Staff Scholarships program provides scholarships to enable Aboriginal and Torres Strait Islander staff (both academic and general) to take leave from their employment to undertake 12 months' full-time higher education study in their chosen academic or professional area. Since their inception in 2004, a total of 33 scholarships have been awarded, with a maximum of five scholarships awarded in any one year (DEEWR 2011k, p. 34).

The Indigenous Staff Scholarships program is a small program and, as such, has limited capacity to make significant inroads into the overall level of participation of Aboriginal and Torres Strait Islander people in postgraduate education. However, the government may wish to address some issues identified within the department's review of the program regarding the lack of clarity of the program aims and internal inconsistency of the program guidelines.

The Australian Institute of Aboriginal and Torres Strait Islander Studies has also contributed to capacity building for Aboriginal and Torres Strait Islander HDR students and early career researchers through its Indigenous Visiting Research Fellowship program (discussed in further detail under *The role of the Australian Institute of Aboriginal and Torres Strait Islander Studies* in section 4.3).

What needs to change?

Despite the considerable efforts that universities have already made to boost their numbers of Aboriginal and Torres Strait Islander staff, more needs to be done to achieve parity targets for general staff across the sector. Building on the National Indigenous Higher Education Workforce Strategy and other actions, the Panel has focused its recommendations on specific actions to provide incentives to encourage more Aboriginal and Torres Strait Islander people into the higher education workforce, to grow and retain the number of Aboriginal and Torres Strait Islander staff across the faculties, and to develop their capacity to take up leadership and professional positions across all areas of university business.

¹¹⁸ For example, submission no. 16, Group of Eight; and submission no. 61, University of Western Australia.

Providing incentives to recruit and retain non-academic staff

To increase the recruitment of Aboriginal and Torres Strait Islander staff into non-academic positions, universities will need to build on good practice and develop creative opportunities to attract Aboriginal and Torres Strait Islander people into universities. Given the relatively low pay provided across the higher education sector, universities may need to offer different kinds of incentives and highlight the positive non-financial rewards of their workplaces to potential recruits.

Intense competition from the Mining industry affects UWA's (and other WA universities) ability to recruit and retain Indigenous students as well as Indigenous staff as both groups are intensely [targeted] for employment and salaries are high (submission no. 61, University of Western Australia, p. 3).

Through submissions and consultations, the Panel has learned of existing strategies that include offering cadetships, traineeships and targeted outreach programs. Once employed, further efforts will be required to retain staff and to help them progress into academic positions through initiatives such as providing professional development and flexible working hours for employees. The Group of Eight recognises that its member universities have a leading role to play in the formation of future academics and has highlighted that:

[u]niversities need to offer Indigenous general staff clear career pathways in the interests of retention and motivation (submission no. 16, Group of Eight, p. 7).

Building on existing efforts

Charles Sturt University has recruited 26 Indigenous trainees to general staff positions from local Indigenous communities. The trainees complete qualifications at Certificate III or IV level as part of a three- to four-year traineeship. The scheme has a 75% success rate.¹¹⁹ The University of South Australia provides professional development to its new Aboriginal and Torres Strait Islander staff and has an Indigenous employment strategy with a target of 2% of the university workforce being from Aboriginal and Torres Strait Islander background.¹²⁰

Creating opportunities through the Indigenous Employment Program and sector-based networks

There may be options for universities and the Australian Government to build on successful programs through the Australian Government's Indigenous Employment Program. Some universities have successfully used Indigenous Employment Program funding to grow their Aboriginal and Torres Strait Islander staff numbers. At the same time, government could share success stories from the Indigenous Employment Program across the university sector.

Supported by the Indigenous Employment Program, other industry sectors have established their own Aboriginal and Torres Strait Islander employment support networks. For example, the Business Council of Australia has an Indigenous network among its members for sharing ideas on what works in Aboriginal and Torres Strait

¹¹⁹ Statistics provided by Charles Sturt University.

¹²⁰ Information provided by University of South Australia.

¹¹⁸ For example, submission no. 16, Group of Eight; and submission no. 61, University of Western Australia.



Islander employment. A similar network exists within the communications and media industry, and the banking industry has made some efforts to provide industry-based training for new recruits across the major banks. While recognising that universities are competing to attract staff from the same potential pool of recruits, they may wish to consider establishing their own Aboriginal and Torres Strait Islander employment network to support success and share lessons learned.

A number of universities have accessed support through the Indigenous Employment Program to build their Aboriginal and Torres Strait Islander workforce and create cadetship opportunities for Aboriginal and Torres Strait Islander students. For example, the University of Western Sydney has already recruited 14 Aboriginal and Torres Strait Islander trainees and cadets in a range of positions from business administration through to human resource officers through the Indigenous Employment Program. A further 10 cadetships, six traineeships and five jobs were announced in March 2011. The university has increased its overall Indigenous employment levels from 15 staff in 2007 to 40 Aboriginal and Torres Strait Islander staff in 2011, and has set a target of 2.5% of employees being from Aboriginal and Torres Strait Islander backgrounds.

Supporting all Aboriginal and Torres Strait Islander staff in professional roles

It is important that Aboriginal and Torres Strait Islander staff are given every opportunity to build their careers as academics and professionals if they are to move into leadership positions and contribute fully in their chosen academic or professional fields. Rigney (2011, p. 11) and others¹²¹ have highlighted that Aboriginal and Torres Strait Islander academics often have to juggle their careers with additional representative and advocacy roles within universities. They may be asked to take on unpaid responsibilities and roles including:

- responsibility and/or consultation regarding the content and appropriateness of key institutional policies, procedures and programs and teaching, learning and research practices from an Aboriginal and Torres Strait Islander perspective
- providing advice to non-Indigenous staff to improve their cultural competency
- supporting Aboriginal and Torres Strait Islander students (and other staff) through their university experience.

Universities could reduce this burden through a range of strategies including growing the pool of Aboriginal and Torres Strait Islander staff.

Precisely because there are so few Indigenous academics, they can be overloaded for a wide range of Indigenous matters which are not really part of their job (submission no. 16, Group of Eight, p. 21).

The Panel considers that universities should also build their own cultural understanding and knowledge among all their staff rather than relying solely on Aboriginal and Torres Strait Islander staff in a 'division of labour rarely expected of other academics' (Rigney 2011, p. 11).

¹²¹ Submissions no. 16, Group of Eight, p. 23; no. 22, Arnold & Peters, p. 1; no. 35, Page & Asmar, p. 2; no. 45, National Tertiary Education Union, p. 7.

At the same time, the Group of Eight argues that Aboriginal and Torres Strait Islander academics could be further supported through mentoring opportunities for early and mid-career academics and that once again this should not be the sole responsibility of other Aboriginal and Torres Strait Islander academics:

Mentoring early and mid career Indigenous academics has to become everyone's business, that is, university business ... Emeritus faculty are still a largely untapped resource in this area. Universities should examine opportunities to involve emeritus faculty—including leaders in their fields—in mentoring Indigenous academics (submission no. 16, Group of Eight, p. 21).

The Panel supports this suggestion, noting that it is consistent with a whole-of-university approach and would, as suggested by the Group of Eight, sit alongside the 'especially valuable' mentoring that Aboriginal and Torres Strait Islander academics already provide to those less advanced in their careers.

5.2 Building the Aboriginal and Torres Strait Islander academic and research workforce

The capability of Australia's academic and research workforce directly impacts on Australia's social and economic prosperity. Academics and researchers are vital not only to professions but across the Australian economy to address critical environmental, economic and/or social needs and drive innovation in Australian businesses.

Current situation

The proportion of full-time equivalent academic staff who are Aboriginal and Torres Strait Islander people has remained largely unchanged between 2004 and 2010, at 0.80% (DIISRTE 2012a).¹²²

Rigney suggests that a range of strategies are required to increase the proportion of Aboriginal and Torres Strait Islander academic staff, highlighting that Aboriginal and Torres Strait Islander alumni are extremely underutilised and that despite increased incentives in past decades, still greater effort is needed to build the pool of Aboriginal and Torres Strait Islander lecturers and researchers (Rigney 2011, pp. 20–1).

The *Research skills for an innovative future: a research workforce strategy to cover the decade and beyond* report, released in 2011 (DIISR 2011b, p. ix), sets a 10-year strategy to ensure that Australia has a world-class research workforce to meet its strategic research and development needs.

An important element in the strategy to meet Australia's future research skills needs is increasing participation in the research workforce by underrepresented groups, including Aboriginal and Torres Strait Islander people.

In 2010, 61 Aboriginal and Torres Strait Islander full-time equivalent staff were employed in a research-only function, constituting 0.5% of research-only staff. To reach a representation of 2.2%, an additional 236 Aboriginal and Torres Strait Islander research-only staff would need to have been employed in 2010.

¹²² Based on Table A providers and domestic students only.

Most of the Aboriginal and Torres Strait Islander academic staff are female, older and in lower-level positions

In 2010, a greater proportion of Aboriginal and Torres Strait Islander full-time equivalent (FTE) academic staff were women, over 40 years old and in lower academic positions compared to non-Indigenous FTE academic staff. In 2010, 63.8% of Aboriginal and Torres Strait Islander FTE academic staff were women, compared to 42.6% of non-Indigenous FTE academic staff. Aboriginal and Torres Strait Islander FTE academic staff were older in 2010, with 76.0% aged 40 years and over compared to 42.6% of non-Indigenous FTE academic staff. Aboriginal and Torres Strait Islander FTE staff were most underrepresented at the higher classification levels and most represented in non-academic positions (65.8% Indigenous in non-academic positions as a proportion of all FTE staff, compared to 56.8% for non-Indigenous). While Aboriginal and Torres Strait Islander and non-Indigenous representation at lecturer (Level B) are at almost the same proportion, Aboriginal and Torres Strait Islander staff were proportionally underrepresented at the above senior lecturer level (7.0%, compared to 11.1% for non-Indigenous), senior lecturer (Level C) (6.2%, compared to 10.1% for non-Indigenous), and below lecturer (Level A) (6.7%, compared to 7.7% for non-Indigenous) (DIISRTE 2012a).¹²³

What is being done to grow Aboriginal and Torres Strait Islander academics and researchers?

There is evidence of strong commitment and innovative approaches being undertaken in the higher education sector to build the Aboriginal and Torres Strait Islander research workforce. The Review commends universities actively addressing this issue in their core business.

Senior executives of universities need to drive strategic and whole-of-university approaches to lifting the number of Aboriginal and Torres Strait Islander academics (for teaching and research) in universities.

Building on existing efforts

Many universities have already sought to 'grow their own' from within the university by targeting additional support and opportunities at final-year students, postgraduate research students and Aboriginal and Torres Strait Islander alumni. This approach recognises and rewards potential, with identified senior students undertaking activities that enhance their skills and experience and accessing a pathway to postgraduate study or employment at the university. The University of Newcastle, for example, has effectively driven such a strategy which has resulted in 2.4% of all staff being Aboriginal and Torres Strait Islander in 2011. In 2010, there were 26 Aboriginal and Torres Strait Islander academic staff.¹²⁴

The University of South Australia has implemented innovative staffing policies including a graduate program which recruits four graduates a year and provides a professional development fund for every Aboriginal and Torres Strait Islander academic.

A number of universities are using flexible entry pathways and mentoring initiatives to help fast-track promising Aboriginal and Torres Strait Islander research students into early career researcher positions. Strategies such as articulating research

¹²³ Based on Table A providers and domestic students only.

¹²⁴ Data provided by the University of Newcastle.

graduate certificates into higher degrees, linking research students with senior academics, and using commercial and community partnerships to encourage and support HDR students to take up research careers, appear to be getting good results.

Further information on these policies can be found in the case studies in section 13.4 of Part III.

What needs to change?

A number of submissions pointed to heavy teaching loads, the need to provide support for students, and representation responsibilities on university committees as leaving little time to undertake research.¹²⁵ Many submissions indicated that Aboriginal and Torres Strait Islander staff found it difficult to find the time to complete their PhDs on top of an already high workload and suggested that time release was needed to allow them to do this.¹²⁶ This was also a key issue raised during consultations with Aboriginal and Torres Strait Islander PhD holders. Survey results have also suggested that Aboriginal and Torres Strait Islander academics in Australia had larger issues with workload and more limited time for research than Māori academics in New Zealand (Asmar, Mercier & Page 2009, pp. 154–5).

Submissions and consultations emphasised that capacity building through networking opportunities and support programs were needed to build the skills of Aboriginal and Torres Strait Islander academics, for example on research methodologies, ethical practice and intellectual property issues, and grant writing.¹²⁷ Leadership, formal mentoring programs with senior staff members and other forms of professional development were also considered important.

The Indigenous Higher Education Advisory Council and a number of submissions recommended the introduction of a series of master classes to explore leadership and management roles, provide support for professional development, and provide guidance on best practice in Aboriginal and Torres Strait Islander knowledge and epistemology, and to promote general researcher skill development.¹²⁸

The University of Queensland recommended in its submission that a limited number of esteemed fellowships be offered to distinguished researchers working on projects of importance to Aboriginal and Torres Strait Islander communities.

Aboriginal and Torres Strait Islander research workforce national targets

As discussed previously, negotiating targets with the sector on Aboriginal and Torres Strait Islander academics will provide a high-level focus to building the research workforce.

Such targets for increases in Aboriginal and Torres Strait Islander staff should explicitly acknowledge strategies to ensure that staff have, or are being supported to, complete their research qualifications.

¹²⁵ Submissions no. 35, Page & Asmar; no. 45, National Tertiary Education Union; no. 48, Bronwyn Fredericks.

¹²⁶ Submissions no. 3, O'Donnell; no. 15, Grant; no. 22, Arnold & Peters; no. 26, National Aboriginal and Torres Strait Islander Higher Education Consortium; no. 35, Page & Asmar.

¹²⁷ Submissions no. 16, Group of Eight; no. 35, Page & Asmar.

¹²⁸ Submission no. 42, University of Queensland.

Recruiting academic staff through ‘growing your own’ and attracting new entrants

The Panel supports the National Indigenous Higher Education Workforce Strategy’s emphasis on growing the pool of Aboriginal and Torres Strait Islander people who are in academic positions. Given the limited pool of Aboriginal and Torres Strait Islander academics, and given that more Aboriginal and Torres Strait Islander staff are in non-academic positions, several universities have favoured a ‘grow your own’ approach to building their Aboriginal and Torres Strait Islander academic workforce.

This approach involves universities identifying students and non-academic staff for further study, providing university-based employment for identified students, and developing identified students as academics. Other options that universities could consider as part of growing their own staff would be to offer academic internships, time release and more flexible study leave provisions for their non-academic staff.

To recruit academic staff externally, universities could put more effort into selling the benefits of university life to potential recruits, as identified earlier for non-academic positions. While universities are unable to compete with the public sector, where many potential academic staff are likely to be located, they could promote other benefits. Academic staff may be attracted by the potentially higher level of autonomy provided within universities.

To support universities in building up their academic staff numbers, the Panel suggests that the government consider providing specific support for both ‘growing their own’ and for attracting academics into the higher education sector from other sectors. The first initiative would involve the government providing funding for staff scholarships at both the undergraduate and postgraduate level, beyond those that are already available. Universities could bid for funding for a staff scholarship with a position attached to it and, in return, the university would guarantee to provide a permanent academic position at the completion of the course by the staff member. Not all universities would necessarily seek to take up this offer because they may not be in a position to offer permanent employment.

The second initiative would be targeted at universities recruiting academics from outside the university. The government would make available funding for universities to provide a ‘top-up’ amount of salary when an Aboriginal or Torres Strait Islander academic employee transitions from a better paid job into the university (up to a specified limit). Such top-up funding could be made available for up to three years to help attract academics into universities and, again, could be subject to the offer of a permanent position at the end of that period.

Building on existing efforts

The University of Newcastle’s Indigenous Employment Strategy includes a ‘grow your own’ approach to developing staff that targets final-year Aboriginal and Torres Strait Islander students, postgraduate research students and alumni to provide pathways to postgraduate study or employment at the university.

Implementing an Aboriginal and Torres Strait Islander research workforce plan under the Research Workforce Strategy

Implementation of an Aboriginal and Torres Strait Islander research workforce plan for higher education was identified at Priority 7.3 in the government’s Research Workforce Strategy (DIISR 2011b).

A key contribution to this work has already been made by the Indigenous Higher Education Advisory Council's National Indigenous Higher Education Workforce Strategy. The strategy does not, however, include actions that specifically target the research workforce and further work is needed to address this particular area of the higher education workforce. Links with the broader national research system may be appropriate to note in any future iteration of the strategy.

A national strategic plan is critical to building the Aboriginal and Torres Strait Islander research workforce within the broader push to increase Aboriginal and Torres Strait Islander staff numbers in universities. To this end, the Review suggests that the Australian Government should work with stakeholders, including the Indigenous Higher Education Advisory Council, to implement a plan under the Research Workforce Strategy.

In addition, consideration should be given to fostering interest in university careers among Aboriginal and Torres Strait Islander members of the workforce. Initiatives that government might consider to boost Indigenous researcher numbers in universities include a targeted campaign and consultation process to promote HDR studies and academic careers to Aboriginal and Torres Strait Islander people already in the workforce. This could involve a coordinated strategy across the research sector, including federal, state and local governments, universities and publicly funded research agencies and institutions.

Recommendations

Recommendation 29

That universities develop strategies, informed by the National Indigenous Higher Education Workforce Strategy, to recruit, support and retain Aboriginal and Torres Strait Islander staff to meet the parity targets set by the Australian Government.

Recommendation 30

That the Australian Government bring forward work to implement an Aboriginal and Torres Strait Islander researcher workforce plan under the national Research Workforce Strategy.

Recommendation 31

That the Australian Government consider developing:

- a funding program to provide additional scholarships at both the undergraduate and postgraduate level to support universities' ability to 'grow their own' Aboriginal and Torres Strait Islander academic staff
- a 'top-up' funding program for positions for three years to support universities to attract new Aboriginal and Torres Strait Islander staff members to join the higher education sector.

6 University culture and governance

Research for the Review (3HFKHQNLQD \$QGHUVRQ 2011; Moreton-Robinson et al. 2011) and submissions to the Review¹²⁹ highlighted the need for cultural change within universities so that their governance structures and teaching and learning are inclusive of and influenced by Aboriginal and Torres Strait Islander expertise and perspectives. This kind of change requires universities to adopt a whole-of-university approach to Aboriginal and Torres Strait Islander involvement and success in higher education, where 'Indigenous strategy is integrated within the core business and accountabilities of the institution' (Pechenkina & Anderson 2011, p. 2).

Indigenous business has to become university business if issues of disadvantage at all levels of higher education are to be effectively addressed. This means that Indigenous issues must become a major part of the mainstream policy development and administration in Australian universities (submission no. 16, Group of Eight, p. 24).

There are several universities already adopting best practice approaches to achieving a whole-of-university approach to Indigenous success in higher education.¹³⁰ Universities can benefit from sharing lessons about these best practice approaches and supportive governance structures. However, given the distinctive nature of each university and their unique student profiles, universities must determine their own governance structures and cultural change processes. There can be no 'one size fits all' solution.

6.1 University culture

The culture of a university is generally developed through an institution's leadership, values, governance structures and approach to its core business of teaching, learning and research. Part of its organisational culture will reflect the perceptions and understandings of those within it about the inherent value of Aboriginal and Torres Strait Islander students, staff and researchers succeeding and actively contributing to the university at all levels. This culture, in turn, influences the attractiveness of the university to Aboriginal and Torres Strait Islander students and staff and how successful it is in supporting them.

Current situation

Universities can be culturally isolating

As outlined earlier in the report, university can be seen as a foreign place for Aboriginal and Torres Strait Islander students, particularly those who are the first in their family to go on to higher education.

¹²⁹ For example, submissions no. 49, Curtin University; no. 14, James Cook University; no. 20, La Trobe University; no. 24, Swinburne University of Technology; no. 21, the Minerals Council of Australia; no. 17, Government of South Australia – Department of Further Education, Employment, Science and Technology; and no. 6, Australian Indigenous Mentoring Experience.

¹³⁰ University of Newcastle; University of Technology, Sydney; University of Sydney.

A similar issue may arise for staff, particularly in situations where they may be the only Aboriginal or Torres Strait Islander staff member within a team.

Despite some universities taking action against racism, it continues to be an issue for Aboriginal and Torres Strait Islander students and staff

The report has outlined a range of factors that can act as barriers to Aboriginal and Torres Strait Islander students accessing and succeeding at university. Racism continues to be identified as one of those barriers, referred to in a number of submissions and research (Pechenkina & Anderson 2011, p. 4).

The report earlier referred to National Union of Students members' experience of racism that was voiced at the union's 2008 Indigenous Student Conference. Again, at the 2011 conference, participants said that:

little has changed. Indigenous students reported examples of (often unintentional) racist or culturally inappropriate behaviour from across the university: academic, administration staff, library staff, security staff and tutors (submission no. 31, National Union of Students, p. 12).

I had a difficult time dealing with the prejudice when I first started here in 2005. Admittedly it's just individuals within the system, most of whom sit at higher management within the system. I tend to use humour to get around prejudice (Jamilla Sekiou, Bachelor of Laws and Legal Practice, Flinders University).

Research conducted on the university experience of law students supports the views of the National Union of Students, arguing 'cultural disrespect, lateral violence and/or racial discrimination' are '[p]robably the biggest contributor to the high levels of attrition of [Aboriginal and Torres Strait Islander] law students within a university environment' (Rodgers-Falk 2011, p. 2).

The Panel notes the link between low participation and aspiration by Aboriginal and Torres Strait Islander people in higher education and 'fears of cultural isolation and experiences of racism on campus' (James et al. 2008, p. 52).

The ever present spectre of racism in Australian society marginalizes our people in their pursuit of educational success (submission no. 26, NATSIHEC, p. 2).

While noting the strength of views expressed in some submissions, the Panel acknowledges that the incidence of racism and prejudice and its management within university cultures will vary greatly and is far from a universal problem. In fact, the goodwill and engagement across the sector was more apparent to the Panel.

What needs to change?

Universities need to build their cultural understanding and have strategies to reduce racism

Notwithstanding the Panel's acknowledgment of the sector's general goodwill, universities need to be aware of how their culture impacts on the learning of students and the careers of staff and researchers. University culture needs to change to counter prejudice where it occurs and bridge the disconnection between cultures for a more inclusive environment (James et al. 2008, p. 53).

If Aboriginal and Torres Strait Islander people feel they belong and are in a culturally safe environment, they are more likely to not only enrol but to stay at university and achieve better outcomes. As outlined earlier in the report, Indigenous Education Units are often seen as providing a culturally safe place for students; however, the entire system needs to be seen as culturally safe, including for staff.

Some submissions made the case for cultural programs and/or cultural competency training for university staff as the best way to encourage cultural awareness across universities.¹³¹ Delivering cultural awareness education through the curriculum was also supported.¹³²

Cultural Competency training is vital to ensuring effective participation in enhancing the outcomes of Aboriginal and Torres Strait Islander education and knowledges in all aspects of university business (submission no. 28, University of Newcastle, p. 8).

The Universities Australia – IHEAC *National best practice framework for Indigenous cultural competency in Australian universities* is a useful guide for universities, as referred to earlier in the report.

The framework is designed to provide universities with the tools required to create culturally supportive environments for Aboriginal and Torres Strait Islander students and staff, while ensuring that non-Indigenous students graduate with the knowledge they need to provide ‘genuinely competent services’ to Aboriginal and Torres Strait Islander people and communities (submission no. 59, Universities Australia, p. 6).

The Framework is based upon the premise that the higher education sector will only find long-term success in increasing Indigenous participation and improved outcomes if it engages in substantial cultural change (submission no. 59, Universities Australia, p. 6).

The framework is underpinned by five guiding principles ‘which have been identified as key to the development of successful cultural competency policies and operations’:

Governance and Management: Indigenous people should be actively involved in university governance and management

Teaching and Learning: All graduates of Australian universities should be culturally competent

Research: University research should be conducted in a culturally competent way that empowers Indigenous participants and encourages collaboration with Indigenous communities

Human Resources: Indigenous staffing should be increased at all appointment levels and, for academic staff, should cover a wider variety of academic fields

¹³¹ For example, submissions by the University of Newcastle (no. 28); University of Western Sydney (no. 62); Universities Australia (no. 59).

¹³² For example, submission no. 37, Australian Catholic University.

Community Engagement: Universities should operate in partnership with local Indigenous communities and should help disseminate culturally competent practices to the wider community (submission no. 59, Universities Australia, p. 7).

In its submission, the National Union of Students recommended that cultural awareness training be provided for staff at universities and that universities recognise national Aboriginal and Torres Strait Islander cultural events. This would help build understanding and reduce racist behaviour, which the union noted may be unintentional but is still offensive (submission no. 31, p. 12).

Building on existing efforts

The *National best practice framework* contains a number of examples of best practice in cultural competency from universities around Australia. For example, Charles Sturt University, Griffith University and the Ngarara Willim Centre at RMIT University all contribute to the professional development of university staff in areas such as the effective teaching of and engagement with Aboriginal and Torres Strait Islander students, embedding Indigenous perspectives into the curriculum, understanding and respecting Indigenous knowledge, values and perspectives, and supporting student transitions. Charles Sturt University requires all staff to undertake formal and assessable Indigenous cultural competency training and is working toward ensuring that 'Indigenous curricula is designed and taught by Indigenous or culturally trained staff' (Universities Australia 2011, p. 117). The University of Newcastle has developed cultural competency workshops and has a commitment to achieving 75% staff attendance at cultural competency forums by 2015.¹³³ The University of Sydney celebrated NAIDOC (National Aborigines and Islanders Day Observance Committee) Week in 2011 and has a program of events for Reconciliation Week.

6.2 University governance

A whole-of-university approach to Aboriginal and Torres Strait Islander success in higher education will require not just cultural change but also change to the governance structures and processes within universities.

The Panel considers that a whole-of-university approach requires:

- everyone, not just Aboriginal and Torres Strait Islander staff or Indigenous Education Units, to be responsible for 'Indigenous business'
- staff at the highest levels within the university to be accountable for Aboriginal and Torres Strait Islander initiatives
- increased Aboriginal and Torres Strait Islander representation and influence at all levels within the university
- non-Indigenous members of the university to effectively and appropriately advocate on behalf of their Aboriginal and Torres Strait counterparts
- everyone within the institution acting in a manner that creates a safe and respectful environment, with instances where this does not occur being appropriately managed.

¹³³ Information from the University of Newcastle's Indigenous Education Statement.

These requirements are supported by the research and submissions received by the Panel.

To develop Indigenous business as core university business, governance must be inclusive of and influenced by Aboriginal and Torres Strait Islander perspectives, policies, objectives and targets (Moreton-Robinson et al. 2011, p. 33).

Our [Aboriginal and Torres Strait Islander people's] participation in educational decision making needs to be broadened and deepened. This is particularly important as we seek a greater level of participation in the governance of our institutions (submission no. 26, NATSIHEC, p. 2).

Current situation

During consultations, the Panel learned about a range of initiatives that universities have in place to shift their governance structures and processes towards a whole-of-university approach to Aboriginal and Torres Strait Islander success in higher education. However, commissioned research indicated that more needs to be done to develop a comprehensive whole-of-university approach with all the elements outlined above.

Currently, in most cases, responsibility and accountability for Aboriginal and Torres Strait Islander student outcomes are left to Aboriginal and Torres Strait Islander staff, Indigenous Education Units (Universities Australia 2011, p. 110; Moreton-Robinson et al. 2011) and lower-level staff without the influence or resources to drive a whole-of-university approach to Aboriginal and Torres Strait Islander success in higher education.

Most universities have sought Aboriginal and Torres Strait Islander representation within their governance framework; however, Aboriginal and Torres Strait Islander involvement is typically found in low-level/low-influence committees and Indigenous-specific committees with limited capacity. At higher levels, Aboriginal and Torres Strait Islander involvement is rare and/or limited (Moreton-Robinson et al. 2011, pp. 14, 33).

According to the Universities Australia submission, there is data that suggests a movement toward greater Aboriginal and Torres Strait Islander representation at higher levels, although current evidence suggests that these appointments tend to be made by 'convention and good will rather than being systemic, policy or process driven' (Universities Australia 2011, p. 110). In addition, the majority of institutions lack 'effective strategies for increasing participation of [Aboriginal and Torres Strait Islander] people in their institutional decision-making processes' (Moreton-Robinson et al. 2011, p. 33).

Where Aboriginal and Torres Strait Islander statements and policies do exist they are often:

[p]redictably ... yoked to equity and diversity plans. Indigenous Australians are corralled with other low SES groups without regard to First Peoples status as defined in the United Nations Declaration on the Rights of Indigenous Peoples and recognised in most universities' Reconciliation Statements (Moreton-Robinson et al. 2011, p. 8).



This lack of formality reduces the accountability, continuity and sustainability of Aboriginal and Torres Strait Islander representation and influence (Universities Australia 2011, p. 110).

What is currently being done to improve governance in universities?

Indigenous education strategies

A number of universities currently have Indigenous education strategies that aim to improve Aboriginal and Torres Strait Islander student recruitment, retention and outcomes.¹³⁴ Indigenous education strategies generally cover a commitment to reconciliation, cultural competency, embedding Aboriginal and Torres Strait Islander content and perspectives in university curriculum, objectives to improve the institution's recruitment and retention of Aboriginal and Torres Strait Islander students, Indigenous research objectives and key performance indicators to monitor the implementation of the strategy.

Some strategies (for example, Charles Sturt University) seek to align the institution's Indigenous education policies and activities with national Indigenous education policies, including the National Aboriginal and Torres Strait Islander Education Policy, as well as the institution's strategic plan and other key policy documents.

Other institutions that do not have a published Indigenous education strategy may articulate these goals as part of other university policies or strategic documents. For example, the Australian Catholic University's Indigenous Thematic Plan is a detailed document that articulates the institution's goals and targets in relation to Aboriginal and Torres Strait Islander staff and students. Additionally, Charles Darwin University has incorporated Indigenous education objectives into the institution's strategic plan, in line with a whole-of-university approach.

In the *National best practice framework for Indigenous cultural competency in Australian universities*, Universities Australia and the Indigenous Higher Education Advisory Council recommend that Indigenous education strategies should reflect and embed the framework's guiding principles, be inclusive of Aboriginal and Torres Strait Islander peoples and cultures, and reflect a commitment to meaningful engagement with local Aboriginal and Torres Strait Islander communities and organisations (submission no. 59, Universities Australia).

Reconciliation Action Plans

A number of universities have developed Reconciliation Action Plans. A Reconciliation Action Plan is:

a business plan that uses an holistic approach to create meaningful relationships and sustainable opportunities for Aboriginal and Torres Strait Islander Australians ... RAPs are also about embedding cultural change within a whole organisation through building good relationships, respecting the special contribution of Aboriginal and Torres Strait Islander peoples, and creating opportunities (Reconciliation Australia 2010).

¹³⁴ For example, CQUniversity, Charles Sturt University, Flinders University, Queensland University of Technology, University of Adelaide, University of Queensland, University of Technology, Sydney, University of Western Australia and University of Western Sydney.

Moreton-Robinson et al. note that Reconciliation Action Plans 'are often required to shoulder institutional objectives in ways that other corporate planning documents do not' (Moreton-Robinson et al. 2011, p. 32). It also appears that they are primarily the responsibility of the Indigenous Education Units rather than the truly strategic whole-of-university documents they are intended to be. That said, where Reconciliation Action Plans (or their equivalent) have been included in the standard annual plans and the planning cycle, their value within and influence on the whole of the university is higher (Moreton-Robinson et al. 2011, p. 2; Pechenkina & Anderson 2011).

Based on feedback during consultations and the commissioned research to the Review, the Panel suggests that if universities have, or intend to implement, a Reconciliation Action Plan (or equivalent strategic document), then they should detail:

- how the desired outcomes will be met
- who is responsible and accountable for meeting those outcomes (ideally staff at the highest levels of the university)
- key performance indicators against outcomes (ideally for staff at the highest levels of the university)
- measurable targets against outcomes (ideally independently verifiable).

The Panel also suggests that Reconciliation Action Plans should be incorporated into annual business planning cycle outcomes.

What needs to change?

Shifting responsibility and accountability for Aboriginal and Torres Strait Islander outcomes to senior university leadership

The Panel believes that a whole-of-university approach to the success of Aboriginal and Torres Strait Islander students and staff requires responsibility to rest at the highest levels, with appropriate accountability mechanisms for these senior positions across all areas of business. To be effective, accountability for success must rest at the highest levels within the university, including the vice-chancellor, deputy vice-chancellors, pro-vice-chancellors and deans.

To shift accountabilities, universities will need to:

- clearly articulate that responsibility for Aboriginal and Torres Strait Islander staff, students and researchers rests at the most senior levels across faculties
- ensure that the key performance indicators of the most senior positions include measures and targets that reflect these responsibilities.

The Panel also notes that, once accountabilities are set at the highest levels, they naturally flow through to lower levels and should spread across faculties.¹³⁵ Other factors that have supported success are the formation of strong links with the community and adequately resourcing senior staff that share responsibilities.

As part of this shift in accountabilities, the Panel expects that universities would increasingly include Aboriginal and Torres Strait Islander priorities and activities

¹³⁵ For example, the Australian National University Indigenous Education Statement refers to targets being set at the faculty level.

within their core policy and planning documents including their strategic plans, business plans and organisational policy documents. Targets and performance measures would similarly be included in these documents, where appropriate, and in other documents already referred to such as Reconciliation Action Plans. While some universities already have Indigenous-specific policies and strategies in place, the Panel would encourage universities to consider how to incorporate such strategies into their core planning and business cycle processes as some universities, such as Charles Darwin University, have done.

Building on existing efforts

Universities Australia's guiding principles for the development of Indigenous cultural competency in Australian universities point to the University of Newcastle, Charles Sturt University, the University of Melbourne, Queensland University of Technology and the University of Western Australia as best practice examples of universities that link key performance indicators with senior management performance.

The University of Newcastle, for example, links the following key performance indicators with the performance of its senior management:

- an environment free from racism
- improved access to higher education for Aboriginal and Torres Strait Islander people
- improved educational outcomes for Aboriginal and Torres Strait Islander people
- attraction and retention of Aboriginal and Torres Strait Islander staff
- linking of Aboriginal and Torres Strait Islander issues to teaching curriculums.

Greater representation and influence by Aboriginal and Torres Strait Islander people at the highest levels

The Panel recognises that increasing representation and appointing more Aboriginal and Torres Strait Islander people to senior positions of influence and decision-making bodies such as governing boards, councils and committees—that is, universities 'growing their own' internal cohorts—will take time.

Recognition of the work performed by Aboriginal and Torres Strait Islander people as valuable and contributing to the broader strategic aims of an institution is perhaps the most vital contributor to positive whole-of-university culture. For this to happen effectively their efforts need to be recognized within existing institutional mechanisms as well as within their local communities (submission no. 20, La Trobe University, p. 4).

During this growth phase universities could consider creative approaches such as the appointment of external Aboriginal and Torres Strait Islander professionals to positions within universities such as adjunct professor roles, visiting fellows and other consultative or representational positions. Universities could also adopt deliberate strategies to ensure that Aboriginal and Torres Strait Islander people are involved in appointment processes for these higher-level positions.

Strong representation of Aboriginal and Torres Strait Islander people at all levels of decision making should be accompanied by effective representation and advocacy by non-Indigenous people. For the university to be reflective of the 'Indigenous business is everybody's business' concept, its non-Indigenous members need to be able to engage and advocate appropriately (3HFKHQNLQD \$QGHUVRQ 2011, p. 19).

For non-Indigenous decision-makers to effectively and appropriately advocate on behalf of their Aboriginal and Torres Strait Islander counterparts, they need to be (more) familiar with 'contemporary issues in Indigenous higher education and the policies and programs that are needed to address disadvantage' (Pechenkina & Anderson 2011, p. 19) as well as have a high level of cultural competence (Universities Australia 2011).

Building on existing efforts

Steps have been taken within a number of universities to improve Aboriginal and Torres Strait Islander participation in university governance.

Indigenous education and employment strategies at the University of Technology, Sydney are overseen by the Vice-Chancellor's Indigenous Strategies Committee, which is chaired by the Senior Deputy Vice-Chancellor and comprises deputy vice-chancellors, directors of relevant units and Aboriginal and Torres Strait Islander staff in key positions. Implementation of the strategies is operationalised across the university by four subcommittees, each of which reports twice yearly on outcomes. This approach aims to engage as many senior staff as possible in the progression of Aboriginal and Torres Strait Islander education and employment.

A small number of universities have shown strong commitment to improving Aboriginal and Torres Strait Islander governance by appointing senior Indigenous positions within the university executive. Charles Darwin University led the way with the appointment of a Pro-Vice-Chancellor (Indigenous Leadership). Others now include a Pro-Vice-Chancellor (Indigenous Education) at the University of Queensland, a Pro-Vice-Chancellor (Equity and Indigenous) at Edith Cowan University, and a Deputy Vice-Chancellor (Indigenous Strategy and Services) at the University of Sydney. Such positions help to leverage influence within the university hierarchy and to effect change across the core activities of the institution.

Recommendation

Recommendation 32

That universities continue to develop and implement a range of strategies to:

- improve the cultural understanding and awareness of staff, students and researchers within their institution, including the provision of cultural competency training
- increase the number of Aboriginal and Torres Strait Islander people in senior management positions
- increase the number of Aboriginal and Torres Strait Islander people represented in the highest-level governance structures
- increase accountability of faculty leaders and senior management for achieving parity targets and improved outcomes.



6.3 Parity targets to be included in mission-based compacts

In the 2009–10 Budget, the Australian Government announced a reform package for the higher education sector that included mission-based compact agreements with Australian universities. The 2011–13 compact agreements provide a framework for universities to pursue their distinctive missions or strategic goals while contributing to the Australian Government's national objectives for higher education.

Compacts are three-year agreements between the Australian Government and 41 Table A and Table B higher education providers. Compacts provide a strategic framework for the relationship between the government and each university, and are also a mechanism for delivering performance funding. Compacts bring together information about a university's mission, teaching and learning, research, research training and public funding. They are the mechanism through which universities and government jointly agree on priority areas for action.

Currently, the compact framework requires universities to nominate one underrepresented group to set performance targets for domestic undergraduate students who are: from regional or remote areas, Aboriginal and Torres Strait Islander, people with a disability, or people from a non-English-speaking background.

The Panel recommends that the government and universities should negotiate stand-alone performance targets related to Aboriginal and Torres Strait Islander student and staffing levels within the mission-based compact negotiations. This approach was supported in submissions to the Review.

It should be noted that in the last 18 months a new higher education regulatory framework has been established. As such, Indigenous [staff] employment targets should also be a reporting requirement within the Compact processes ... (submission no. 45, National Tertiary Education Union, p. 13).

Goal 5: Develop a funding formula where higher education institutions are rewarded for recruitment, retention, time to completion, and overall success rates [of Aboriginal and Torres Strait Islander students] (submission no. 42, University of Queensland, p. 5).

The Indigenous Higher Education Advisory Council recommends that:

[t]he Government require all Australian universities to include improved outcomes for Indigenous people as a mandatory target, tied to performance funding, during the next round of Compact negotiations (submission no. 73, IHEAC, p. 11).

Under this approach, each university would negotiate the parity targets set out at the start of the report for Aboriginal and Torres Strait Islander students and staff, for both general and academic positions. In doing so, universities would take into account their differing starting positions regarding student enrolments, retention and completions, and current staffing profiles. The targets would also reflect the universities' differing geographic catchment areas.

The University of Sydney, in its submission to the Review, suggested that compacts need to go further and that there should be mission-based Indigenous strategy agreements that 'identif[y] this area of activity as a core strategic priority within [a university's] strategic plan' (submission no. 33, University of Sydney, p. 6). The Panel believes that the mission-based compact approach should help to encourage universities to see Indigenous success in higher education as a core strategic priority, part of everyone's responsibility and, therefore, reflected in strategic plans and a range of other institution-wide planning and performance documents. A similar approach has been used in New Zealand, where '[r]esponding to Maori is no longer an optional exercise or a question of goodwill but is closely linked to funding agreements' (Durie 2011, p. 162, cited in Penetito 2011, p. 10).

Recommendations

Recommendations 1 to 3 at the start of the report outline the overall framework for setting parity targets and negotiating these within mission-based compacts. Other sections of the report refer to specific targets within the mission-based compacts in more detail.

7 The way forward: an Aboriginal and Torres Strait Islander higher education strategy and evaluation framework

7.1 Development of an Aboriginal and Torres Strait Islander higher education strategy and the role of the Indigenous Higher Education Advisory Council

Strategies to improve access for Indigenous Australians into higher education need to be nested within a broader and more robust Indigenous higher education strategy (Anderson 2011, p. 4).

In conducting this Review, the Panel has aimed to build on the Closing the Gap agenda and other Indigenous education and broader development policies and action plans to drive stronger social and economic outcomes for Aboriginal and Torres Strait Islander Australians. It has argued throughout the report that increased efforts in Aboriginal and Torres Strait Islander higher education need to link in with existing efforts to improve Indigenous educational outcomes and Indigenous economic development.

The Panel believes that the next step in response to this report is for the government and universities, in close partnership with other sectors and Aboriginal and Torres Strait Islander academic leaders, to develop a coherent performance framework within an Aboriginal and Torres Strait Islander higher education strategy.

Such a strategy needs to articulate pathways from early school through to professions and set out short-, medium- and longer-term priorities and actions for government and others based on the recommendations in this report. The Panel notes that the development and implementation of this strategy will require leadership, partnerships and collaboration, and monitoring of progress in delivering outcomes. It will be important that Aboriginal and Torres Strait Islander academics across the sector provide their expertise and input into the strategy.

In this context, the Panel has considered the role that could be played by the Indigenous Higher Education Advisory Council (IHEAC). The council, now in its third term, is appointed by the Minister for Tertiary Education, Skills, Science and Research and is comprised of 10 Aboriginal and Torres Strait Islander academics and administrators. In 2011, IHEAC appointed a new member with expertise in Aboriginal and Torres Strait Islander issues at the school level to increase linkages between the schools and higher education sectors. Currently, this position is filled by a representative from the Victorian Aboriginal Education Association Incorporated.

Since its inauguration in 2004, IHEAC has provided policy advice to government on improving outcomes in higher education for Aboriginal and Torres Strait Islander students and staff relating to their participation, retention and progression both in

study and in employment. The council reports to the Minister for Tertiary Education, Skills, Science and Research.

The Panel believes that IHEAC can play an important role in responding to the recommendations outlined in the report and could provide leadership and advice on these matters.

The Panel suggests that to fulfil this role IHEAC would need a mix of skills and perspectives in its membership, reflecting the range of partners that should be involved in this collaborative effort. However, the Panel notes that these are matters for the Minister's consideration.

Recommendations

Recommendation 33

That the Australian Government work with the higher education sector, Aboriginal and Torres Strait Islander academics, students, communities and other stakeholders to develop an Aboriginal and Torres Strait Islander higher education and research strategy that responds to the recommendations of this report.

Recommendation 34

That the Indigenous Higher Education Advisory Council play a leadership role and an advisory role to the Minister on the development and implementation of the proposed Aboriginal and Torres Strait Islander higher education and research strategy in response to this Review.

7.2 Development of a monitoring and evaluation framework

To ensure the success of the proposed Aboriginal and Torres Strait Islander higher education strategy, a robust monitoring and evaluation framework will be required. In conducting this Review, the Panel required accurate data and evidence to assess the current situation, what needs to change and what is working well for Aboriginal and Torres Strait Islander people in the higher education sector. While considerable data was available through departmental program-based reporting to monitor progress, there was not always sufficient evidence to assess the overall success or otherwise of specific programs. In some cases, there were no independent evaluations of programs for the Panel to draw on.

The importance of research and quality evidence was emphasised in Warrior's research paper to the Review, *Native higher education in the United States and Canada: a report for the Review of Higher Education Access and Outcomes for Aboriginal and Torres Straits Islanders*. He noted the 'descriptive nature' of much of the literature on Indigenous higher education in the United States and Canada and argued that:

[w]hatever and however governments decide to intervene in Indigenous higher education, a critical component of that engagement is sustained research that tests the bases of programs (Warrior 2012, p. 23).

Universities currently provide considerable amounts of data to the government through student-based and program-based reporting; however, there does not

appear to be a strategic approach to how this information is being collected and used for monitoring and evaluation of Aboriginal and Torres Strait Islander outcomes. As noted earlier, there is duplication of effort across some program reporting by universities to government. COAG-based reporting is still being developed and there is limited data currently collected at this level that relates specifically to Aboriginal and Torres Strait Islander peoples' success in higher education.

An Aboriginal and Torres Strait Islander higher education monitoring and evaluation framework could complement the strategy and provide a more coherent and purpose-driven mechanism for data collection to feed into monitoring and assessing overall performance and success across the sector. The development of the framework would require close collaboration among universities, governments and COAG officials to reduce the risk of duplication of effort and to agree on purpose, appropriate sources and collection methods for data.

Current situation

COAG-based reporting

Almost all national-level reporting of outcomes for Aboriginal and Torres Strait Islander people is conducted within a framework originally endorsed by COAG in 2003 and subsequently revised in line with the 2007 National Indigenous Reform Agreement (Closing the Gap). The reporting framework is a 'living' structure in the sense that it is subject to revision in light of both new demands for monitoring and new evidence about the impact that government policies and programs are having on outcomes for Aboriginal and Torres Strait Islander people.

Also since 2003 the Steering Committee for the Review of Government Service Provision has published a series of biennial reports, *Overcoming Indigenous disadvantage: key indicators*. The reports contain information on progress towards the six COAG Closing the Gap targets, together with reports on a further six headline indicators of disadvantage and seven building blocks—strategic areas for action that are seen as underpinning any sustainable improvements in outcomes for Aboriginal and Torres Strait Islander people.

The *Overcoming Indigenous disadvantage* reports indicate that ongoing, coordinated work on data development continues to be done by Commonwealth and state and territory government agencies in consultation with stakeholders. Much of the focus of this data development work is on improving the quality of existing measures and on addressing recognised gaps in data coverage.

In the sphere of education, most of the indicators under the National Indigenous Reform Agreement relate to the primary COAG targets of early childhood education; reading, writing and numeracy; and Year 12 attainment. Although many of the indicator variables for Closing the Gap targets are related to later participation in higher education, participation itself is captured in the headline indicator 'Post-secondary education—participation and attainment'.

COAG also recognises that the indicators are interdependent and that '[f]ew of the COAG targets or headline indicators are likely to improve solely as the result of a single policy or a single agency' (SCRGSP 2011b, p. 4.2).

Departmental reporting

Universities currently report substantial additional information on their students to the Department of Industry, Innovation, Science, Research and Tertiary Education. For

each provider, the Higher Education Information Management System (HEIMS) records information including, but not limited to:¹³⁶ Commonwealth Higher Education Student Support Number; level of study; course of study; basis of admission; prior study; permanent address; and whether students identified themselves to the university as being of Aboriginal or Torres Strait Islander origin.

Based on the information reported, the department can derive other data regarding Aboriginal and Torres Strait Islander participation in higher education, including enrolments, retention and completions. These can be disaggregated further, for example, for specific time periods and geographic regions.

Data is also collected on staff employed by universities; and student applications, offers and acceptances to university through the Higher Education Information Management System.¹³⁷

Additional information, much of it qualitative, is available from universities' annual Indigenous Education Statements.

What needs to change?

Government should develop an Aboriginal and Torres Strait Islander higher education monitoring and evaluation framework

While a substantial amount of high-quality data is already collected from universities on a variety of outcome measures, data is not collected with a strategic focus on the *specific* outcomes for Aboriginal and Torres Strait Islander people. Most data that relates to outcomes for Aboriginal and Torres Strait Islander students is collected as part of a broader data collection process in which respondents or students are simply recorded as having identified themselves as being of Aboriginal or Torres Strait Islander origin. This collection approach may mean under-reporting by Aboriginal and Torres Strait Islander students, particularly if they do not see any relevant purpose to the data collection.

As a result, it may be difficult to determine in any detail the specific experiences of higher education of Aboriginal and Torres Strait Islander students *and* how it may differ from that of non-Indigenous students.

Therefore, the Panel recommends that a monitoring and evaluation framework be developed for assessing the progress in achieving outcomes for Aboriginal and Torres Strait Islander people in higher education. The framework would incorporate quantifiable measurement of progress on the specific targets referred to throughout this report, that is, the parity targets for Aboriginal and Torres Strait Islander students, staff and researchers. Progress would be measured at both a sector-wide level and institution level. Qualitative information could also be collected on issues affecting achievement of these targets and on the experiences of students and staff within the sector. The actual variables collected would need to be determined through consultations with the higher education sector. It would be important to ensure that the collection of any additional data was based on consistent definitions that could be applied across all universities.

¹³⁶ A complete list of the data items collected by HEIMS is beyond the scope of this document. HEIMS-HELP has complete information by year of data collection at <http://heimshelp.deewr.gov.au>.

¹³⁷ Around 120 HEIMS data elements are collected for each enrolled student, 22 for each staff member, and 48 for each applicant for admission.

The Panel notes that the Aboriginal and Torres Strait Islander Health Performance Framework that was endorsed by the Australian Health Ministers' Advisory Council in 2006 may provide a useful model. It includes information on health status and determinants of health for Aboriginal and Torres Strait Islander people and also on the performance of the health system.

Existing Indigenous Education Statements, which are currently used as the annual activity and financial reporting mechanism for the Indigenous Support Program, could be amended in collaboration with universities for use as a mechanism for annual reporting against performance targets. The statements currently provide the department with annual information on an institution's:

- objectives to improve higher education outcomes for Aboriginal and Torres Strait Islander Australians
- policies, strategies and activities in relation to the goals of the National Aboriginal and Torres Strait Islander Education Policy
- constraints that impact on the ability to achieve each goal
- plans for future improvement against each goal.

The Panel also notes the need to ensure that cultural and other barriers to the effective enumeration of Aboriginal and Torres Strait Islander people are identified and addressed. For example, universities should be encouraged to:

- align their questions about identification as Aboriginal or Torres Strait Islander with the Indigenous identification question in the national census
- explore different approaches to eliciting self-identification information (for example, emphasising confidentiality and outlining limits on the use of the information).

The Panel suggests, in the development of the monitoring and evaluation framework for Aboriginal and Torres Strait Islander higher education outcomes, that:

- suitable existing data collections be incorporated into the performance framework rather than duplicating these collections
- only essential new data be collected.

Recommendation

Recommendation 35

That the Australian Government and universities work together to:

- develop a national Aboriginal and Torres Strait Islander higher education monitoring and evaluation framework
- develop a set of standardised words to be used by universities, based on the national census's Indigenous identification question, when asking whether a person identifies as Aboriginal or Torres Strait Islander
- encourage Aboriginal and Torres Strait Islander students to identify themselves as such to their university.

Part III:

Lessons

learned



Introduction to Part III

The Panel consulted widely with the Australian higher education sector during the course of the Review. Thirty-nine universities were visited, and meetings were held with vice-chancellors, senior executives, staff and students. A clear message received from university leadership teams is their desire for more information on what other universities are doing, and what is working. The Panel used the consultations to collect information on current university approaches to Aboriginal and Torres Strait Islander education and research and to hear from those people most affected by the approaches.

Overall, universities have mounted a lively response to the challenge of getting more Aboriginal and Torres Strait Islander people into higher education and supporting their success while they are there. The purpose of this part of the report is to inform the reader about the sorts of initiatives that are currently being implemented and, importantly, to share information across institutions about lessons learned. Contributors were invited to share insights gained from their experience, in particular what they saw as the critical success factors and key challenges in implementing such programs.

This is not meant to be a comprehensive audit of Aboriginal and Torres Strait Islander programs. The initiatives highlighted represent a small part of the total effort underway across the sector. The Panel selected case studies that it felt highlighted the range of forces affecting Aboriginal and Torres Strait Islander education and research: from outreach into schools, VET colleges and prisons, through nurturing a home-grown professional and academic workforce, to collaboration with professional bodies to raise cultural competency in priority professions.

The Panel saw value in showing a sample of the range of approaches being progressed. Some of the initiatives are too recently introduced to be judged on their efficacy, but the Panel expects that this would be undertaken as a part of the university's normal evaluation and reporting processes.

The information provided has been collated from a range of sources, including publically available material and universities' written responses to requests for information. The universities' observations about their own approaches were used to identify challenges that might be faced in executing such approaches and factors critical to their longer-term success. Noting the number of initiatives highlighted and the nature of information collection, details on each initiative are necessarily brief. Readers interested in learning more about activities highlighted in this part are encouraged to contact the relevant university.

8 Whole-of-university approach

Some universities have adopted a strategic approach to Aboriginal and Torres Strait Islander education and research that extends across the university. The following are three examples of a whole-of-university approach.

The University of Newcastle

The University of Newcastle has achieved outcomes for Aboriginal and Torres Strait Islander staff and students that are approaching those for the non-Indigenous population, particularly in such high-priority areas as medicine, nursing and allied health services. They attribute their success to an approach that is embedded and supported at a whole-of-university level. Aboriginal and Torres Strait Islander outcomes are included as key performance measures in the university's strategic planning processes and supported by the university's executive committee.

The university's strategic plan prioritises Aboriginal and Torres Strait Islander collaboration and sets ambitious targets for Aboriginal and Torres Strait Islander student and staff participation. Responsibility for achieving these outcomes is shared across the institution, with all areas required to incorporate them into their own internal planning and reporting processes.

Strategies to support outcomes include a reconciliation statement and Reconciliation Action Plan that promotes connection with communities and ongoing collaboration. The statement is published in the university's strategic plan.

The university's Wollotuka Institute consolidates Aboriginal and Torres Strait Islander activities into a central facility, including the provision of both academic and student support. It works with other areas of the university to implement these activities and provide mentorship to Aboriginal and Torres Strait Islander staff and students. The institute is not expected to manage everything related to Aboriginal and Torres Strait Islander issues, but to act as an enabler. It provides a model of Aboriginal and Torres Strait Islander-led management and governance. Institute directors provide advice to the senior executive and are guided by the university's all-Indigenous Board of Aboriginal and Torres Strait Islander Education and Training.

The majority of Aboriginal and Torres Strait Islander-related research programs are led and undertaken by academics in the U Mulliko Indigenous Higher Education Research Centre within the Wollotuka Institute. This centre provides cultural, personal and academic support to students undertaking higher degrees by research, including financial support, access to research facilities, professional development workshops and assistance with conference attendance.

An Elder-in-Residence program is funded to support students and staff, and to guide liaison with the university community. The position is currently funded for 20 hours a week for a two-year period.

The university examines needs within the community and determines and develops courses to fit these needs. For example, Aboriginal Studies was changed to a Bachelor of Aboriginal Professional Practice and has attracted demand for work placements. The university is also trying to build the science base. A team of seven people works with families, students, schools, and local community organisations and councils. The team organises guest talks, barbecues, campus tours and

workshops. Aboriginal and Torres Strait Islander content is embedded in courses across all faculties, particularly in health, education, law, social work and environmental science. The university has set a target for 350 courses to contain Aboriginal and Torres Strait Islander cultural knowledges by 2015.

The university has a range of school outreach activities, including *Making Education Goals Sustainable* (for Year 5 to 7 students), programs run across the state for Year 7 to 12 students, a mobile education unit providing rural outreach, and summer schools in mathematics and science (for Year 9 students, particularly those at risk of dropping out of school and from disadvantaged backgrounds). Students are employed on a casual basis to help with outreach and role model work, including cadetships in the faculties and secondments from the Wollotuka Institute to external organisations. The university works with final-year undergraduate students on building aspirations. Students are tracked through outreach programs on a database.

Other activities include the expansion of scholarship support through the Indigenous Business and Industry Scholarships, and development of a pre-medical program for Aboriginal and Torres Strait Islander people seeking entry into the Bachelor of Medicine—Joint Medical Program.

University of Technology, Sydney

The University of Technology, Sydney has introduced a whole-of-university approach to Aboriginal and Torres Strait Islander education, student support, research, employment, teaching and learning through the Indigenous Education Strategy. The Indigenous Education Strategy is the primary planning and implementation document regarding Aboriginal and Torres Strait Islander education at the university. This multi-year document hangs off the Strategic Plan and sets out specific initiatives to progress the plan's objectives.

The Indigenous Education Strategy is driven by the Indigenous Education Committee and establishes four subcommittees to address four target areas. Each subcommittee is chaired by a senior academic. The strategy allocates responsibility for implementation to deans, deputy vice-chancellors and pro-vice-chancellors, as well as the Vice-Chancellor and senior Aboriginal and Torres Strait Islander staff.

The strategy resulted from a review of one faculty and the realisation that effective change would not be achieved without a whole-of-university approach. It was also recognised that the Indigenous Education Unit—Jumbunna Indigenous House of Learning—could not be the sole driver of that change. Responsibility for student support, research, teaching, learning and employment had to be shared between the centre and the faculties. This approach now drives changes across the university.

The strategy sets benchmark targets for Aboriginal and Torres Strait Islander undergraduate and postgraduate student enrolment rates. These targets reflect state population parity and Aboriginal and Torres Strait Islander undergraduate and postgraduate progression and completion rates equal to those of other undergraduate and postgraduate students at the university. The strategy aims to ensure that all courses specifically offered to Aboriginal and Torres Strait Islander students are high quality, appropriately supportive, academically rigorous and aligned to the expectations of students and the requirements of potential employers. The strategy helps develop and promote research across the university. The strategy also aims to achieve Aboriginal and Torres Strait Islander staff employment rates that reflect the Aboriginal and Torres Strait Islander working population, and

Aboriginal and Torres Strait Islander retention rates and levels of seniority commensurate with the university's non-Indigenous staff.

The strategy can be found at: <http://www.gsu.uts.edu.au/policies/indigenous-education-strategy.html>.

The University of Sydney

A review carried out by the University of Sydney College of Health Sciences in 2005 recommended measures to strengthen Aboriginal and Torres Strait Islander enrolment and engagement across its five faculties. The university had seen improvements since its first outreach initiatives in the 1950s, but these had been neither consistent nor generalised.

A review commissioned in 2009 recommended that the university make Aboriginal and Torres Strait Islander education an 'area of core business for the entire University deserving of the status and infrastructure of similar areas such as learning and teaching, research, engagement with community and internationalisation'.

On the advice of a working group of deans and other senior officers, the position of Deputy Vice-Chancellor (Indigenous Strategy and Services) was created in 2011 and *Wingara Mura Bunga Burrabugu* – The University of Sydney Aboriginal and Torres Strait Islander Integrated Strategy was approved in 2012. *Wingara Mura Bunga Burrabugu* means 'thinking path to make tomorrow' in the Aboriginal languages of the Sydney region.

Wingara Mura reinvigorates the university's journey by focusing attention on reformist and innovative approaches to the challenges of Aboriginal and Torres Strait Islander higher education. It seeks to position the university as a uniquely Australian university and to make Aboriginal and Torres Strait Islander higher education, research and engagement core business, and not structurally, culturally or organisationally marginalised.

Wingara Mura rejects the discourse of disadvantage and instead builds on promotion of Aboriginal and Torres Strait Islander human rights, creation of opportunity and enrichment of people's capability to pursue a university experience that is of intrinsic and instrumental value and merit.

New admission pathways are being introduced to ensure that the university does not exclude quality students. The administrative burden on students and their families is being reduced. Better outreach is being developed, and wrap-around student services and support have commenced. Cultural competence will become a graduate attribute for all students. The university will address outdated or inappropriate cultural, systemic and behavioural barriers that impede access to study or work at the university.

Wingara Mura establishes targets for the university with respect to students, staff and research. More specific project milestones in other areas of reform will be identified in the design of local implementation plans.

Strategic targets include:

- over five years, the number of Aboriginal and Torres Strait Islander people studying at the university will double
- over five years, non-Indigenous student interest, engagement and knowledge of Aboriginal and Torres Strait Islander issues will rise by 50%

- within four years, an Aboriginal and Torres Strait Islander academic staff complement of 75 will be employed and 97 Aboriginal and Torres Strait Islander staff will be employed in the general stream
- within four years, the number of staff and students engaged in research in Aboriginal and Torres Strait Islander issues will increase by at least 40%
- within four years, funding from all sources for research in Aboriginal and Torres Strait Islander areas will increase by at least 25%
- within four years, at least two international partnerships will be established to explore the Aboriginal knowledge journey with Indigenous peoples, relevant organisations and universities, research funding will be secured and research on the top 60% of identified research priorities will have commenced
- by 2015, all existing and new staff will undertake an approved cross-cultural training program.

The strategy acknowledges the significant role that faculties and professional service units play in designing commitments and setting targets relating to learning and teaching, operations and planning. These parties will be responsible for developing local implementation plans and the Office of the Deputy Vice-Chancellor (Indigenous Strategy and Services) will provide guidance. Each faculty or unit will establish a staff-based project team to support local implementation. It is expected that a senior staff member (dean or director) will act as executive sponsor. Sharing of information and experiences across the university will be encouraged. The Office of the Deputy Vice-Chancellor, the local project team and executive sponsor will review progress and continued relevance of strategies, until the transition to 'business as usual' has been achieved.

9 Unlocking capacity and empowering choices

9.1 Schools

The low number of Aboriginal and Torres Strait Islander students completing Year 12 with the knowledge and skill levels required for university entrance presents a major barrier to increasing the number of Aboriginal and Torres Strait Islander students in higher education. Aboriginal and Torres Strait Islander students are less likely than their non-Indigenous peers to consider university a realistic option. Programs that include mentoring and peer networks have the potential to support students to remain in school to the end of Year 12. Similarly, programs that provide a taste of university life can help potential students to consider university study and make a successful transition.

9.1.1 Critical success factors

Critical success factors include:

- pathways are clearly articulated, easy to navigate and promoted in partnership with schools and VET institutes
- students have an opportunity to experience university life and study before they commit
- mentoring and academic support are provided to schoolchildren, enhancing both their school outcomes and articulation into higher education.

9.1.2 Key challenges

Key challenges include:

- meeting the cost of providing individual mentoring and additional academic support, particularly for regional and remote students
- building aspirations of students to see university study as a viable option.

9.1.3 Examples

University of the Sunshine Coast – Headstart Program

The University of the Sunshine Coast's Headstart Program is a transition program aimed at enabling Year 11 and 12 students to study two subjects at university while completing secondary school and giving them a taste of university study. The program is available to all senior secondary school students and immerses them in university subjects across faculties, including subjects not available in the school curriculum. Headstart is designed to enhance students' knowledge, skills and school performance, while providing a new pathway to university study.

The program is targeted broadly at Year 11 and 12 students. However, it is promoted to Aboriginal and Torres Strait Islander students by Murri Pathways, a Queensland Department of Education, Training and Employment program that aims to increase

awareness of career options among Aboriginal and Torres Strait Islander students in Years 8 to 12.

Headstart introduces students to fellow students, staff and the campus, and gives them an understanding of a university workload, assessment requirements and how to access study support. Students engage in independent learning and are responsible for their own attendance and assessment.

Each university subject completed under the program contributes two credits towards the Queensland Certificate of Education and relevant university degrees. Those who complete Headstart are guaranteed admission to any University of the Sunshine Coast degree for which they meet prerequisite requirements.

The university's Buranga Centre tailors culturally appropriate academic and student support for participants, including the Indigenous Tutorial Assistance Scheme – Tertiary Tuition.

Queensland Consortium – a coordinated approach

Eight universities in Queensland and the Queensland Department of Education, Training and Employment are collaborating in a statewide effort to stimulate interest and widen participation in tertiary study by people from low socio-economic status and Aboriginal and Torres Strait Islander backgrounds. The universities are Australian Catholic University, CQUniversity, Griffith University, James Cook University, Queensland University of Technology, University of Queensland, University of Southern Queensland and University of the Sunshine Coast. The arrangement is underpinned by a memorandum of understanding.

The approach acknowledges the decentralised nature of Queensland's population and the large number of Aboriginal and Torres Strait Islander people and people from low socio-economic status backgrounds. It seeks to increase schooling, higher education and employment outcomes for these groups.

The approach is multi-layered and holistic. It builds on existing capacity in the Indigenous Education Units in the universities with an emphasis on local needs. It seeks to raise awareness of Aboriginal and Torres Strait Islander perspectives within the sector and address the issues of remoteness, access to information technology and trends in employment and education.

Project activities include university outreach to parents and communities, aspirational and academic support for school students (mentoring, personal development workshops, homework centres, on-campus camps, links with sports programs and social networking), preparatory and bridging programs and career advice for prison inmates, community education for adults, and capacity building for people working with students and communities.

9.2 Vocational education and training sector

The vocational education and training (VET) sector represents a pool of prospective students who could transition into higher education, although they may not have the academic qualifications required for direct entry from Year 12 to university. VET and higher education providers have a role to play in unlocking the capacity of Aboriginal and Torres Strait Islander students to use VET as a launching pad into higher education, particularly for students who have left secondary school without the academic qualifications necessary for university entry.

9.2.1 Critical success factors

Critical success factors include:

- support and aspiration programs offer easy-to-navigate pathways, for example through guaranteed entry into certain courses
- courses are adapted to fit students, rather than the reverse, and take into account prior study
- student transition into university study and life is scaffolded through peer support, mentoring and pastoral care.

9.2.2 Key challenges

Key challenges include:

- promoting collaborative approaches in curriculum development between the VET sector and universities
- tailoring higher education courses to meet the needs and experiences of each student, which can be resource-intensive
- providing required resources and support, such as technology and mentoring, to students who do not have access to on-site services.

9.2.3 Examples

University of Ballarat – TAFE2HE

The University of Ballarat is a regionally headquartered, dual-sector institution with both VET and higher education operations. The university's 'TAFE2HE' initiative provides education pathways for students wanting to study in their local region and community, and for those aiming for a career with a regional focus. Through TAFE2HE, students who have successfully completed their TAFE diploma or advanced diploma studies can articulate into university studies. Initiated in 2011, the program builds on existing pathways from TAFE to higher education in a range of disciplines and is expected to be the first step in a sustainable process for encouraging TAFE students to undertake further studies.

TAFE2HE seeks to build the aspirations of Aboriginal and Torres Strait Islander students by offering a simple and streamlined process for access and entry to university that does not require Year 12 university entry qualifications. Once they enter university, students can access individualised support programs, including Aboriginal and Torres Strait Islander peer group learning and student-based mentoring.

During the first week of December 2011, enrolment packs, including both a personalised application form and a reply-paid envelope, were mailed to all eligible TAFE graduates, including Aboriginal and Torres Strait Islander students. Around 1,200 TAFE students were offered a guaranteed place in a higher education program at the University of Ballarat, on the basis of having completed a pathway TAFE qualification. This included offers of a guaranteed place to 25 Aboriginal and Torres Strait Islander students. An initial review of the program will be conducted in mid-2012.

The program is part of broader VET-to-university pathway initiatives to support regional areas of Victoria. The University of Ballarat has received \$24.8 million under the Structural Adjustment Fund in 2011 to link with six regional Victorian VET institutes to teach industry-relevant degrees in underserved markets.

Charles Sturt University – TAFE pathways and partnerships

With 30% of commencing undergraduate students entering the university through VET, Charles Sturt University has developed VET-to-university pathways for people in their local communities, including Aboriginal and Torres Strait Islander students.

Building on its relationship with the TAFE sector, the university has established links with the rural community through the Parkes University Study Centre (sponsored by the university, the TAFE NSW – Western Institute and the Parkes Shire Council); a partnership with the TAFE NSW – Riverina Institute at Griffith and Wagga Wagga; and an Indigenous steering group with TAFE NSW – Western Institute to promote the participation and success of students in VET and higher education.

These partnerships provide Aboriginal and Torres Strait Islander people with increased exposure to educational opportunities. Key elements are VET-to-university pilot projects, community-based professional development, locally based community facilitators and a mentoring network with links to students and university programs.

In a student-centred and course-by-course approach, particularly suited to the needs of distance education students, the university tailors degree courses to take account of relevant VET course outcomes, so that graduates can be articulated into customised Charles Sturt University degree programs. Supporting students who experience difficulty in negotiating the contrasting institutional practices across two sectors has proven critical to student success.

The university has created a position, Manager VET Agreements, to support VET (including school) to higher education opportunities for people in rural and regional areas of New South Wales and nationally. The manager facilitates educational course and program development and delivery, and provides an increased number of articulation pathways across all faculties. The manager also facilitates research and educational partnerships with both private and public sector organisations and communities.

The University of Notre Dame – VET pathways in nursing and education

The University of Notre Dame is a dual-sector institution. Its Broome campus has developed pathways to enable students to gain VET and higher education qualifications. These pathways provide multiple course entry and exit points which give students the flexibility to leave with formal recognition at those points or to continue to higher education.

In 2012, the university introduced a new 12-month Foundation Year program, which offers students alternative entry to undergraduate studies. The program is suitable for students who have not studied recently or who do not meet tertiary entry requirements for higher education. It includes courses offered by the Schools of Education and Nursing. On completion of Education Support Certificates III and IV, education students are eligible to enrol in the Bachelor of Education (Kindergarten to Year 7). For students interested in nursing, a pathway starts with a VET in Schools Health Support Services Certificate II, followed by a Health Services Assistant Certificate III and a Diploma of Nursing (Enrolled/Division 2 Nursing)—this third

course provides entry into the Bachelor of Nursing – Enrolled Nurse Conversion course. Alternatively, students may enter directly into the Foundation Year program, which provides access to both education and nursing degrees.

In 2011, the Broome campus established a postgraduate program, commencing with four master's degree by research students, three of whom are Aboriginal women. Along with supervisory guidance, students receive administrative support and pastoral care from a postgraduate coordinator and the Indigenous Community Liaison Officer.

Queensland University of Technology – articulation into the Bachelor of Justice

In 2010, the Queensland University of Technology School of Justice signed a memorandum of understanding with Southbank Institute of Technology to offer a pathway from the Diploma of Justice (Aboriginal and Torres Strait Islander) into the university's Bachelor of Justice program. This arrangement is suitable for students interested in the fields of justice, policing and criminology. The institute's Diploma of Justice (Aboriginal and Torres Strait Islander) is specifically designed for Year 11 and 12 Aboriginal and Torres Strait Islander students. Upon completion of the diploma, students are offered direct entry into, and advanced standing towards, the Queensland University of Technology Bachelor of Justice course.

Students have access to finance, textbooks, computers and a range of other services through the university's Equity Officer. To enhance the prospect of successful completion, the students participate in a Pre-Entry Law and Justice Program for Indigenous Students, jointly run by academics from the School of Justice and School of Law and overseen by the Faculty of Law, Equity Chair and Equity Officer. Year 12 completion is not a requirement for entry.

9.3 Aboriginal and Torres Strait Islander workforce

Universities have a role to play in helping people in the workforce acquire new and deeper skills to improve their performance and productivity. The workforce is also a source for increasing the number of Aboriginal and Torres Strait Islander students in higher education as current workers in semi-professional roles seek higher education qualifications.

9.3.1 Critical success factors

Critical success factors include:

- employers support study through flexible working arrangements, paid study leave and scholarships
- teaching arrangements are flexible to the needs of students, through online delivery, block delivery and evening classes
- mentoring is available within the university, from peers or Aboriginal and Torres Strait Islander staff.

9.3.2 Key challenges

Key challenges include:

- getting employer support for Aboriginal and Torres Strait Islander staff to take time out to upgrade their qualifications
- overcoming the financial and time pressures for employed Aboriginal and Torres Strait Islander people who wish to engage in higher education.

9.3.3 Examples

Macquarie University – Master of Indigenous Education

Macquarie University introduced a new coursework Master of Indigenous Education program in 2012. The Master of Indigenous Education aims to fill a gap in postgraduate Aboriginal and Torres Strait Islander education and contribute to the university's blueprint for making Aboriginal and Torres Strait Islander education 'everybody's business'. Developed by Warawara – Department of Indigenous Studies, the program seeks to provide students with knowledge and understanding of Aboriginal and Torres Strait Islander perspectives and of policies, practices and issues relevant to Aboriginal and Torres Strait Islander education.

Targeted largely at school teachers, the Master of Indigenous Education program will develop advanced knowledge in education practices appropriate for interacting with Aboriginal and Torres Strait Islander people. It will also develop skills for teachers wishing to educate non-Indigenous students about Aboriginal and Torres Strait Islander people, culture and histories. The course includes two research units and is designed to offer a clear pathway to higher degrees by research.

Open to both Aboriginal and Torres Strait Islander and non-Indigenous students, significant components of the course are taught by Aboriginal and Torres Strait Islander staff. The program is delivered in distance mode, utilising recent technology. Each unit has an interactive electronic learning platform enabling students to access their lectures remotely, accompanying slide shows, reading materials and a forum to converse with one another. The platform supports professional networking by its students, including teachers in early childhood, primary, secondary and higher education.

The program can also be undertaken at postgraduate certificate and postgraduate diploma levels. The postgraduate certificate meets the NSW Institute of Teachers professional development requirements.

For the first cohort in 2012, the program enrolled 20 students, seven of whom were Aboriginal or Torres Strait Islander people, and many of whom resided in regional and remote areas. Early indicators suggest that the mid-year intake will attract a further 10 to 20 enrolments.

9.4 Correctional centres

Pathways to higher education may fall outside the traditional pathways from school, VET and the workforce. This section focuses on the provision of courses to Aboriginal and Torres Strait Islander people who are currently in the justice system. There are challenges in delivering education to this pool of students, including students' access to educational facilities and teachers, but there are significant benefits to be gained, both for the students themselves and for society. Aboriginal and Torres Strait Islander people are overrepresented in the justice system.

9.4.1 Critical success factors

Critical success factors include:

- senior staff within correctional centres support inmates' study
- modes of delivery are responsive to the barriers affecting students, including life circumstances and access to technology.

9.4.2 Key challenges

Key challenges include:

- providing ongoing support despite limited contact hours
- maintaining continuity, given the mobility of the incarcerated, who can be moved or released without notification to the university.

9.4.3 Examples

CQUniversity – correctional centres

Nulloo Yumbah is CQUniversity's Aboriginal and Torres Strait Islander learning, spirituality and research centre. It seeks to make university study accessible to Aboriginal and Torres Strait Islander people, both recent school leavers and mature-age people. The Tertiary Entry Program developed by Nulloo Yumbah assists students to acquire the skills (including literacy and numeracy), qualifications and confidence they need for university study.

Nulloo Yumbah specialises in the delivery of the Tertiary Entry Program in correctional centres as well as supporting inmates enrolled in other CQUniversity programs. This includes facilitating access to Commonwealth scholarships.

Many incarcerated students have complex backgrounds, which may include troubled home lives, low self-esteem, substance abuse and disengagement from education. Research undertaken by Nulloo Yumbah staff on the experiences of inmates in the Capricornia Correctional Centre has contributed to Nulloo Yumbah's understanding of the Aboriginal and Torres Strait Islander student's environment and barriers to educational achievement.

The structure provided in correctional centres, including access to quiet study areas and the potential for minimal distraction, can be advantageous for students who are in prison. In light of the difficult circumstances and other factors impinging on their studies, the university has adopted a flexible approach to assessment submission. Inmates in both undergraduate and postgraduate programs can access learning assistance, including provision of textbooks and study-related materials, through the Indigenous Tutorial Assistance Scheme – Tertiary Tuition.

Some inmates have graduated with a master's qualification and one is studying for a doctorate. The university has provided graduation ceremonies within prisons.

The University of New England – TRACKS Tertiary Preparation Program

The University of New England's TRACKS Tertiary Preparation Program provides Aboriginal and Torres Strait Islander students with an alternative pathway to undergraduate studies by assisting them to develop requisite foundation skills and knowledge. Often coming from non-traditional backgrounds, students include those who are the first in their families to participate in higher education, mature age, and

those who are incarcerated. Approximately 80% are from rural or remote areas and many are from low socio-economic status backgrounds. The program also provides opportunities for students with paraprofessional backgrounds to enhance their professional qualifications, including Aboriginal teacher aides and nursing aides. Students may receive Commonwealth and University of New England scholarships.

The TRACKS program embeds cultural knowledge in an academic framework and supports flexible learning—an approach that is particularly relevant to Aboriginal and Torres Strait Islander students. It assists students to develop academic skills necessary for university studies. TRACKS has had success in using Aboriginal and Torres Strait Islander pedagogy and in relating Aboriginal and Torres Strait Islander ways of learning to academic culture.

In 2010, TRACKS introduced a Pre-Orientation Program which helped increase participation. New off-campus and on-campus students can familiarise themselves with the university environment, and meet their lecturers and each other.

The TRACKS program is also offered in a distance education mode to Aboriginal and Torres Strait Islander men at the Woodford Correctional Centre in Queensland. The Oorala Aboriginal Centre's Aboriginal and Torres Strait Islander Campus Mentor visits the centre to provide student support and a tutor works with the students two to three hours a week.

Completing TRACKS has helped build inmates' self-esteem and confidence and has assisted them to find employment upon their release. However, if they choose to study for a degree after completing TRACKS, inmates are limited in the degrees they can complete while in prison and face many obstacles. These include lack of regular access to a computer and online course materials and assessment, and to practical classes. Certain professions are closed to people with a criminal record, including social work, in which there is a common interest.

9.5 Aspiration

Aspiration programs work with Aboriginal and Torres Strait Islander students to build their expectations of their own potential to progress to higher education and the professional workforce. Programs equip students with the skills, confidence and resilience to meet those expectations. The focus is on intervening at an early stage and sustaining a peer support structure for the duration of the student's schooling and higher education and beyond. These programs can bring about significant cultural change within universities and schools, and among non-Indigenous mentors. By showing Aboriginal and Torres Strait Islander students what success at school can mean for them, aspiration programs aim to make university eligibility and attaining qualifications the norm.

9.5.1 Critical success factors

Critical success factors include:

- intervention occurs early enough to influence subject choice and is maintained throughout school years
- professional pathways are promoted collaboratively by education, community and professional organisations

- positive images of Aboriginal and Torres Strait Islander students are presented to students, their teachers and the wider community
- families and key community members are involved in building aspiration
- curriculum and pedagogy are innovative and engage a young audience by connecting with their lived experiences
- peer support networks are built and maintained over time.

9.5.2 Key challenges

Key challenges include:

- securing long-term commitment and funding, when short-term outcomes are limited
- building the trust and confidence of students, their families and their communities
- getting information about aspiration programs out to students, their families and communities
- having few Aboriginal and Torres Strait Islander role models in science, engineering and mathematics
- overcoming low expectations held by teachers and schools
- meeting the high costs associated with engaging students and parents from regional and remote areas.

9.5.3 Examples

Aurora Project and the Charlie Perkins Trust – The Aspiration Initiative

The Aspiration Initiative (TAI) aims to increase opportunities and support for Aboriginal and Torres Strait Islander students to realise their potential at school, university and beyond. In 2011, following consultations in Australia and overseas (including primary research in the United States), and analysis of Australian high school and university participation data, TAI launched an academic enrichment program for Aboriginal and Torres Strait Islander high school students. A joint initiative of the Aurora Project and the Charlie Perkins Trust for Children & Students, the program aims to strengthen academic skills and build resilience and aspirations by providing students with intensive and ongoing educational and related support during holiday periods and throughout the school year.

TAI commenced concurrent pilot projects in New South Wales and Victoria in 2011 and will begin another in Western Australia in 2012. In each state, 30 students in Year 8 participate in the program, with clusters of three to five students selected from each of approximately eight schools. TAI works with the Indigenous education consultative bodies and the education departments in each state to identify the clusters of students. TAI spends at least 20 contact days with the students each year for five and a half years, from the middle of Year 8 through to the completion of their first post-school year.

A full-time state coordinator in each state is responsible for arranging the 20 days of academic camps and additional support, including tutoring, work experience in sectors related to students' interests and personal guidance. They also liaise with a

designated teacher from each school, whose role it is to assist and support students throughout the school term.

The program is being developed and implemented in partnership with Aboriginal and Torres Strait Islander education professionals and academics, local Aboriginal and Torres Strait Islander organisations and consultative bodies, and communities, schools, universities and state and federal education departments. The program is designed with teachers and other professionals experienced in the field of Indigenous pedagogy and gifted and talented education to provide a curriculum that integrates Aboriginal and Torres Strait Islander and mainstream perspectives, pedagogy and content.

Australian Indigenous Mentoring Experience

The Australian Indigenous Mentoring Experience Indigenous Corporation (AIME) runs a mentorship program designed to give Aboriginal and Torres Strait Islander high school students the skills and confidence to finish school at the same rate as all Australian students. The program has grown from one school, 25 high school students and 25 university student mentors in 2005 to over 1,000 high school students, 1,000 university student mentors and 10 university sites in three states.

AIME's philosophy promotes high expectations of Aboriginal and Torres Strait Islander students and positive conversations around Aboriginal and Torres Strait Islander education generally.

It offers an opportunity for Aboriginal and Torres Strait Islander and non-Indigenous university students to gain experience working with Aboriginal and Torres Strait Islander high school students and to learn about Aboriginal and Torres Strait Islander culture. The AIME program also enhances connections between universities and their local schools and communities.

At each site, AIME operates a Core Program and an Outreach Program. The Core Program targets Aboriginal and Torres Strait Islander high school students located within 30 minutes' drive of a participating university campus, and the Outreach Program is available to students within three hours' drive.

Throughout the school year, AIME runs a series of short mentoring sessions for Year 9 and 10 students at a local university campus, and a Year 11 and 12 Leadership and Development Program, comprising three full-day sessions on campus, focusing on Year 12 completion and transition to further study. It also offers tutoring for Aboriginal and Torres Strait Islander students in Years 7 to 12 at AIME Learning Centres and sends Tutor Squads to schools (each site may host up to five squads of five university students). In 2012, AIME commenced its Outreach Program, where students in Years 9 to 12 at schools outside the 30-minute radius of its Core Program participate in nine sessions spread across three one-day visits to the university campus.

In 2011, 787 students from three states participated in AIME and 36% of Year 12 students in the program successfully transitioned into university. AIME is working with the University of Wollongong and other partners to track the program's impact on a longitudinal basis.

Curtin University – Indigenous Australian Engineering Summer School

The Indigenous Australian Engineering Summer School has been hosted by Curtin University's Faculty of Science and Engineering for three years. Aboriginal and

Torres Strait Islander people are significantly underrepresented in the engineering professions. The summer school provides a challenging environment that demonstrates to students what it means to be an engineer and how engineering can help them and their communities.

The program runs for seven days on a residential basis. Each year 20 students with an aptitude for science and engineering are selected from across Australia. The students participate in engineering laboratory activities, site visits and lectures alongside Aboriginal and Torres Strait Islander student mentors and role models. These activities provide them with an insight into the various disciplines of engineering and related sciences. Students receive advice on study skills, scholarships, cadetships and alternative pathways into engineering at the tertiary level. Students have opportunities throughout the week to network with industry professionals.

An initiative of Engineering Aid Australia, the summer school has previously been run for 15 years in New South Wales. Given the need for engineers in Western Australia's resources sector and the drive from industry to engage Aboriginal and Torres Strait Islander engineers particularly in regional areas, Curtin Engineering sought to host the program and was supported in its bid by the Chamber of Minerals and Energy of Western Australia.

The first Curtin Indigenous Australian Engineering Summer School, held in 2010, was funded by the university with in-kind support from Engineering Aid Australia and the Centre for Aboriginal Studies. Following the first program's success, Curtin subsequently secured funding from Engineering Aid Australia to host the program again in 2011 and 2012. Since 2010, a number of industry stakeholders have become sponsors and supporters of the Curtin program, including BHP Billiton Iron Ore, Woodside, BG&E Engineering, GHD, Parsons Brinckerhoff, Sinclair Knight Mertz, Leighton Holdings, Main Roads Western Australia, Steel Blue, International Centre for Radio Astronomy Research and Wesfarmers.

The costs of travel, meals and accommodation are covered without charge. Participants are provided with scholarships from Engineering Aid Australia to assist them to successfully complete Years 11 and 12 and are supported on a pathway into tertiary studies in engineering. Industry provides a number of scholarships to assist with tuition fees associated with Curtin's Indigenous Pathway into Engineering program and engineering degree. Cultural support is provided by the Centre for Aboriginal Studies.

University of South Australia – Aboriginal Power Cup

The University of South Australia, through UniSA College, is a supporting partner of the Aboriginal Power Cup, an initiative of the South Australian Attorney-General's Department with the Port Adelaide Football Club, Santos and the South Australian Aboriginal Sports Training Academy in the Department for Education and Child Development.

UniSA College runs outreach activities and provides foundation and diploma programs to students who may not have previously considered tertiary education, bridging the gap between preparation and ability. The college and the university's Indigenous Student Services support the Aboriginal Power Cup by emphasising career aspirations and leadership skills.



The Aboriginal Power Cup was developed in 2008 as an early intervention strategy to engage young people at risk. Participants take part in sporting activities to encourage them to continue with their education and make positive life choices. Since the program's inception, its objectives have expanded to provide educational pathways linking to employment. All participating students are required to complete the South Australian Certificate of Education Integrated Learning subject by completing curriculum work throughout the program. Current and former Australian Football League (AFL) Port Adelaide 'Power' players and staff from the football club visit each school to talk about goal setting, career aspirations and life/work skills, and to conduct football drills and skill sessions.

The program culminates with a carnival in Adelaide including a football tournament, career expo, skill development workshops and cultural activities. The teams that play in the grand final are selected based on their school attendance and successful completion of the curriculum tasks as well as their performance on the field. The grand final matches are played as the curtain-raiser to a Power AFL game at AAMI Stadium, the Power's home ground.

Resources contributed by the university include the Health Sciences Van, which is staffed by human movement and physiotherapy students and used as a physiotherapy suite during the carnival. The university hosts a stand to promote further education options, and art and design students and university staff are involved in judging the guernsey design curriculum task sponsored by UniSA College. From 2012, the university aims to promote additional pathways from school to university by offering three scholarships for cup participants. In collaboration with the Port Adelaide Football Club and the Aboriginal Power Cup Steering Committee, UniSA College is exploring ways to offer targeted students access to the university's online tutoring service.

More than 280 students from 23 school sites took part in the cup in 2011. Of the 265 students enrolled in the Integrated Learning subject, 80% successfully achieved the unit, a 10 percentage point increase on 2010.

The University of Western Australia – Indigenous Science and Engineering Camp

The Indigenous Science and Engineering Camp is an annual residential program offered by the University of Western Australia's School of Indigenous Studies to Aboriginal and Torres Strait Islander students in Years 9 and 10. The camp is designed to encourage students to study science and mathematics through to Year 12 and to progress into university studies that lead to careers in science, engineering and technology. Twenty-five Aboriginal and Torres Strait Islander students attend the camp each year, a majority of whom come from regional areas of the state.

The camp includes cultural 'science' excursions, hands-on experiences in the science and engineering faculties on campus, information on science career options for students and parents, and interaction with Aboriginal and Torres Strait Islander science and engineering graduates and current students. A follow-up program of contact and engagement is provided in Years 11 and 12, as part of the School of Indigenous Studies residential study and careers seminars.

The camp commenced in 2008–09 with Australian Government funding as a school-to-university transition program. It has become an ongoing program of the School of

Indigenous Studies and articulates into the full range of the school's student support program.

The activities at the camp support students' learning styles and enable them to make the connection between their community life and science. They explore issues of concern to Aboriginal and Torres Strait Islander communities, including sustainability, ecology, energy and infrastructure. Following a session at the SciTech Star Dome, senior Nyungar ecological and cultural guides present a night session on Indigenous cosmology. This encourages students to combine cultural understandings of the night sky with the science of astronomy. A 'Green Chemistry' workshop breaks students into four groups (animal, plant, earth and water) and encourages them to see the link between science and country.

Year 9 participants interact with Aboriginal and Torres Strait Islander undergraduate science and engineering students at the university, who participate as supervisors and role models. The older students are able to share their own school experiences in science subjects, including the alternative pathways some of them took when they did not achieve satisfactory tertiary entrance results. Participants also hear from Aboriginal and Torres Strait Islander science and engineering graduates about the careers they have found in a wide range of science areas. The university is seeing an increase in science enrolments, as the first cohort from the Indigenous Science and Engineering Camp enter university.

9.6 Readiness

Enabling programs provided by universities offer an alternative pathway into higher education for Aboriginal and Torres Strait Islander people who have the potential to undertake higher education but did not achieve a tertiary entrance rank at school or who have not studied for some time. These programs smooth students' transition by introducing them to university life and building the academic skills and knowledge needed to succeed at the tertiary level. Some programs aim to build Aboriginal and Torres Strait Islander cohorts from remote and regional locations and in disciplines of particular relevance to those cohorts.

9.6.1 Critical success factors

Critical success factors include:

- preparation programs project an Aboriginal and Torres Strait Islander identity that assists students to develop a sense of belonging in the wider university environment
- intensive academic and pastoral support cultivates a realistic understanding of what university studies entail
- student readiness is maximised through tailored, flexible approaches.

9.6.2 Key challenges

Key challenges include:

- committing the resources required to deliver in regional areas in terms of staffing, logistics and student recruitment
- accommodating the high attrition rates that often result as students explore their capacity to transition to higher education



- supporting students from individual and community backgrounds that are not conducive to university study
- accessing financial support for students and their dependants.

9.6.3 Examples

The University of Adelaide – Wilto Yerlo University Preparatory Program

Wilto Yerlo, the University of Adelaide's Aboriginal and Torres Strait Islander academic and student support centre, offers foundation, enabling or bridging programs on the main city campus and is seeking wider enrolments from regional areas, including the Spencer Gulf region and Port Augusta. In 2012, Wilto Yerlo introduced the University Preparatory Program which aims to provide a pathway for, and preparation of, Aboriginal and Torres Strait Islander students to study for undergraduate degrees at the University of Adelaide. In early 2012, 20 students had enrolled in the program.

In providing Aboriginal and Torres Strait Islander students with pathways to study at the university, the program builds on the success of the previous Humanities and Social Sciences Foundation Program, which originated from an Australian Government policy designed to increase access to higher education for Aboriginal and Torres Strait Islander people. It also aims to increase pathway opportunities for Aboriginal and Torres Strait Islander people to engage with mathematics or science-based foundation studies and provides them with a background for studies across the faculties.

Over the past five years, the Wilto Yerlo Student Experience of Learning and Teaching system has shown a consistently high level of satisfaction with courses and teaching, including in the prioritisation of Indigenous knowledges and practices in teaching and across all its academic areas. The course structure and approach have been shown to reinforce Aboriginal and Torres Strait Islander cultural identity and develop student confidence.

Wilto Yerlo's academic team engages 'Reconciliation Pedagogy' that draws upon Western and Aboriginal and Torres Strait Islander knowledges. The course provides opportunities for Aboriginal and Torres Strait Islander staff members to teach and participate in the research environment at the university and Aboriginal and Torres Strait Islander postgraduate students are occasionally employed to tutor or provide guest lectures.

The University of Queensland – UQ College

In 2011, the University of Queensland established UQ College, a registered training organisation, at its Ipswich campus to provide alternative entry for groups new to higher education. The aim of UQ College is to create innovative pathways and optimise access to higher education, particularly for students from low socio-economic status backgrounds and mature-age students who wish to upgrade or re-engage with the education process.

By increasing participation, retention and completion rates, UQ College aims to boost students' employment and career prospects. It specialises in the delivery of tertiary preparation and support programs, and associate degree-level qualifications. At the end of its first year of operation in 2011, 21 students successfully graduated from the 28-week intensive program of study in tertiary preparation, equivalent to

Year 12 completion. Over 70% of the UQ College intake went on to enrol in bachelor-level degrees at the University of Queensland, the associate degree at UQ College or diploma-level programs with other providers.

In both the tertiary preparation and associate degree programs, UQ College has initially attracted a cross-section of students, including refugee, Pacific Island and Indigenous students. Aboriginal and Torres Strait Islander people account for around 15% of the programs' intake.

The University of New South Wales – preparatory programs

The University of New South Wales offers enabling programs for students who lack the qualifications for university admission—one in science, engineering and technology and one in the humanities. The Indigenous Preparatory Programs (Pre-Programs) are run in four-week intensive residential blocks. They provide a pathway for Aboriginal and Torres Strait Islander students to enter undergraduate programs in business, law, medicine and social work. Students are assessed throughout the program on their ability to participate academically in the discipline area, commitment to study, attitude and aptitude for university studies.

The Pre-Programs have been a core part of the university's activities for some years. The 2011 program marked the eighteenth annual program for law, fourteenth for medicine, tenth for business and ninth for social work. The Pre-Law Program has grown to be the largest of the four discipline areas. In 2011, 25 new students participated in the program, and 19 of those went on to study at the university in 2012.

The Pre-Law Program is designed to assist Aboriginal and Torres Strait Islander students develop the skills necessary to complete undergraduate studies in law. The program includes a simulation of the law school experience, and an introduction to university life and the study of law within a culturally appropriate environment. Attending lectures and completing assignments are included as realistic experiences of first-year study. Aiming to prepare participants for a mainstream education in law, program content includes an introduction to legal process, Indigenous legal issues, criminal law, legal writing and academic skills.

The Pre-Programs run at no cost to participants. The university's Nura Gili centre arranges all travel, accommodation, meals and study materials. The faculties coordinate the teaching and learning curriculum.

9.7 Access to information

Lack of information can present a barrier to higher education participation by Aboriginal and Torres Strait Islander people. In a demand-driven system, universities are expected to meet the information needs of disparate communities across diverse topics. Prospective students and their families and advisers must navigate a complex landscape to arrive at significant decisions about future study and employment. Web-based resources can facilitate decision making by providing essential information, including what subjects and study modes exist in the student's area of interest, what costs are involved, what financial and other support is available, and what career outcomes they might expect upon graduation.

9.7.1 Critical success factors

Critical success factors include:



- prospective students, and their families and advisers, can make informed choices regarding study and employment opportunities
- information is comprehensive and current and can be retrieved in a form that suits individual interests and circumstances.

9.7.2 Key challenges

Key challenges include:

- accurately assessing the information needs of a diverse student market
- finding the right balance between comprehensiveness and information overload

9.7.3 Examples

Aurora Project and the Charlie Perkins Trust – website and guidebooks

The Aurora Project and the Charlie Perkins Trust for Children & Students have collaborated to provide information about financial assistance available to Aboriginal and Torres Strait Islander Australians for undergraduate and postgraduate study in Australia and overseas. The information is targeted at school students and their parents, carers and advisers, and others considering university study.

In 2011, the Indigenous Scholarships website (www.indigenousscholarships.com.au) was launched to provide access to a database of over 300 scholarships offered by government and non-government organisations. The online database is searchable by keyword, level of study, institution, duration and area of study. Details provided for each scholarship include costs covered, value and frequency of payments, eligibility criteria, closing dates, selection criteria and contacts for further information.

Scholarships featured on the site range in value from \$500 as a one-off payment to \$100,000 during the student's time studying. Overall, these scholarships are potentially worth over \$40 million. They include scholarships for which only Aboriginal and Torres Strait Islander people are eligible, as well as broader equity and merit-based scholarships for which Aboriginal and Torres Strait Islander people are encouraged to apply. Scholarships cover a range of study-related costs, including university fees, accommodation and the purchase of books and equipment.

The website also provides news and resources for prospective students, including guidance on making the decision to commit to study, the costs involved and alternative entry pathways, as well as inspirational stories from Aboriginal and Torres Strait Islander university graduates.

Two companion volumes have been published in paperback and distributed free of charge via university Indigenous Education Units. They are the *Indigenous students' guide to postgraduate scholarships in Australia and overseas*, published in 2009, and the *Indigenous students' guide to undergraduate scholarships in Australia*, published in 2011. These guidebooks include personal reflections from successful graduates and current students about their experiences at university, information on alternative entry schemes and preparatory programs, and information to assist high school students and prospective mature-age students to decide whether study is for them. The postgraduate guide also includes information on general scholarships for study overseas and a number of scholarships that are only open to Aboriginal and Torres Strait Islander Australians (including the Charlie Perkins Scholarships for

study at the University of Oxford and the University of Cambridge and various Roberta Sykes Scholarships for study at Harvard University and other overseas universities).

In addition, the Aurora Project produces a monthly newsletter delivered via email to over 600 recipients that contains news, profiles and featured scholarships.



10 Aboriginal and Torres Strait Islander student success

10.1 Student support: a case management approach

Providing student support is an essential part of a university's role in ensuring that students enrol, stay and succeed at university. The relatively small size of the Aboriginal and Torres Strait Islander cohort in many institutions makes it possible to adopt an individually tailored case management approach to student support. This involves employing dedicated staff to manage the student relationship, including establishing contact with students, assessing their support needs, helping them to secure support and monitoring their progress.

10.1.1 Critical success factors

Critical success factors include:

- support staff maintain a one-to-one relationship with students throughout their studies
- support is holistic and meets the student's personal and academic needs, including integration into university culture
- staff across the university are culturally competent, particularly those who provide academic support.

10.1.2 Key challenges

Key challenges include:

- overcoming the shortage of appropriately skilled staff for student liaison roles
- recognising the need for secure resources within wider university workforce planning processes.

10.1.3 Example

University of Southern Queensland – Individual Tailored Student Support Program

The University of Southern Queensland's Individual Tailored Student Support Program is managed by the Centre for Australian Indigenous Knowledges. It offers integrated, holistic support to all enrolled Aboriginal and Torres Strait Islander students. Students are given the opportunity to choose the type, level and frequency of service they need to successfully complete their study. This model was first mooted in 2005 and commenced in 2008 with funding from the Equity Incentives Fund.

Under the program, student relationship officers are assigned to students to monitor progress and provide assistance at an early stage. Each officer has responsibility for students in a portfolio of faculties. Services include access to the Indigenous Tutorial Assistance Scheme – Tertiary Tuition and information on available scholarships. Students can also access emergency funds from the centre's non-salary budget, to

cover emergency accommodation, funeral costs and travel. First contact is made with students through the university email system and maintained throughout their studies. Each student is interviewed upon exit from the program and their study.

Student relationship officers maintain regular contact with students (approximately 300 in 2011). The university's Workforce Plan takes account of longer-term staffing needs and gives stability in the employment arrangements for these officers.

10.2 Regional and remote delivery

Regional and remote Aboriginal and Torres Strait Islander students can be prevented from accessing higher education by geographical, academic, family and cultural factors. They have special logistical, academic and pastoral care requirements. Universities are finding ways to accommodate these needs to increase the participation and retention of students, through the application of new technologies, provision of decentralised student support and creation of defined pathways from regional VET programs.

10.2.1 Critical success factors

Critical success factors include:

- flexible delivery modes are accessible
- students' financial, personal and academic needs are supported.

10.2.2 Key challenges

Key challenges include:

- ensuring that time and resources are made available to establish infrastructure in widespread locations
- accommodating the family responsibilities and limited capacity to travel of Aboriginal and Torres Strait Islander students
- gaining staff and student acceptance of technologies with which they are unfamiliar
- dealing with inadequate computer infrastructure, low levels of computer literacy and a lack of English language proficiency
- overcoming the shortage of accessible tutors with the knowledge and expertise in particular areas of study.

10.2.3 Examples

The University of Notre Dame – blended delivery model

The Broome campus of the University of Notre Dame first trialled online education software in a limited capacity between 2009 and 2010. This initiative led to the development of a blended delivery model between the Broome and Fremantle campuses in 2011 and includes traditional face-to-face teaching and online face-to-face teaching. Students in Broome and regional and remote students now have direct access to live lectures and tutorials from the Broome and Fremantle campuses. The blended delivery model offers students direct access to experienced staff and improved support regardless of where they live. This is particularly

important for the Broome campus and its work on reconciliation, equity for Aboriginal and Torres Strait Islander and regional students, and social justice.

The Broome campus has offered external studies since 1995, and has attempted to refine and enhance the learning experiences of external students. The blended delivery model was developed to further improve student access and support, diversify course offerings and make better use of financial and physical resources. The university met the financial costs of implementing the model.

The blended delivery model supports undergraduate and postgraduate students who live in towns and communities. Many Aboriginal and Torres Strait Islander students cannot travel to Broome to study because of family, community, cultural and work commitments. Learning online provides them with the opportunity to join other students, either in Broome or in Fremantle, in real-time lectures and tutorials without leaving home, a critical access issue for Aboriginal and Torres Strait Islander students who are mothers. Because all teaching is automatically recorded, students can watch the lectures and tutorials outside of set teaching times or re-watch them for exam preparation. The blended delivery model aims to increase access, retention and completion rates of Aboriginal and Torres Strait Islander students through its flexible approach to meeting individual student needs.

Curtin University – reverse block delivery

Curtin University's reverse block program is delivered by academic staff from the Centre for Aboriginal Studies in the areas of Aboriginal and Torres Strait Islander health, community management and teacher education. It is funded by the Australian Government under the Away-from-Base program. Reverse block delivery is designed to increase access, relevance and participatory action learning by supporting students in their workplaces and communities. The centre's role includes the administration of travel, documentation, debriefing and providing reports on student progress. Two blocks are delivered in semester one and one in semester two.

Block release lecturers are allocated a cohort of students to visit over a two-week period for three hours per student. An individualised learning program is developed for each student. The lecturer is responsible for managing the academic requirements of their cohort. Staff development is supported by the centre. Staff meet before and after each block to discuss individual students' needs. The role of the lecturer is predominantly focused on teaching and learning, including linking content to student context, developing learning materials, providing advice on study techniques, problem solving and meeting assessment requirements, ensuring access to learning resources, and reinforcing course expectations. Lecturers are also responsible for supporting students during field practicums (for up to 10 weeks per year). This includes liaison with school principals, line managers and supervisors to ensure that students are supported within the working environment, and their competencies are monitored and assessed.

There is a strong focus on both academic and pastoral care. Reverse block delivery helps to maintain student motivation and overcome feelings of academic and professional isolation. Teaching is delivered in culturally appropriate ways to enhance students' understanding of the materials that are presented. This is underpinned by Indigenous terms of reference that create an environment of cultural safety and sensitivity. Students from isolated or disadvantaged backgrounds need to

overcome many obstacles to access university programs. Obstacles include inadequate computer infrastructure, low levels of computer literacy and a lack of English language proficiency. Support provided to these students includes assisting them to adapt to a new language and academic culture.

Charles Sturt University – Walgett Bachelor of Education project

In 2012, Charles Sturt University's Faculty of Education will commence delivery of the Teacher Education in Community pilot project. The pilot allows Aboriginal people in regional communities, who are interested in a teaching career, the opportunity to study the Bachelor of Education (Early Childhood and Primary) degree at home, supported by Dubbo-based academic staff from the university's School of Teacher Education. The internal mainstream course will be delivered through online and in-community teaching linking university communication networks with remote service delivery hubs at Walgett and Wilcannia. Students will attend block residential schools, link to fortnightly meetings via the connected classroom hubs, and be supported by local tutors who will be practising teachers in the local community. Additional support will be provided by a Mobile Learning Support team.

A total of 24 applications have been received for the pilot, drawn from a broad range of communities including Walgett, Brewarrina, Bourke, Narromine, Wilcannia and Dareton. Several applicants are Aboriginal education officers or Aboriginal education workers currently employed in schools, while others work in early childhood settings around the region.

In 2009, the Koori Interagency Network in Dubbo approached the university to find out how Aboriginal and Torres Strait Islander people in remote communities could access university studies in teacher education, without having to move to Sydney, Dubbo, Bathurst or Wagga Wagga. University staff attended conferences for Aboriginal workers and discussed the idea with the NSW Department of Education and Communities, Centrecare and other agencies. A survey was conducted to determine the viability of the mode of delivery. One hundred and twenty people from inland New South Wales indicated their interest in enrolling to study the Bachelor of Education (Early Childhood and Primary) degree at home, supported by a Dubbo-based academic. Support is being provided under the Australian Government's Higher Education Participation and Partnerships Program. A working partnership has been maintained between the university, the NSW Department of Education and Communities – Western New South Wales Region and the Remote Service Delivery hubs in Walgett and Wilcannia. In-kind support has been pledged by local committees of the NSW Aboriginal Education Consultative Group, the NSW Aboriginal Land Council and the Macquarie Anglican Grammar School.

10.3 Financial support

The costs of living away from home can create a significant barrier for Aboriginal and Torres Strait Islander students wishing to access higher education, and to their successful completion of study. Some universities attempt to alleviate this burden by providing accommodation or scholarships to cover living expenses.

10.3.1 Critical success factors

Critical success factors include:

- financial support that is substantial enough to make an impact on real costs faced by students, particularly those studying in high-cost locations and those with dependants
- supply of funding is secure and available for the duration of study.

10.3.2 Key challenges

Key challenges include:

- securing sufficient funding from various sources, including professional and philanthropic organisations, to cover student living costs for the duration of their studies.

10.3.3 Examples

The University of New South Wales – Shalom College Gamarada Scholarship Program

The Shalom College Gamarada Scholarship Program was established in 2005 with the aim of increasing the number of Aboriginal and Torres Strait Islander medical doctors graduating in New South Wales. The program supports Aboriginal and Torres Strait Islander students of medicine by providing an on-campus accommodation scholarship for the duration of their program. The program was established by Shalom College and the Muru Marri Indigenous Health Unit within the Faculty of Medicine.

In 2012, 24 Aboriginal and Torres Strait Islander students will be studying and living at the college as part of the program. Students receive a college experience that sustains academic achievement by providing academic and peer support, and engagement in college community and university life. It has now been extended to students from other faculties including law, arts and engineering.

Each scholarship covers full board and tutoring support. Students make a nominal contribution towards the costs and must maintain successful academic progress. The scholarships are funded by corporate donors, private donors and funds raised annually from the Shalom Gamarada Art Exhibition. The Australian Indigenous Education Foundation also provides funding.

The program graduated its first doctor in 2009 and the first Indigenous optometrist in New South Wales. The third graduate completed their studies in 2011.

University of South Australia – Division of Business Indigenous Scholarships

The University of South Australia makes provision to award at least three living allowance scholarships each year to Aboriginal and Torres Strait Islander students studying with the Division of Business. Five scholarships were awarded in 2009 and seven in 2010, but only two were awarded in 2011 due to a fall in the number of applications. The scholarship has been in place since 2005. It is offered to Aboriginal and Torres Strait Islander students commencing a full-time undergraduate degree program with the Division of Business. Eligible students are identified by the university and invited to apply. Selection is based on merit. Continuing students with a grade point average above 4.0 are also considered if there are insufficient suitable commencing students.

Scholarship recipients receive the funding for the equivalent of three years of full-time study; however, students undertaking a four-year program receive payments for the equivalent of four years of full-time study. The scholarship is \$12,000 for three years. The recipient's performance is reviewed annually. If a recipient loses the scholarship due to poor academic performance, they may reapply if their performance improves. The university is considering removing the requirement for students to be enrolled full-time and changing the payment structure from \$4,000 per annum to \$500 per course enrolled (up to a maximum of \$4,000 per annum) to accommodate students studying at different loads.

Since inception, 24 students have received the scholarship, five have graduated (including one who has continued on to honours), eight have withdrawn from study with the university, and one has transferred to another program within the university.

11 Building professional pathways and responding to community need

11.1 Community-based approach to Aboriginal and Torres Strait Islander education

Universities maximise the relevance of their professional programs by responding to the needs of Aboriginal and Torres Strait Islander communities. In partnership with communities, some universities have identified areas of importance to those communities and built cohorts of students and researchers with relevant expertise. As members of the community identify with the outcomes from such approaches, these universities reinforce their own role in building essential capabilities for Aboriginal and Torres Strait Islander communities, for example, in the health and education areas.

11.1.1 Critical success factors

Critical success factors include:

- partnerships are built between the academy, the community and funding bodies, and are based on goodwill, patience and persistence
- business is conducted through authentic and respectful partnerships with communities
- design of content and delivery take into account the needs and aspirations of Aboriginal and Torres Strait Islander communities and the requirements of professional body accreditation.

11.1.2 Key challenges

Key challenges include:

- securing funding for programs that cross jurisdictional and disciplinary boundaries (education, workforce capacity building and service enhancement)
- meeting the costs associated with a responsive community-based approach, including provision of professional support after graduation
- dealing with the difficulty for students taking time out from work commitments to undertake professional study
- maintaining contact with students in remote locations, including helping them to overcome the challenges of isolation or lack of support from family or community
- fully grounding academic staff in Aboriginal and Torres Strait Islander cultural protocols.

11.1.3 Examples

Deakin University – Institute of Koorie Education

Deakin University's Institute of Koorie Education has evolved from two programs that commenced in 1986—the Koorie Teacher Education Program and a final-year program for Batchelor College graduates—to increase the number of Aboriginal and Torres Strait Islander teachers in schools. Today it delivers a suite of faculty degree courses through a mixed mode community-based delivery model. Students undertake a Deakin University degree, and their studies are jointly managed with the faculties and associated committees. This approach cascades through policy, cultural practices and programs and embraces both Western and Indigenous knowledge systems.

Teaching, learning and research that embed Koorie cultural knowledge systems and perspectives are central to the institute's programs. Curriculum and assessment tasks for students studying through the community-based delivery model are identical to those studying through other modes of delivery within the university.

The institute promotes Indigenous knowledge systems with the direction of a Council of Elders and Respected Persons, and it is growing its higher degree by research enrolments through the leadership of the Chairs for Indigenous Knowledge Systems and use of Indigenous methodologies. The university employs three Aboriginal professors.

The Institute of Koorie Education is jointly managed through a higher education agreement between the Victorian Aboriginal Education Association Inc. and Deakin University, which provides a platform for self-determination by communities. Administrative structures enable the university and the Victorian Koorie community to work jointly on teaching, curriculum development, and financial, organisational and personnel aspects.

The institute attracts second and third generations of specific families and communities and has graduated over 600 Aboriginal and Torres Strait Islander students.

La Trobe University – Aboriginal Family Therapy Training Program

The Aboriginal Family Therapy Training Program for Indigenous health, child and family workers represents a partnership between government, the Bouverie Centre at La Trobe University and Aboriginal and Torres Strait Islander communities. It integrates education, workforce capacity building and service enhancement. It is delivered at the postgraduate certificate level on-site at six Aboriginal Community Co-operatives throughout Victoria. A total of 53 people graduated from the program between 2008 and 2012.

The aim of the program is to build 'working with families' capacity across mental health and welfare services, allowing Aboriginal and Torres Strait Islander families to choose high-quality family therapy services in either Aboriginal and Torres Strait Islander services or mainstream services. The program creates a professional Aboriginal and Torres Strait Islander family therapy workforce and provides ongoing support to graduates in implementing their family therapy skills. It contributes to research on capacity building for Aboriginal and Torres Strait Islander health, child and family workers. The Indigenous Program Team also provides primary, secondary and tertiary support to the employers of graduates and the community.



Students achieve a retention rate on a par with that of all students in similar courses (87%). Of graduates, 49% are now undertaking increased clinical duties with families, 16% have taken up senior positions in mainstream service providers as a result of receiving academic credentials, and 7% have enrolled in a mainstream master's degree program.

The program is supported through partnerships between La Trobe University and philanthropic funding bodies and by short-term contributions (2008–11) from the Australian Government Office for Aboriginal and Torres Strait Islander Health, and the Victorian Department of Human Services, Department of Health and Department of Education and Early Childhood Development. The philanthropic partners are currently providing transitional support as the centre seeks to secure long-term funding.

Integrating workforce development and service enhancement with mainstream education has allowed the program to be delivered in Aboriginal and Torres Strait Islander communities, combine theory and practice and target the day-to-day tasks of working with families. Supervision has been provided after training, enabling Aboriginal and Torres Strait Islander graduates to work together across Aboriginal and Torres Strait Islander and non-Indigenous health services. The employment of Aboriginal and Torres Strait Islander staff in the Bouverie Centre is critical to the program's and students' success.

11.2 Professions and universities collaborating

Professional bodies, such as the Australian Medical Council, set service-level requirements and knowledge and skill standards for member practitioners within their own professions. Each body has a role to play in the development of cultural competence of member practitioners and in increasing the presence of Aboriginal and Torres Strait Islander people. This work by necessity is collaborative and involves universities and other education providers, and Aboriginal and Torres Strait Islander practitioners and communities. Such partnerships help to improve the quality of services provided to Aboriginal and Torres Strait Islander communities.

11.2.1 Critical success factors

Critical success factors include:

- ongoing relationships are maintained between professions, universities and Aboriginal and Torres Strait Islander students
- professional bodies are committed to engaging with Aboriginal and Torres Strait Islander communities
- realistic and measurable targets are identified, monitored and celebrated by all parties.

11.2.2 Key challenges

Key challenges include:

- recruiting sufficient numbers of professionally qualified Aboriginal and Torres Strait Islander staff within relevant disciplines
- dealing with the fact that many students are mature age and have limited prior educational experience

- providing access to discipline-related technologies in regional and remote locations
- increasing the range of professions in which working relationships exist between professional bodies, universities and Aboriginal and Torres Strait Islander communities.

11.2.3 Examples

Charles Sturt University – Djirruwang Aboriginal and Torres Strait Islander Mental Health Program

The Djirruwang Aboriginal and Torres Strait Islander Mental Health Program is a collaboration between Charles Sturt University, Aboriginal and Torres Strait Islander community-based organisations and government health service providers. It was developed to meet a need for qualified mental health workers in Aboriginal and Torres Strait Islander communities. Critical relationships have been forged with NSW Health, WA Health and Aboriginal and Torres Strait Islander health service providers.

The Djirruwang degree program was designed for Aboriginal and Torres Strait Islander students. Most students are mature age (the average age is 36) and work in the field of mental health. The design of the program enables students to maintain a balance between life, study, work, family and community responsibilities. Students study four subjects each year. Delivery is through two residential teaching blocks, supplemented by the provision of teaching materials, the university's mobile learning and teaching support unit and compulsory workplace experience. Students are empowered in their study by local Aboriginal and Torres Strait Islander communities when they arrive on Country.

Djirruwang graduates achieve a Bachelor of Health Science (Mental Health) or exit the program with diploma or degree qualifications. They can also return to pursue higher qualifications. Graduates' knowledge and skills align with the National Competency Standards for Aboriginal Health Workers and Torres Strait Islander Health Workers, both of which are recognised by prospective employers in the field. Graduates find employment at various levels within mental health services, including Aboriginal and Torres Strait Islander mental health services.

Charles Sturt University and the NSW Police Force – Indigenous Police Recruitment Our Way Delivery

The NSW Police Force, with support from TAFE NSW, Charles Sturt University, the NSW Aboriginal Education Consultative Group Inc. and others, provides the Indigenous Police Recruitment Our Way Delivery (IPROWD) training program. The program prepares Aboriginal and Torres Strait Islander people for entry to the Associate Degree in Policing Practice (the prerequisite qualification for a career in the NSW Police Force), which is delivered jointly by the NSW Police Force and Charles Sturt University. The IPROWD program is offered in towns across New South Wales, including Broken Hill, Casino/Lismore, Dubbo, Maitland, Nowra and Tamworth, as well as in Redfern and Mount Druitt within Sydney.

In 2011, 104 students completed IPROWD training. Of these, approximately 30% went on to study for the Associate Degree in Policing Practice and 40% found other employment.

The program illustrates how a profession can support the creation of a professional development pathway that prepares individuals for tertiary education and entry into the profession. It also supports the NSW Police Force's commitment to engaging with communities, bringing police officers and Aboriginal and Torres Strait Islander communities together, and growing respectful relationships between policing professionals and the communities they serve.

Flinders University, Charles Darwin University and the Northern Territory Government – Northern Territory Medical Program

The Northern Territory Medical Program commenced in 2011. It is a partnership between Flinders University, Charles Darwin University and the Northern Territory Government. The program will see up to 40 Northern Territory-trained doctors graduating per year.

The Northern Territory Government has identified that there are insufficient doctors in the Northern Territory. Its commitment to the program includes payment of HECS-HELP liabilities for up to 24 students from the Northern Territory. These graduating doctors will be required to make a commitment to work for the Northern Territory Government health service for two years following graduation.

In 2011, 10 of the 24 Northern Territory students enrolled in the program were Aboriginal and Torres Strait Islander people.

A focus of the program is the recruitment and training of Aboriginal and Torres Strait Islander medical students to become doctors in the Northern Territory. Aboriginal and Torres Strait Islander applicants may apply to enter the study of medicine in the same way as non-Indigenous applicants. However, the program also provides an Indigenous entry stream as a separate pathway and supports applicants through the process. This includes interviews with panels comprising program staff and representatives of the Australian Indigenous Doctors' Association and the community.

11.3 Indigenous graduate attributes

By establishing graduate attributes, universities seek to ensure that all students complete their studies with the full range of professional qualities appropriate to their chosen career. Some universities now include Indigenous-specific competencies within their graduate attribute statements. Appropriately crafted Indigenous graduate attributes have the potential to significantly alter the cultural competence of the nation's professional workforce in the future and to improve outcomes for their Aboriginal and Torres Strait Islander clients.

11.3.1 Critical success factors

Critical success factors include:

- a range of Aboriginal and Torres Strait Islander content is made available across the curriculum, including electives at the individual unit level and compulsory subjects within priority professional programs
- a learning and teaching framework is available for the development and delivery of Aboriginal and Torres Strait Islander content
- repositories of Aboriginal and Torres Strait Islander resources are available to all students and staff

- graduate attributes are developed and implemented across the curriculum in partnership with Aboriginal and Torres Strait Islander staff and communities.

11.3.2 Key challenges

Key challenges include:

- dealing with the scale of embedding graduate attributes across the curriculum
- developing and delivering cultural training for academics to ensure that they work within the teaching framework and have the competence to communicate Aboriginal and Torres Strait Islander content
- ensuring that content is relevant and appropriate.

11.3.3 Examples

University of Western Sydney – Indigenous graduate attribute

The Badanami Centre for Indigenous Education, University of Western Sydney, led consultations with the centre's Elder-in-Residence, other Aboriginal and Torres Strait Islander Elders and the community, and university staff to develop and commit to the systematic application of an Indigenous graduate attribute for all University of Western Sydney courses. The attribute was developed in 2008, following an audit of Indigenous-related activities across the university in 2007, and a benchmarking exercise undertaken with 36 Australian universities. The attribute comprises a set of generic skills and descriptors. All courses will be expected to include the attribute and new courses will be assessed against it as part of the course approval process.

In 2008, a seed grant was provided under the Australian Government's Structural Adjustment Fund to assist with embedding the Indigenous graduate attribute into the university's courses. Implementation of the attribute into University of Western Sydney courses began in 2009 and covered the development of Aboriginal and Torres Strait Islander content to be embedded in courses at unit level, including an Indigenous Australian Studies major of 10 units that can be undertaken as a major, sub-major or as individual units.

The purpose of the Indigenous graduate attribute is to ensure that students develop relevant knowledge and skills to demonstrate cultural competency and professional capacity to interact with the broader Australian society and to raise the level of academic service delivery to students. It also contributes to an inclusive national identity.

The potential impact of the initiative can be measured in terms of the university's large student and academic populations and its location within a significant Aboriginal and Torres Strait Islander student catchment area. Since 2009, and through analysis of the implementation of the attribute when preparing this report, it was evident that over 9,000 graduates were engaged in studying Aboriginal and Torres Strait Islander content in their courses. Many of them come from the local region and are expected to remain working in the region. The initiative is focused on ensuring that students emerge with greater appreciation of Aboriginal and Torres Strait Islander culture and how it may affect their future careers. It also supports the success of Aboriginal and Torres Strait Islander students and staff by making the

work and study environment more inclusive and increasing the employment and participation of Aboriginal and Torres Strait Islander staff and communities.



12 Aboriginal and Torres Strait Islander knowledge and perspectives

12.1 Curriculum and pedagogy

Some universities offer programs explicitly designed for Aboriginal and Torres Strait Islander students. A focus on the professional needs of Aboriginal and Torres Strait Islander communities, inclusion of Aboriginal and Torres Strait Islander content, alternative modes of delivery, and the academic and pastoral needs of students has helped these programs to build strong cohorts of students in a number of priority areas, particularly in the health and education professions.

12.1.1 Critical success factors

Critical success factors include:

- diverse knowledge domains are recognised, including a focus on regeneration and transition of Indigenous knowledges
- Aboriginal and Torres Strait Islander people are appointed as academics and cultural leaders
- communities, the professions and industry are engaged where relevant.

12.1.2 Key challenges

Key challenges include:

- meeting the learning needs of a diverse student demographic
- developing curriculum that encompasses both discipline- and Indigenous-specific cultural content
- recruiting specialist academic and general student support staff and accessing Indigenous content experts and knowledge owners
- securing sufficient funding for institutional costs over and above basic operations, including investing in workforce growth.

12.1.3 Examples

Deakin University – Institute of Koorie Education

The Institute of Koorie Education at Deakin University offers graduate and postgraduate courses designed to grow a cohort of Aboriginal and Torres Strait Islander professionals in areas of national priority. These programs include a strong focus on health workforce development in fields such as nursing, public health, social work and diabetes education. Three of these are profiled below.

Graduate Certificate of Diabetes Education

In 2010, the Institute of Koorie Education piloted the Graduate Certificate of Diabetes Education. Prior to this, the course was only offered by distance mode and was

mainly targeted at nurses and allied health professionals rather than Aboriginal health workers. Four students graduated in the pilot year and are now working with a credentialed diabetes educator in their local community.

Course materials address the social determinants of health relevant to Aboriginal and Torres Strait Islander communities. This enables students to demystify dominant constructs and emerge as independent thinkers in the diabetes area. The program is taught by three diabetes educators and one Aboriginal health professional with experience working in nutrition and diabetes.

The Victorian Aboriginal Community Controlled Health Organisation (VACCHO) and Diabetes Australia (Victoria) are working towards establishing a pathway for senior Aboriginal health workers from Certificate IV into the Graduate Certificate of Diabetes Education. The Institute of Koorie Education is liaising with the Australian Diabetes Educators' Association regarding processes for accepting graduates as credentialed diabetes educators. The project was funded by the Victorian Department of Health as an allied health training grant in 2010–11. It included an internship of up to \$25,000 and HECS-HELP for students, program coordination assistance and student mentoring.

Bachelor of Nursing

In 2002, the Institute of Koorie Education piloted the Bachelor of Nursing program with Australian Government funding. The program allows students to obtain a higher degree without diminishing their own cultural knowledge system and their professional place within their community. A total of 32 students have graduated and work in Aboriginal and Torres Strait Islander-specific services, but more importantly, they also play a critical role in reforming mainstream nursing practice as it impacts on Aboriginal and Torres Strait Islander health. The institute tracks graduates' career progression. All graduates are either employed as registered nurses, in community organisations or their local hospital, or are undertaking further studies in health, including the Graduate Diploma of Midwifery, Master of Public Health, Graduate Certificate of Diabetes Education and Graduate Diploma of Mental Health.

Master of Public Health

In 2001, the Institute of Koorie Education introduced the Master of Public Health in partnership with the Victorian Consortium for Public Health in response to community demand for Aboriginal and Torres Strait Islander practitioners. The institute took over responsibility for delivery in 2010. Course delivery involves mixed mode teaching through six intensive study blocks held on campus throughout the year. This structure enables students to continue to work in their communities while completing their professional qualifications.

Since 2002, the institute and the Onemda VicHealth Koori Health Unit at the University of Melbourne have collaborated to increase the number of Aboriginal and Torres Strait Islander Master of Public Health graduates and enhance their capacity to respond to Aboriginal and Torres Strait Islander health issues. As part of this work, the National Indigenous Public Health Curriculum Framework was developed in 2008 and is currently being implemented in public health teaching institutions around the country.

The Master of Public Health equips practitioners to fulfil their health leadership roles, including strategic planning, program coordination, policy development, management and research. The institute provides both on- and off-campus support, including

advocating on behalf of the students with employers. Career tracking of graduates demonstrates a high level of graduate engagement in addressing Aboriginal and Torres Strait Islander health issues at community, state and national levels. Three graduates are now enrolled in PhD programs. Since 2004, 26 students have completed the course.

Elders have contributed to the success of the program and two Elders have completed the course themselves. Elder and community research groups work with students to develop research projects. This ensures that community priorities are addressed and appropriate permissions obtained. It also facilitates a two-way exchange of knowledge between students and the community.

The institute works with communities, state and federal government departments and professional bodies in achieving capacity-building and workforce strategies within many professions. Courses include: Bachelor of Arts, Bachelor of Creative Arts (Visual Arts), Bachelor of Arts (Honours), Bachelor Education (Primary), Bachelor of Teaching/Bachelor Arts, Bachelor of Early Childhood Education, Bachelor of Commerce, Master of Education, Master of Teaching, Bachelor of Laws, Bachelor of Social Work, Master of Social Work, Graduate Diploma of Natural and Cultural Resource Management and Graduate Diploma of Accounting.

More recently, the institute and the School of Accounting, Economics and Finance at Deakin University, in partnership with CPA Australia, held a roundtable event at the Deakin Management Centre. The event brought together key stakeholders from around Australia to discuss and plan strategies to increase the participation and employment of Aboriginal and Torres Strait Islander people in the accounting profession.

The University of Adelaide – Centre for Aboriginal Studies in Music program

The University of Adelaide Centre for Aboriginal Studies in Music provides tertiary-level music education qualifications to Aboriginal and Torres Strait Islander musicians. It grew out of a community grant in the early 1970s. The centre operates as a cultural institution in its own right, and contributes to the development of Aboriginal and Torres Strait Islander music making at the state and national levels.

The centre's programs respond to identified Aboriginal and Torres Strait Islander community needs and provide specialised pathways for Aboriginal and Torres Strait Islander students, including those who would not otherwise have gained access to higher education. The centre offers curriculums and teaching strategies that are responsive to the needs of Aboriginal and Torres Strait Islander students, and provides a supportive cultural space for Aboriginal and Torres Strait Islander musicians within the mainstream institutional setting. Its approach includes a focus on engagement and collaboration with the broader Aboriginal and Torres Strait Islander and non-Indigenous communities and music industry, and a focus on traditional and contemporary forms. Key among its achievements is the centre's influence on the development of Australian Indigenous music and recognition of Aboriginal and Torres Strait Islander music as a research outcome. Graduates are employed in a wide range of fields.

12.2 Teacher education

As providers of teacher education, universities have an impact on the classroom experiences of Aboriginal and Torres Strait Islander students, experiences that can make the difference between educational success and otherwise. Universities are actively recruiting Aboriginal and Torres Strait Islander students into teacher education and supporting them during their studies and throughout their professional lives, as well as building the cultural competence of non-Indigenous teachers and school leaders. These initiatives involve collaborations between university faculties of education, researchers and state education authorities at the VET and school levels and aim to improve Aboriginal and Torres Strait Islander school outcomes.

12.2.1 Critical success factors

Critical success factors include:

- teachers hold high expectations of Aboriginal and Torres Strait Islander school students, and understand the factors that impact on their ability to succeed
- alternative pathways and aspirational programs promote teaching as a career for Aboriginal and Torres Strait Islander people and support them throughout school, university and employment.

12.2.2 Key challenges

Key challenges include:

- facilitating collaboration between education providers across sectors
- ensuring the continued development of teachers after university through involvement by professional bodies
- changing low expectations held of Aboriginal and Torres Strait Islander students by teachers and schools.

12.2.3 Examples

University of Wollongong – Djinggi Program

In 2011, the University of Wollongong signed a memorandum of understanding with the NSW Department of Education and Communities to pilot the Djinggi Program, which seeks to create a new pathway into teacher education from high school. The program targets Aboriginal and Torres Strait Islander students in Year 10, who are interested in doing teacher education when they finish school. Concurrently with study for the Higher School Certificate in Years 11 and 12, participants undertake a Certificate III in Education Support at a TAFE institute. Their training will include on-the-job experience in primary schools within the Illawarra and South East Region.

The intended pathway is into teaching in an early-years setting or in primary schools, but participants who successfully complete the program may be accepted into any of the Faculty of Education's five undergraduate teacher education programs. Where students consider options for study in other faculties, support and advice will be provided to them by staff in the Faculty of Education. Those who do not choose to continue on to university will have achieved their Certificate III. The Faculty of Education intends to set aside the Australian Tertiary Admission Rank and accept

any participant who successfully completes the program with their Higher School Certificate.

The first cohort commenced Year 11 in 2012. They participated in an introductory camp run at Berry by TAFE NSW and Department of Education and Communities staff, with involvement by Aboriginal staff from the Faculty of Education. Further camps will be held at the end of each term. The role of the university in more general terms, and specifically its Woolyungah Indigenous Centre located on the university's Wollongong campus, is under development.

The Djinggi Program is promoted in schools throughout the Illawarra and South East Region. The first cohort has 21 participants drawn from across the region. Most of these were current school students, but a small number returned to school in order to participate.

University of Wollongong – Aboriginal Teacher Mentor Training Program

The Aboriginal Teacher Mentor Training Program was piloted in 2011 by the Australian Centre for Educational Leadership within the Faculty of Education at the University of Wollongong. It is jointly facilitated by the faculty and the NSW Department of Education and Communities. It is hoped that it will provide a model for delivery of support to Aboriginal and Torres Strait Islander teachers. The program is designed to improve retention of new teachers as well as leadership and career development for more experienced teachers and executives, who will act as mentors.

Mentors are selected by the teacher or their school. They are drawn from experienced professionals of high standing within the teaching community. They receive training for this role and are accredited for learning and leadership development achieved on the program. Intensive training is provided at two workshops at the university—one at the beginning of the program and one at the end. Between the workshops, the mentor and their teacher undertake six months of school-based mentoring engagement.

Mentors are trained to participate in a professional dialogue about classroom programs and teaching strategies, to build collaborative relationships and to use data for professional improvement. They are also equipped with a critical contextual and cultural understanding of the professional motivations and aspirations of Aboriginal and Torres Strait Islander teachers.

Relief funding is provided to all participants to undertake the school-based mentoring activities. These include discussion of classroom programs and teaching strategies, and preparation for taking on additional responsibilities across the school. Ongoing evaluation and advice is provided to the mentor by the Australian Centre for Educational Leadership at the university.

Queensland University of Technology – Stronger Smarter Institute

The Stronger Smarter Institute was established in 2005 to challenge a culture of low expectations for Aboriginal and Torres Strait Islander children prevalent in parts of the Australian community. The institute delivers programs for leaders within schools and Aboriginal and Torres Strait Islander communities. The leadership program aims to instil the Stronger Smarter philosophy in order to transform schools and communities. The philosophy promotes positive cultural identity, community



leadership and relationships that acknowledge strength, capacity and the right to access opportunity.

The institute and its programs are based on tangible stories of success in Aboriginal and Torres Strait Islander education. These stories are shared with new participants as a way of demonstrating potential for positive changes in school culture and student outcomes.

A total of 829 school leaders have completed the institute's core leadership program since it began in 2006. Participants were drawn from 254 schools across the country, 30% of which were in very remote and remote localities.

The institute received corporate support as well as Australian Government funding for the Stronger Smarter Learning Communities project and, more recently, the Focus School Next Steps initiative.

New Zealand Ministry of Education and University of Waikato—Te Kotahitanga

Te Kotahitanga commenced in 2001 as a research and professional development collaboration between the New Zealand Ministry of Education and the University of Waikato (Te Kete Ipurangi n.d.). The program aims to create a 'culturally responsive pedagogy of relations', whereby teachers commit to caring for students as culturally located individuals for whom they have high expectations.

The program involves a multi-faceted intervention within the school setting, including provision of professional development to equip teachers to understand their own impact on student achievement, and coaching of school leaders and communities to help them create the right structures for development to occur. After an initial induction, teachers participate in a cycle of intensive classroom observations and feedback, cross-curricular collaboration and shadow-coaching. During training, teachers are exposed to Māori students' experiences of schooling.

Te Kotahitanga was designed in consultation with Māori students, their families, principals and teachers. It addresses barriers to educational achievement for Māori students in the classroom by establishing an approach where: power is shared; culture counts; learners are co-inquirers and knowledge is co-created; teachers are connected to their students and the community; and all parties share a vision for excellence in Māori education.

The Australian Institute of Aboriginal and Torres Strait Islander Studies has been working with the University of Waikato to research the transferability of this approach to Australian schools.

12.3 The interface between Indigenous and Western knowledge systems

New knowledges emerge from the interface between Indigenous knowledges and Western-based systems of knowledge. Current research projects and initiatives seek to build on Indigenous knowledges and open new avenues for research. Respectful engagement with Aboriginal and Torres Strait Islander communities and people supports growth in the nation's knowledge base. Community-led research requires sharing decision making, resources, credit, results and knowledge.



12.3.1 Critical success factors

Critical success factors include:

- organisations are focused on long-term relationships with Aboriginal and Torres Strait Islander communities
- each party's project inputs are recognised, and ownership and use of outputs are negotiated at the start
- Aboriginal and Torres Strait Islander research is published to contribute to increased understanding and academic interest.

12.3.2 Key challenges

Key challenges include:

- committing to long-term relationships between universities and Aboriginal and Torres Strait Islander communities
- dealing with the fact that research is starting from a low base, which can result in funding challenges.

12.3.3 Examples

Commonwealth Scientific and Industrial Research Organisation – research involving Indigenous knowledges

The Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia's national science agency, is engaged in a range of research projects that utilise Indigenous knowledges. The following are three prominent examples of CSIRO's work.

Aboriginal and Torres Strait Islander biodiversity management and planning

Aboriginal and Torres Strait Islander people are important agents and collaborators in biodiversity conservation. Both Aboriginal and Torres Strait Islander aspirations and knowledge contribute management capability and unique perspectives on balancing biodiversity risks and benefits.

Work with communities has included:

- collecting scientific and cultural knowledge to develop an atlas for Martu native title holders of the Great Sandy Desert in Western Australia
- developing the first national guidelines for Aboriginal and Torres Strait Islander protected area management plans and a range of effective planning tools for integrating Indigenous ecological knowledge
- producing multi-case study analysis of Aboriginal and Torres Strait Islander engagement in environmental management, identifying the positive influence of Aboriginal and Torres Strait Islander governance on Indigenous ecological knowledge and science integration
- drawing on Australia's longstanding experience with Aboriginal and Torres Strait Islander co-management to inform innovative directions for treaty claim settlements in New Zealand.



Aboriginal and Torres Strait Islander co-benefits from carbon economies

CSIRO research has critically examined the opportunities available to Aboriginal and Torres Strait Islander people interested in participating in carbon management and markets, and informed the design of Aboriginal and Torres Strait Islander co-benefit criteria and requirements under the Carbon Farming Initiative offset regime. CSIRO has played a research leadership role on the National Indigenous Climate Change project, which is working on the development of Aboriginal and Torres Strait Islander-specific co-benefit evaluation frameworks and carbon management methodologies. This research links strategically to biophysical science in forestry and fire management for greenhouse gas mitigation and carbon sequestration. It also supports research that is developing a decision model for fire management by Aboriginal and Torres Strait Islander landowners in remote deserts under different climate change scenarios.

Aboriginal and Torres Strait Islander water values and planning research

National standards for water planning and management in Australia require that Aboriginal and Torres Strait Islander peoples' values are taken into account. CSIRO research has generated the knowledge and tools to enable effective incorporation of these values.

Highlights of the research include:

- identifying Aboriginal and Torres Strait Islander socio-economic values and water flows, including quantitative economic assessments of Aboriginal and Torres Strait Islander resource use and studies of Indigenous ecological knowledge in the Daly and Fitzroy Rivers
- identifying Indigenous knowledges and perspectives relevant to water availability (for example, in the Northern Territory's Roper River region and in the Murray–Darling Basin)
- analysing Aboriginal and Torres Strait Islander water governance and planning.

CSIRO uses its own protocols in engaging with Aboriginal and Torres Strait Islander communities based on:

- consent, consultation and mutual agreement with communities
- equity and respect
- benefits for Aboriginal and Torres Strait Islander people and their communities
- respect for Aboriginal and Torres Strait Islander right of ownership to ecological, cultural and traditional knowledges.

Macquarie University – Aboriginal Astronomy Centre

The Aboriginal Astronomy Centre at Macquarie University is driven by interdisciplinary research, using approaches from the physical and social sciences, to better understand the astronomical knowledge and traditions of Aboriginal and Torres Strait Islander people. The project aims to explore, for example, whether complex motions of the sky and transient phenomena such as supernovas, comets and meteors have been recorded verbally or in rock art or stone arrangements.

As research outputs increase, students are learning about Indigenous scientific knowledge. The centre aims to attract Aboriginal and Torres Strait Islander and non-Indigenous students who wish to pursue projects in Aboriginal astronomy. A student at the centre has recently completed a PhD and another is currently commencing a master's degree by research. The centre has also employed a vacation scholar in partnership with the Macquarie University Research Centre for Astronomy, Astrophysics and Astrophotonics. This partnership increases research outputs and improves skills of Aboriginal and Torres Strait Islander academics in the centre.

The Aboriginal Astronomy Centre collaborates on projects with CSIRO Astronomy and Space Science, the Macquarie University Departments of Physics and Astronomy, and Earth and Planetary Sciences, Sydney Observatory and the Powerhouse Museum. The research is breaking down barriers between Western science and Indigenous knowledge, and rapidly advancing understanding of Aboriginal and Torres Strait Islander knowledge systems.

Macquarie University works closely with Aboriginal and Torres Strait Islander Elders, custodians and communities, and heavily promotes its work to the public. The work of the centre is guided by respect and support for Aboriginal and Torres Strait Islander people and culture, and ensuring that communities retain ownership and control of information.

Information on Aboriginal and Torres Strait Islander astronomy perspectives from the project are incorporated into school curriculums, higher education course material and institutes, such as museums, observatories and planetariums.

The centre's research blog has received over 50,000 views in one year, many of which come from overseas visitors. The research has resulted in 10 journal papers, four conference proceedings, and speaking engagements to public and academic audiences on six continents. Aboriginal and Torres Strait Islander people are co-authors on journal publications where possible.

Monash University and Aboriginal and Torres Strait Islander communities – Monash Country Lines Archive

The Monash Country Lines Archive is a living archive that aims to assist Aboriginal and Torres Strait Islander communities to animate their stories as material for intergenerational knowledge sharing. These stories can be a combination of the community's history, knowledge, poetry, songs, performance and language. Every animation is made in partnership with the community that owns the story. This partnership spans all levels of production. The copyright of each animation remains with the Indigenous knowledge owners.

The success of the program depends on partnerships between Monash University and the participating Aboriginal and Torres Strait Islander communities. Building trusting relationships and finding shared objectives between university academics and community members takes time.

The project came from a long partnership between the Yanyuwa people of Borroloola in the Northern Territory and the Monash Indigenous Centre and Faculty of Information Technology. In December 2010, the Monash Country Lines Archive program was developed through the vision, trust and support of the Alan and Elizabeth Finkel Foundation. The gift from the Finkel Foundation will enable the team to animate 20 country lines a year (equal to more than 40 minutes of animation) over



the next five years. The five-year plan for the program includes engagement of Aboriginal and Torres Strait Islander higher degree by research students in the various areas of Indigenous studies, 3D digital animation, archival science and community partnership research.

Charles Sturt University and Wiradjuri Council of Elders – Wiradjuri Language and Cultural Heritage Program

Charles Sturt University is working with the Wiradjuri Council of Elders and the Wiradjuri nation towards the recovery, maintenance and development of Wiradjuri language and cultural heritage. The Wiradjuri Language and Cultural Heritage Program Committee, jointly chaired by the Deputy Vice-Chancellor (Academic) and the Chair of the Wiradjuri Council of Elders, aims to empower Wiradjuri communities as custodians of Wiradjuri history, knowledge, cultural heritage, community life, language and land.

The program includes language teaching, language teacher development, curriculum development, language research, collection and storage of oral history, heritage and care of Wiradjuri country and the ways of life that nurture and support Wiradjuri people and country.

The university has appointed a full-time project officer from the Wiradjuri Council of Elders to liaise with the university and other agencies, including the Museum of the Riverina, the Australian Institute of Aboriginal and Torres Strait Islander Studies and the NSW Office of Environment and Heritage.

The focus of the program is establishing and maintaining engagement with Elders and Indigenous communities to support Indigenous higher education students, and providing Indigenous education across the university curriculum. It also provides opportunities to support the Indigenous employment strategies of the university and in the local communities.



13 Research, research training and university workforce

13.1 Good practice supervision of Aboriginal and Torres Strait Islander higher degree by research students

Supervision is a critical element of the higher degree by research (HDR) experience for all students. An understanding of culture and Indigenous knowledge systems is needed by supervisors, as well as an appreciation of the different approaches to research and research design that may be needed to support research involving Aboriginal and Torres Strait Islander communities.

13.1.1 Critical success factors

Critical success factors include:

- access is available to a broad a range of supervisors with experience and a track record
- support and capacity building are provided via training based on real experiences of Aboriginal and Torres Strait Islander and non-Indigenous researchers, particularly for non-Indigenous supervisors
- collaborative relationships are developed with Aboriginal and Torres Strait Islander communities in preparing research materials.

13.1.2 Key challenges

Key challenges include:

- low numbers of Aboriginal and Torres Strait Islander people available to be supervisors
- providing comprehensive advice, training and support to supervisors, ideally using written materials and face-to-face training.

13.1.3 Examples

Lowitja Institute – Supporting Indigenous Researchers: A Practical Guide for Supervisors

Supporting Indigenous researchers: a practical guide for supervisors is a comprehensive guide to good practice in developing the capacity of Aboriginal and Torres Strait Islander health researchers and students. It brings together the advice and experiences of Aboriginal and Torres Strait Islander researchers and non-Indigenous researchers, to support new researchers who want to know how to build Aboriginal and Torres Strait Islander research ethics, values and approaches to research.

The guide outlines six principles of good practice in supervision, including:

- good teaching, concern for students and thoughtful and timely feedback
- time, energy and professional commitment

- personal support to the student
- adjusting practice to student preferences
- high expectations
- mentoring for first-rate scholarship.

The guide has two parts:

- **Part A: Supervision Issues and Approaches**—discusses workplace issues for Aboriginal and Torres Strait Islander health researchers and their supervisors, suggesting ways to build a reciprocal and supportive supervisor–researcher relationship and a strong intercultural research team
- **Part B: Workplace Strategies and Resources**—provides workplace supervisors with practical strategies to tackle issues and to support Aboriginal and Torres Strait Islander researchers. It uses real examples to guide supervisors in: job planning and recruitment of emerging Aboriginal and Torres Strait Islander researchers; induction and orientation; work planning and performance appraisal; assessing training needs; designing and supporting on-the-job training and professional development.

The Cooperative Research Centre for Aboriginal Health, the predecessor organisation to the Lowitja Institute, identified a lack of resources in supervision and research and financed the writing, research and production of both parts. Extensive consultations were undertaken with 50 stakeholders and reviewers from a broad range of organisations, ensuring a wide investment in the guides.

While the guides were designed for researchers, supervisors and students in Aboriginal health, the authors suggest that they are suitable for use in other academic contexts.

Approximately 1,900 copies of the guide have been distributed to research organisations, community organisations, tertiary institution libraries, hospital research departments, public health promotion organisations and researchers, international researchers (Canada and New Zealand), university-based Aboriginal and Torres Strait Islander researchers' networks, as well as federal, state and territory departments. The Lowitja Institute has received requests from tertiary institutions for multiple copies to be used in teaching and supervision, as well as many single copy requests from supervisors and students. The guide is also used in the teaching of the University of Melbourne's annual Professional Certificate in Indigenous Research summer school.

The guide as well as case studies are available at www.lowitja.org.au/crcah/list-crcah-publications.

CQUniversity – flexible and supportive supervision practices

CQUniversity holds a database of supervisors for HDR students. The database includes suitable supervisors of Aboriginal and Torres Strait Islander research students across topics.

CQUniversity has developed guidelines and resources around HDR supervision to ensure the highest quality of supervision. This includes a yearly conference for

supervisors. Support for Aboriginal and Torres Strait Islander HDR students is conducted biannually through this conference and as demand emerges.

Aboriginal and Torres Strait Islander engagement in research is expected to be a growth area for CQUniversity in the future.

13.2 Cohort support for Aboriginal and Torres Strait Islander higher degree by research students

Cohort support for Aboriginal and Torres Strait Islander HDR students is critical to enabling students to share and learn from each other, provide emotional and social support and importantly to reduce the social isolation of long periods of solitary research. The sense of isolation for Aboriginal and Torres Strait Islander HDR students is even greater as they may be the only Aboriginal and Torres Strait Islander student transitioning to HDR study at any one university. Aboriginal and Torres Strait Islander PhD graduates strongly emphasised how helpful it would be to have a means of building support among Indigenous HDR students to provide academic, social and emotional support.

13.2.1 Critical success factors

Critical success factors include:

- cohort-based support is available for Aboriginal and Torres Strait Islander students, either through the university or across universities
- a safe environment is provided that acknowledges and respects Indigenous world views.

13.2.2 Key challenges

Key challenges include:

- pressure on limited numbers of Aboriginal and Torres Strait Islander academics to provide program support.

13.2.3 Examples

James Cook University – School of Indigenous Australian Studies postgraduate program

The School of Indigenous Australian Studies delivers a postgraduate program (coursework and research) and a research program.

The program for postgraduate students includes:

- compulsory coursework to ensure that students are adequately prepared for research. This includes on-campus blocks of study for lectures and student presentations for critique.
- assistance for students in developing and understanding tenants of culture and research method approaches related to their study
- master classes held annually with invited expert lecturers
- co-supervision arrangements which includes expertise from relevant disciplines as well as from Aboriginal and Torres Strait Islander academics



- assistance with individual student study plans including regular supervisory meetings and regular catch-ups with students
- monthly video conference links to discuss selected readings
- promotion of scholarships.

Separate researchers lead work under a series of research themes and create a nexus for research and teaching and learning.

The program supports flexible entry requirements with conditions applied in some alternative entry modes. The program also includes early identification and counselling for students at risk of not completing.

The program was established in 1999 by the School of Indigenous Australian Studies and is managed by Aboriginal and Torres Strait Islander academics. The program offers various exit pathways at graduate certificate, graduate diploma, masters and PhD levels.

New Zealand Māori and Indigenous postgraduate network

New Zealand's Māori and Indigenous program, established in the early 1990s, is a nationally organised network of key sites around New Zealand. The network is supported virtually through its website (www.mai.ac.nz) which broadens its reach to all students nationally.

The program consists of:

- support and mentoring to assist research capacity development for individual students as well as universities (wānanga) dedicated to Māori educational contexts
- a curriculum of courses, seminars, lectures, conferences, retreats and workshops that are specifically designed for pre-doctoral through to postdoctoral levels and beyond
- a system of grants and fellowships
- career and leadership training
- international study and research opportunities.

Sites are located in Auckland, Wellington, Christchurch and Otago. The postgraduate network is part of the capability-building program of New Zealand's Māori and Indigenous Centre of Excellence (Ngā Pae o te Māramatanga) which was established in 2002.

There has been a significant increase in the number of Māori with doctoral degrees since this time (around 20 or 30 graduates a year since 2000).

13.3 Building Aboriginal and Torres Strait Islander research capacity in students and early career researchers

Building research capacity in Aboriginal and Torres Strait Islander HDR students and early career researchers is critical to a number of objectives. It is an important first step in building the number of Aboriginal and Torres Strait Islander HDR students and academics. It is also important in raising the profile of research involving

Aboriginal and Torres Strait Islander communities, enriching the national research effort and supporting research.

13.3.1 Critical success factors

Critical success factors include:

- support is tailored to the individual
- university executive and faculties ensure that capacity-building programs are resourced and recognise the need for non-standard progression patterns and HDR enrolment criteria
- faculties provide mentoring and cultural awareness training for mentors.

13.3.2 Key challenges

Key challenges include:

- identifying potential Aboriginal and Torres Strait Islander researchers and research candidates
- resourcing academic and support staff to a sufficient level.

13.3.3 Examples

Queensland University of Technology – Indigenous postgraduate research capacity-building program and pathway support

The Queensland University of Technology has an Indigenous postgraduate research capacity-building program which aims to build a distinctive cohort of postgraduate students across the university. This unique program hosts specially designed activities that support Aboriginal and Torres Strait Islander postgraduate students and researchers. It includes a three-day program that is benchmarked against university criteria for graduate capabilities. It includes a seminar series, an annual symposium and a critical reading group. It also includes provision of dedicated 24-hour office space and resources for postgraduate Aboriginal and Torres Strait Islander students, funding for conference and research activities related to postgraduate studies, and involvement in research projects.

While the program is unique in offering postgraduate cohort support, it also aims to:

- promote Aboriginal and Torres Strait Islander research
- facilitate communication and information exchange about Indigenous knowledges and research
- stimulate collaborative research within Indigenous studies
- foster Aboriginal and Torres Strait Islander research capacity building
- facilitate the publication and dissemination of the program's research activities
- provide Aboriginal and Torres Strait Islander communities, organisations, government and the broader public and private sectors with access to the global Indigenous studies community.

A typical program for the three-day workshop covers project management, technical research and library skills, publishing research, Indigenous methodologies, research



ethics in research involving Aboriginal and Torres Strait Islander communities, and writing grant applications.

The program was established as the university felt that Aboriginal and Torres Strait Islander postgraduate students are often isolated and may need assistance in negotiating the research system beyond that which is routinely made available in faculties and through central support areas. It is supported by the Indigenous Students' Research Network.

The University of Melbourne – postgraduate summer school program

For 10 years the University of Melbourne has hosted a summer school program for Aboriginal and Torres Strait Islander research students. This formed the basis for the development of the Professional Certificate in Indigenous Research which is an interdisciplinary coursework program exploring research and developing research skills from an Aboriginal and Torres Strait Islander perspective. The program allows research students to invite their research supervisors to attend the course. For those supervisors who attend, the immersion in an Aboriginal and Torres Strait Islander learning environment is a uniquely valuable experience. The Lowitja Institute's guide for supervisors (see section 13.1.3) is provided to all participants of this course.

In 2011, Murrup Barak – Melbourne Institute for Indigenous Development at the University of Melbourne supported the university's Indigenous Graduate Students Association to establish the inaugural Symposium of Aboriginal and Torres Strait Islander Research. The symposium provided a unique opportunity for staff and students involved in Aboriginal and Torres Strait Islander research to present and discuss their research, to develop collaborative networks, and provide information to supervisors and researchers. This program will now be held on an annual basis, with the next symposium scheduled for late 2012.

13.4 Building the Aboriginal and Torres Strait Islander higher education workforce

The underrepresentation of Aboriginal and Torres Strait Islander staff, particularly in academic roles and research, is a significant barrier to achieving greater access, retention and participation of Aboriginal and Torres Strait Islander people in Australian universities. Increasing the number of Aboriginal and Torres Strait Islander academics will greatly assist, for example, in building teaching capacity, providing high-quality supervision for postgraduate students, embedding Aboriginal and Torres Strait Islander perspectives in curriculums and increasing research capacity.

13.4.1 Critical success factors

Critical success factors include:

- university executive provide support and leadership to drive outcomes
- capacity-building initiatives for targeted students and general staff
- professional development is provided for existing Aboriginal and Torres Strait Islander academic staff

- a single point of contact exists to provide administrative, pastoral and mentoring support to new Aboriginal and Torres Strait Islander staff and trainees
- the university is seen as an employer of choice by potential staff through engagement with the local community.

13.4.2 Key challenges

Key challenges include:

- identifying, developing and recruiting appropriately qualified Aboriginal and Torres Strait Islander people
- developing frameworks to support effective communication and implementation of Aboriginal and Torres Strait Islander employment strategies across the university
- ensuring that the whole university is perceived as a culturally safe place, so employees feel welcome and supported
- tailoring recruitment to recognise the different educational and employment histories of many Aboriginal and Torres Strait Islander people
- having sufficient resources (including time and funding) to train new Aboriginal and Torres Strait Islander staff to meet the needs of each job.

13.4.3 Examples

The University of Newcastle – Indigenous Employment Strategy

The University of Newcastle's Indigenous Employment Strategy has seen applications and total Aboriginal and Torres Strait Islander staff numbers rise since its implementation in 2009. The strategy focuses on recruitment, ensuring a culturally appropriate environment and the professional development and extension of current and prospective staff.

Key elements of the plan include:

- an Aboriginal and Torres Strait Islander Employment Coordinator to develop and implement the strategy
- collaborations with the Diversity in the Workplace Officer (Equity Advisor – Employment) and Human Resource Services to ensure that Aboriginal and Torres Strait Islander perspectives and pathways are considered in all employment activities
- establishing relationships with local Aboriginal and Torres Strait Islander communities and employment agencies
- conducting workshops regularly for staff in the university and within local high schools with connections to the university.

The university pursues a 'grow your own' approach to developing and attracting Aboriginal and Torres Strait Islander academic and general staff, with target groups including final-year students, postgraduate research students and Aboriginal and Torres Strait Islander alumni. This approach recognises and rewards potential, with identified senior students undertaking activities that enhance their skills and

experience and provide a pathway to postgraduate study or employment at the university.

As part of this, the Success and Leadership Program identifies final-year students for both postgraduate and employment opportunities. Students are supported to attend leadership and professional development activities, such as conferences, leadership workshops and international exchange programs.

The Kunarr Indigenous Alumni program also provides opportunities to Aboriginal and Torres Strait Islander graduates to participate in professional networking and development, social events and ongoing connection to the university. Postgraduate and employment opportunities are also promoted through the program. Alumni are encouraged to apply for positions.

In 2010, the university employed 67 Aboriginal and Torres Strait Islander staff (21 as academic staff and 46 as general staff). In 2011, Aboriginal and Torres Strait Islander staff represented approximately 2.4% of all university staff. Most faculties within the university exceed the sector average in rates of Aboriginal and Torres Strait Islander employment.

In 2012, the university has a target to increase the number of Aboriginal and Torres Strait Islander staff to 2.8% of all university staff. This target is one of the 20 key performance indicators against which the university will measure its success.

University of South Australia – professional development of new Aboriginal and Torres Strait Islander staff

An Indigenous Employment Strategy, *Yaitya Warpulai Tappa* (Indigenous Work Path), guides the recruitment, retention and development of Aboriginal and Torres Strait Islander staff at the University of South Australia. The university has set a target to ensure that 2% of the university's workforce is Aboriginal and Torres Strait Islander.

There are two distinct initiatives within the university's Indigenous Employment Strategy:

- an Indigenous Graduate Program which commenced in 2011 recruits and provides training for up to four Aboriginal or Torres Strait Islander graduates at any one time. Graduate trainees undertake four six-month placements in administrative units and academic divisions and are employed at Higher Education Officer level 4. The program provides a direct link between Aboriginal and Torres Strait Islander education and employment strategies, giving Aboriginal and Torres Strait Islander students an additional pathway into employment. This is one of the ways the university is seeking to improve internal employment pathways to enable transition from student to employee status.
- a professional development fund for Aboriginal and Torres Strait Islander staff who are newly appointed to the university either through a continuing or fixed-term contract of three or more years. The program provides funds for a customised professional development program.

In 2010, the David Unaipon College of Indigenous Education and Research graduated its first Aboriginal and Torres Strait Islander PhD candidate, who was subsequently appointed as a full-time lecturer at the university.

13.5 Ethical practice in research involving Aboriginal and Torres Strait Islander communities

Ethical research practice ensures that research involving Aboriginal and Torres Strait Islander people is done in collaboration with relevant communities in a culturally sensitive way. Historically, Aboriginal and Torres Strait Islander people have been the focus of inappropriate and disrespectful treatment by non-Indigenous researchers, including treatment as sub-human specimens of study. Aboriginal and Torres Strait Islander people were described as a physically and intellectually inferior 'race' and their remains displayed in museums in Australia and abroad (Malin, Franks & CCRE Research Course Development Committee 2007, pp. 16–17).

13.5.1 Critical success factors

Critical success factors include:

- research is led by Aboriginal and Torres Strait Islander people and involves community partnerships
- collaborative relationships with Aboriginal and Torres Strait Islander communities are established and inform all stages of research activity, including conception, design, conduct and application
- intellectual property rights are recognised, which includes a culturally safe research environment, a commitment to equal partnerships with Aboriginal and Torres Strait Islander communities and a demonstrated benefit from the research activity for participating communities.

13.5.2 Key challenges

Key challenges include:

- developing the systems and resources to embed ethical research principles and practice, including governance and cultural competency of researchers
- overcoming negative perceptions and gaining the trust of Aboriginal and Torres Strait Islander communities
- dedicating the time and resources necessary to build and maintain quality relationships with Aboriginal and Torres Strait Islander communities.

13.5.3 Examples

Australian Institute of Aboriginal and Torres Strait Islander Studies – Guidelines for Ethical Research in Australian Indigenous Studies

In 2011, the Australian Institute of Aboriginal and Torres Strait Islander Studies released the *Guidelines for ethical research in Australian Indigenous studies* following sector consultations. The guidelines outline good practice to assist researchers to conduct research involving Aboriginal and Torres Strait Islander communities. The guidelines identify 14 principles for ethical research and incorporate recent legislative changes relating to the cultural rights of Aboriginal and Torres Strait Islander people.



Eleven principles of practice are articulated:

- consultation, negotiation and free and informed consent are the foundations for research with or about Aboriginal and Torres Strait Islander people
- responsibility for consultation and negotiation is ongoing
- consultation and negotiation should achieve mutual understanding about the proposed research
- Indigenous knowledge systems and processes must be respected
- there must be recognition of the diversity and uniqueness of peoples as well as individuals
- the intellectual and cultural property rights of Indigenous peoples must be respected and preserved
- Aboriginal and Torres Strait Islander researchers, individuals and communities should be involved in research as collaborators
- use of, and access to, research results should be agreed
- a research community should benefit from, and not be disadvantaged by, the research project
- negotiation of outcomes should include results specific to the needs of the research community
- negotiation should result in a formal agreement for the conduct of a research project, based on good faith and free and informed consent.

The Australian Institute of Aboriginal and Torres Strait Islander Studies reports that the guidelines are used in some form within a number of universities, some research agencies, and groups such as professional associations and government departments. The guidelines can be downloaded at www.aiatsis.gov.au/research/ethics.html.

National Health and Medical Research Council – Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research and Criteria for Assessment of Proposals

The National Health and Medical Research Council *Guidelines for ethical conduct in Aboriginal and Torres Strait Islander health research* assist researchers to develop research proposals relating to Aboriginal and Torres Strait Islander people. The guidelines supplement the *National Statement on Ethical Conduct in Human Research*. Together these documents provide an authoritative statement on ethical research practice involving Aboriginal and Torres Strait Islander people on health issues. They provide guidance to researchers and human research ethics committees on the conception, design and conduct of research.

The guidelines identify six core values:

- spirit and integrity
- reciprocity
- respect



- equality
- survival and protection
- responsibility.

The guidelines provide advice for human research ethics committees, particularly non-Indigenous committees, and help to ensure that Aboriginal and Torres Strait Islander health research proposals are assessed and conducted ethically. This includes referring research proposals to a properly constituted Aboriginal and Torres Strait Islander research ethics committee, and creating an Aboriginal and Torres Strait Islander subcommittee or advisory group with Aboriginal and Torres Strait Islander members.

Examples of ethical research practice in universities

RMIT University

RMIT University demonstrates a commitment to ethical research practice targeting Aboriginal and Torres Strait Islander communities by ensuring that all research proposals involving Aboriginal and Torres Strait Islander people are reviewed and approved by its Human Research Ethics Committee. This is a mandatory requirement of the university's research process regardless of the level of perceived risk. Proposals are also viewed by the university's Aboriginal and Torres Strait Islander Researcher Network, a subcommittee of the ethics committee. Members of this network include Aboriginal and Torres Strait Islander academics and academics with expertise and experience in Aboriginal and Torres Strait Islander research. The university employs a coordinator at the academic Level B to support Aboriginal and Torres Strait Islander higher degree by research students and improve their understanding of ethical research issues.

Charles Sturt University

Charles Sturt University has processes in place to guide ethical research including a university research code of conduct, an intellectual property policy and a Human Research Ethics Committee. These policies and processes address all research management and administration, including that relating to Aboriginal and Torres Strait Islander research. The university ensures senior Aboriginal and Torres Strait Islander representation on the ethics committee to drive accountability and culturally safe and ethical research practice relevant to Aboriginal and Torres Strait Islander research. The university is currently establishing an Indigenous Research Ethics Committee as a subcommittee of the Human Research Ethics Committee, and developing an Indigenous Research Strategy to provide an overarching framework for all Aboriginal and Torres Strait Islander research policies, protocols and procedures.

CQUniversity and the Queensland Centre for Domestic and Family Violence Research

CQUniversity is involved with two Aboriginal and Torres Strait Islander initiatives that are underpinned by ethical research practice and demonstrate the benefit of ethical research practice. The Family Behavioural Intervention Program and the annual Indigenous Family Violence Prevention Forum are focused on providing intervention and support to families in the region that are experiencing family violence or youth

offending. The initiatives also deliver important employment and higher education opportunities for Aboriginal and Torres Strait Islander participants.

The Family Behavioural Intervention Program is managed and led by a CQUniversity professor in partnership with a local youth justice service, a community organisation and a school-based consortium. A central pillar of the initiative is ethical research practice, as evidenced by linking research to local community issues, engaging the community directly in the development, operation and evaluation of the program and providing opportunities for staff and clients to undertake higher education including research. The program has been evaluated and findings point to important, long-term benefits for participating communities.

In 2003, the Mackay-based Queensland Centre for Domestic and Family Violence Research, jointly funded by CQUniversity and the Queensland Government, established an Aboriginal and Torres Strait Islander reference group to guide its domestic and family violence prevention research, professional development and community education initiatives. Another key achievement of the partnership is an annual Indigenous Family Violence Prevention Forum which brings practitioners and researchers together to discuss key issues associated with family violence in Queensland. The work of the reference group and forum has linked research development and implementation with community-based 'grassroots' practitioners and issues. It has helped to break down barriers between academia and communities and provided a safe place for Aboriginal and Torres Strait Islander researchers, practitioners and representatives to share ideas. The local community benefits in a range of ways from this research activity, including through education and employment opportunities available to researchers and workers.

13.6 University strategies to support Aboriginal and Torres Strait Islander researchers

Successful research outcomes are achieved when Aboriginal and Torres Strait Islander research students are successfully supported to complete their PhDs and produce high-quality research. Sufficient support from universities is critical to fostering young Aboriginal and Torres Strait Islander academics and building capacity to undertake research. This in turn is fundamental to realising the academic gains of research involving Aboriginal and Torres Strait Islander people for the academy.

13.6.1 Critical success factors

Critical success factors include:

- university executive are committed to supporting researchers
- strategic frameworks build Aboriginal and Torres Strait Islander research capacity (for example, through research strategies and employment strategies to build the number of Aboriginal and Torres Strait Islander researchers)
- partnerships are cultivated between students, academics/mentors, communities, industry and government
- faculties provide academic networks and mentoring of Aboriginal and Torres Strait Islander students and staff

- approaches to research build strong and enduring relationships with Aboriginal and Torres Strait Islander communities
- non-Indigenous mentors and supervisors are culturally competent
- early career researchers have pathways and funding to support their development and research opportunities.

13.6.2 Key challenges

Key challenges include:

- attraction and recruitment of Aboriginal and Torres Strait Islander staff and students
- means to provide adequate income support for Aboriginal and Torres Strait Islander students undertaking research.

13.6.3 Examples

University of Western Sydney – Aboriginal and Torres Strait Islander Research Strategy

The University of Western Sydney's Aboriginal and Torres Strait Islander Research Strategy involves three streams:

- linking Aboriginal and Torres Strait Islander students who demonstrate the potential to be an early career researcher or academic with senior academic mentors to kick-start their research involvement and activate a research career
- utilising alternative entry pathways such as the Graduate Certificate in Research Studies transitioning to HDR studies for students aspiring to be successful future academics
- developing the academic workforce to partner effectively with industry, government and the community on projects that improve opportunities for Aboriginal and Torres Strait Islander research.

The university's Aboriginal and Torres Strait Islander Research Strategy develops research but also addresses some of the barriers to postgraduate study and academic careers, focusing on building confidence, awareness, support and connections. It does this by linking Aboriginal and Torres Strait Islander students, discipline-specific academic researchers/mentors, and industry, government and community. It also creates a smooth transition pathway from undergraduate to postgraduate study and then to academic/research employment.

The university provides strong and supportive research and teaching environments within schools, centres and research programs. Set staff funding, Aboriginal and Torres Strait Islander staff and student scholarships and professional development courses are regularly offered to increase levels of professionalism and expertise. In addition, a number of internal Early Career Research and Partnership grants are also regularly offered.

The key focus for the university's research strategy model is partnerships with opportunity. The quality, relevance and potential impact of research increases substantially where quality partnerships are developed between students, staff,



industry and community. This in turn increases the likelihood of quality research output, PhD completions, more projects and increased community engagement and trust.

The presence of students who are successfully transitioning into academia is leading to increased awareness within the Aboriginal and Torres Strait Islander community of the possibility of careers in research. As a result of the program, the university is receiving increased enquiries from Aboriginal and Torres Strait Islander candidates for research places.

The university has received the highest number of Discovery Indigenous grants of any Australian university, with 14 awarded over the period 2000–10.

Charles Sturt University – pathway support for fostering Aboriginal and Torres Strait Islander academics

Charles Sturt University pathways for Aboriginal and Torres Strait Islander people to undertake HDR studies and research now include the following schemes:

- **Indigenous Academic Internship Program:** a program that provides a living wage for eligible Aboriginal and Torres Strait Islander PhD candidates and assists in developing potential to enter an academic career. The internship combines a scholarship/stipend and a one-day-per-week teaching role. Eligible candidates enrol in a Charles Sturt University PhD program and receive appropriate, high-quality supervision and academic support.
- **Indigenous Staff Higher Degree by Research Pathways:** a program that offers partial time release from teaching/administrative responsibilities to fast-track completion of the Graduate Certificate in Research Methods and honours programs as a pathway into PhD study. Time release provided halves teaching and administration responsibilities.
- **Indigenous Staff PhD Release Scheme:** full-time equivalent release from teaching for eligible staff to facilitate PhD completion
- **Indigenous Research/Researchers Seed Funding:** a small internal funding pool to support seeding projects and/or small groups
- **Indigenous Higher Degree by Research Student Fee Waivers:** to encourage and support Aboriginal and Torres Strait Islander HDR student candidates by providing a fee waiver. The scheme is open to general staff and community members.

The university's Indigenous Trainee Program also means that there are employment pathways into university that can lead to study and academic careers.

13.7 Research teams and models for research success

Fostering and supporting the development of Aboriginal and Torres Strait Islander research students and early career researchers depends on the existence of high-quality research collaborations and opportunities to participate in them.

13.7.1 Critical success factors

Critical success factors include:

- strong and trusting partnerships are cultivated with non-Indigenous colleagues to access expertise, and support advocacy and mentoring
- collaborative teams are formed between Aboriginal and Torres Strait Islander HDR students and postdoctoral researchers
- professional development and research opportunities are provided (for example, to attend international conferences or to undertake leadership courses).

13.7.2 Key challenges

Key challenges include:

- limited time availability of lead researchers
- the often disparate nature and geographical spread of different research projects
- different and sometimes confronting research approaches and methodologies.

13.7.3 Examples

Telethon Institute for Child Health Research – Aboriginal capacity building and Centre for Research Excellence

The Telethon Institute for Child Health Research has two research programs to improve the health outcomes of support programs for Aboriginal and Torres Strait Islander communities:

- NHMRC Indigenous Capacity Building Grant in Population Health Research: Not just scholars but leaders: learning circles in Indigenous health research
- Centre for Research Excellence in Aboriginal Health and Wellbeing.

The aim of both of these collaborative five-year programs, which have run sequentially since 2004, is to build the capacity of Aboriginal and Torres Strait Islander researchers in the broad areas of health and wellbeing to become future leaders in research, to conduct research of the highest quality embedding strong cultural contexts and knowledge, and wherever possible, to utilise this knowledge to improve the health and wellbeing of Aboriginal and Torres Strait Islander families.

The programs are an integral part of the institute's commitment to improving Aboriginal and Torres Strait Islander wellbeing. The institute strongly feels that the only way to undertake high-quality research that is relevant to communities is to train Aboriginal and Torres Strait Islander people to lead and control the research process.

The Indigenous Capacity Building Grant has supported various PhD candidates and research projects:

- an Aboriginal and Torres Strait Islander parenting program being trialled and delivered to Aboriginal and Torres Strait Islander families in Perth
- bullying and its relevance to closing the gap for Aboriginal and Torres Strait Islander health



- helping families to achieve a smoke-free environment for their children
- foetal alcohol spectrum disorders and associated issues
- developmental, health, socio-economic, racial and demographic factors associated with risk, protective and resilience factors that contribute to juvenile delinquency
- Aboriginal and Torres Strait Islander racial identity and impacts on self-esteem, mental health and wellbeing
- contribution of primary health care to maternal, infant and child health of communities in Western Australia
- care-giving for Aboriginal and Torres Strait Islander people living with a serious mental illness.

The first five-year program was aimed at graduating 10 Aboriginal and Torres Strait Islander PhD candidates and supporting their postdoctoral experiences. Eight of the 10 chief investigators were Aboriginal and/or Torres Strait Islander, most of whom had completed their PhDs.

Based on the success of the Indigenous Capacity Building Grant, in October 2010 the Telethon Institute was awarded funding under the National Health and Medical Research Council Centres of Research Excellence Scheme to establish a national collaboration in Aboriginal and Torres Strait Islander health and wellbeing. The Centre for Research Excellence in Aboriginal Health and Wellbeing aims to radically improve the health and wellbeing of Aboriginal and Torres Strait Islander people through the use of community participatory action research, and to transfer research outcomes to health policies and practice. A key aim is to advance the training of researchers, particularly those with a capacity for independent research and future leadership roles.

Since October 2010, the Telethon Institute has published over 20 peer-reviewed journal articles, book chapters and its first research and policy brief. The centre is still in development; however, accomplishments to date include finalising its governance structure, employment of a full-time research coordinator, completion of a draft strategic plan and communication plan, a two-day research retreat, and a website. The centre has also been involved in capacity building for several Aboriginal and Torres Strait Islander and non-Indigenous staff and students through both national and international visiting scholars and roundtable discussions.

Four Aboriginal and Torres Strait Islander research participants have completed their PhDs through the Indigenous Capacity Building Grant. One participant is about to submit their PhD from the Centre for Research Excellence. Several researchers have gone on to set up independent research groups of their own as a result of the endeavours of the institute.

The sense of transformation and empowerment from the institute's research efforts is illustrated by Cheryl Kickett-Tucker and Juli Coffin on behalf of team investigators:

Alone we are one, together we are a critical mass, a group to be listened to, acknowledged and respected for our knowledge and skills in promoting and advocating our influence for change. Such a bond is formed for life as are our links back to our family, kin, culture and country. We have all shared this time of collective growth and

development and we will make a difference (Bessarab et al. 2009, p. 3).

Batchelor Institute of Indigenous Tertiary Education – Collaborative Research Network

In 2011, the Batchelor Institute of Indigenous Tertiary Education was awarded a Collaborative Research Network funding allocation from the then Department of Innovation, Industry, Science and Research to build a research development network, intended to increase and focus the research work of the institute. Beginning in 2012, this three-year project is directly tackling a national need for Aboriginal and Torres Strait Islander research and researcher capacity building, researcher critical mass and effective nodes and networks of collaboration across the institute's existing areas of research concentration, namely the creative arts, language and linguistics, and education.

The project is building on existing researcher and institutional relationships and is bringing together the expertise and resources of the Australian National University, Monash University, Charles Darwin University, and the Australian Institute of Aboriginal and Torres Strait Islander Studies to design and implement a range of integrated strategies, programs and activities including:

- joint HDR supervision
- supervision training and mentoring
- joint research proposals
- publication support
- shared seminars and HDR/researcher workshops
- HDR staff/supervisor exchanges.

The project has commenced by inducting three Indigenous 'staff fellows' into the research program. Two fellows are commencing PhD studies (one at the Batchelor Institute of Indigenous Tertiary Education, the other at the Australian National University) with one relocated into the Collaborative Research Network and supported by it for completion in 2013.

All staff fellows have had significant research exposure but with few opportunities to pursue full-time research awards at the doctoral level. All are long-term institute employees and have demonstrated an enduring commitment to the privileging of Aboriginal and Torres Strait Islander knowledge and epistemology. They have meaningful research career pathways before them.

The key challenges for both the project, and more broadly the capacity-building efforts at the Batchelor Institute of Indigenous Tertiary Education, have been distance, a small cohort and an equally small pool of research supervisors and mentors. The establishment of this project is intended to transform these challenges into a strength, by building capacity in specific and targeted areas of research activity beyond the life of the funding.



14 University culture and governance

14.1 Bringing community knowledge to campus

The practical engagement of Elders has been significant to universities' success in creating a learning environment that fosters cross-cultural understanding and respect for both students and staff. It has created partnerships with Aboriginal and Torres Strait Islander communities to address a wide range of issues pertinent to the social, emotional and spiritual wellbeing of Aboriginal and Torres Strait Islander families, and the education of Aboriginal and Torres Strait Islander students. Universities that formally recognise the role of Elders in university business offer a model for other institutions, both in terms of engagement with local communities and embedding in a practical way the principles of national reconciliation.

14.1.1 Critical success factors

Critical success factors include:

- Elders are engaged in ways that respect their knowledge and the role they play in achieving education and employment outcomes
- Aboriginal and Torres Strait Islander communities are recognised in high-level university documentation
- community endorsement is sought for both what is done and how it is done
- the activities of Elders in university business are resourced appropriately.

14.1.2 Key challenges

Key challenges include:

- limited models for community engagement in university life
- identifying relevant communities and securing necessary endorsements and permissions.

14.1.3 Examples

University of Western Sydney – Office of Aboriginal and Torres Strait Islander Employment and Engagement

In 2007, the University of Western Sydney established the Office of Aboriginal and Torres Strait Islander Employment and Engagement to improve outcomes for Aboriginal and Torres Strait Islander employment, engagement and cross-cultural awareness. The office's impact extends across the university through the development of language, policies, strategies and workplace agreements (including setting employment targets through the Aboriginal and Torres Strait Islander Employment Strategy Consultative Committee).

In its five years of operation, the office has achieved outcomes for Aboriginal and Torres Strait Islander people through a broad range of employment and engagement-related programs, including:

- an increase in Aboriginal and Torres Strait Islander employment from 15 to 50 full-time equivalent employees (representing 2% of the university's staff)
- a 95% completion rate by trainees and progression to higher study and employment
- creation of a cadetship brokerage model (with 100% completion by cadets placed in government, industry and community organisations)
- establishment of an early career academic and researcher pilot project providing mentoring to take postgraduate candidates through to academic careers
- establishment of an Elders on Campus program that provides leadership in cultural workplace relations
- creation of two annual Vice-Chancellor's Scholarships for Aboriginal and Torres Strait Islander staff.

The Elders on Campus program links the university to Aboriginal and Torres Strait Islander communities across six campuses in the Greater Western Sydney region. It provides role models and mentors for cadets, trainees and staff and an avenue for community input into university governance. The leadership program includes university training and invites Elders to become role models for other Aboriginal and Torres Strait Islander people.

The university's approach to engagement seeks to address the social, cultural and economic aspects of Aboriginal and Torres Strait Islander higher education, and to obtain external community validation. The university's Aboriginal and Torres Strait Islander Employment and Engagement Advisory Board was established to provide strategic advice and input into employment and engagement initiatives. Engagement is identified as a priority in the university's *Our People 2020* strategy.

Griffith University – Council of Elders

Griffith University's Indigenous Community Engagement, Policy and Partnership arrangement with a range of stakeholders and Aboriginal and Torres Strait Islander communities addresses the needs of Aboriginal and Torres Strait Islander staff and students. The involvement of Elders at the university over the past 10 years has grown in both responsibilities and strength—from one of student support to guest speaking, research and the development of policies and community engagement. In 2002, the university established the Elders-in-Residence program. The program involves Elders in policy and partnership initiatives, including advancing cross-cultural knowledge and respect across the university in areas such as curriculum development, teaching, research, student support and community-based initiatives. A Council of Elders was launched by the Governor-General in 2011.

The Council of Elders is active at the national and international levels in promoting better outcomes for Aboriginal and Torres Strait Islander students within higher education. The council developed the model for a Global Indigenous Elders Alliance,



which was endorsed by the World Indigenous Network Higher Education Consortium in 2011.

The Council of Elders and the Elders-in-Residence program have raised the profile of Elders in higher education, including in the scholarship of Indigenous knowledge and the role of Elders in research, academic programs and community engagement. They were instrumental in the formation of the Murri Court, in which Elders and respected members of the Aboriginal and/or Torres Strait Islander community sit on Magistrates Court proceedings involving Aboriginal and Torres Strait Islander defendants, an initiative that has been adopted at the state level.

The role of Elders includes:

- development of policies, academic programs and research as it pertains to Aboriginal and Torres Strait Islander student support, participation and employment
- facilitation of a greater understanding of cultural protocols across the university
- establishment of partnerships involving Griffith University faculties and centres, local Aboriginal Education Consultative Councils, industry, TAFE institutes and local schools to provide cultural advice and guidance for significant initiatives being developed
- participation in university committees such as the Aboriginal and Torres Strait Islander Advisory Committee and the Inclusive Curriculum Reference Committee
- provision of cultural support for Aboriginal and Torres Strait Islander students and staff and information for non-Indigenous students and staff on Aboriginal and Torres Strait Islander histories, experiences and issues
- representation of Griffith University at relevant local, state, national and international forums
- acting as cultural supervisors for Aboriginal and Torres Strait Islander and non-Indigenous postgraduate students
- promoting the university as a destination for Aboriginal and Torres Strait Islander people
- acting as a conduit between the university and the community
- developing a network of Elders across states and territories to work with national bodies to improve higher education outcomes for Aboriginal and Torres Strait Islander people.

The relationship developed with the local community has been important to the success of the program, as has the provision of both financial and in-kind resources to enable the Elders to develop a formal and well-recognised presence across the university.

14.2 Decision-making and accountability structures

Universities have adopted a variety of approaches to including Aboriginal and Torres Strait Islander people and perspectives in governance and accountability

arrangements. The most effective of these have articulated a strategic agenda at the highest level and established meaningful roles for senior Aboriginal and Torres Strait Islander and non-Indigenous staff.

14.2.1 Critical success factors

Critical success factors include:

- the university's commitment is signalled through articulation of a strategic agenda, led by senior leadership
- accountability is borne by senior staff across the university at faculty level
- senior Aboriginal and Torres Strait Islander appointments lead and coordinate cultural change across the university (noting accountability and action at faculty level)
- reporting and accountability structures are comprehensive and well coordinated.

14.2.2 Key challenges

Key challenges include:

- resistance to change across the institution
- inadequate information and reporting systems
- inadequate resources to support governance mechanisms and initiatives
- lack of prominence for Aboriginal and Torres Strait Islander matters at the university level.

14.2.3 Examples

Charles Darwin University – governance and higher education partnerships

Charles Darwin University was highlighted in relation to governance and cultural competence in research commissioned for the Review (Moreton-Robinson et al. 2011, pp. 14–15), due to the inclusion of Aboriginal and Torres Strait Islander people in institution decision-making processes and the presence of policies around this involvement. In addition, the university was the first Australian university to establish a high-level Aboriginal and Torres Strait Islander executive position (Pro-Vice-Chancellor Indigenous Leadership); a number of Australian universities have followed this trend with appointments at the pro-vice-chancellor and deputy vice-chancellor levels.

In 2010, the university partnered with the Batchelor Institute of Indigenous Tertiary Education to establish the Australian Centre for Indigenous Knowledges and Education (ACIKE). The centre aims to provide pathways to build the social, human, economic and identity capital of Aboriginal and Torres Strait Islander peoples across Australia.

The centre commenced delivering qualifications in 2012. Its approach is to:

- privilege and champion Indigenous identity, knowledges and relational ways of being in ways that empower individuals and communities and enhance cultural security



- emphasise a 'both ways' approach to developing intercultural communication, decision making, governance and ways of doing business
- benefit Aboriginal and Torres Strait Islander communities in the Northern Territory and nationally.

The foundations on which the centre is built are respect for Aboriginal and Torres Strait Islander ethics and protocols, respect for difference and diversity, trust, creativity, flexibility and adaptability, responsibility and accountability. The centre's Governance Board has majority Aboriginal and Torres Strait Islander membership. The centre will harness the complementary strengths of its founding institutions for their mutual benefit.

The centre is delivering a range of courses from enabling (Preparation for Tertiary Success) to postgraduate, using internal, external and workshop delivery approaches. There are three main delivery sites: the main ACIKE Hub at the university's Casuarina campus, the Batchelor Institute of Indigenous Tertiary Education's campus at Batchelor and the Desert Peoples Centre in Alice Springs.

The University of Queensland – appointment of Pro-Vice-Chancellor (Indigenous Education)

The University of Queensland established the Office of the Pro-Vice-Chancellor (Indigenous Education) in 2011, following an external review of the Aboriginal and Torres Strait Islander Studies Unit. The Pro-Vice-Chancellor is providing Indigenous leadership in the development and implementation of a university-wide strategy on Aboriginal and Torres Strait Islander education, in consultation with senior staff, external stakeholders and community organisations. The Pro-Vice-Chancellor is a member of the university executive, the Equity, Diversity and Status of Women Committee (a Senate subcommittee) and the Academic Board.

A key goal in the university's strategic plan is to increase the participation and completion rates of Aboriginal and Torres Strait Islander students in all education programs offered at the university. A range of entry pathways are available, and there is evidence of increasing numbers of school leavers gaining entry on merit. A range of initiatives are also in place to support inclusion of Indigenous perspectives in curriculums and opportunities for practical projects in Aboriginal and Torres Strait Islander communities.

In 2012, a case management approach is being introduced for all Aboriginal and Torres Strait Islander students and processes are being introduced for more formally linking faculty staff with academic and support staff of the Aboriginal and Torres Strait Islander Studies Unit. An Aboriginal and Torres Strait Islander working group established at faculty level will monitor and report on progress of Aboriginal and Torres Strait Islander students.

An audit of Aboriginal and Torres Strait Islander research activity is currently underway to inform the development of a comprehensive Aboriginal and Torres Strait Islander research plan for the university that will identify areas of strength and opportunities for Aboriginal and Torres Strait Islander students.

The most challenging aspect of moving to a university-wide strategy has been that of managing change. Overcoming barriers and resistance to change has involved extensive consultations with staff affected by the changes as well as with faculties, institutes, colleges and other administrative units of the university to ensure an

acceptable plan for strategy implementation and structures to support the desired outcomes. Additionally, the need to implement quality information and reporting systems has been identified.

Monash University – Indigenous Health Strategy

The Faculty of Medicine, Nursing and Health Sciences at Monash University launched its Indigenous Health Strategy in 2010. The strategy establishes the infrastructure for a more strategic, coordinated and sustainable approach to Aboriginal and Torres Strait Islander health in the areas of management, engagement, education, research, student support and environment across what is a large and complex faculty.

The strategy highlights how research will be conducted and identifies the following success factors:

- being relevant and effective in meeting community needs
- Aboriginal and Torres Strait Islander leadership and faculty-wide responsibility
- equal partnerships and joint decision making
- a strengths-based approach
- celebrating and promoting success.

By developing this strategy, the faculty is making a strong statement about its commitment to achieving outcomes in the health and wellbeing of Aboriginal and Torres Strait Islander people. Development of the strategy was endorsed at the faculty executive level and included an audit of arrangements within the faculty and at other universities. The process was driven by a committee that included the dean, deputy dean and community representatives. The audit identified structural and academic support systems that could be adapted for Monash University.

Monash University's Indigenous Health Strategy is supported by a range of institution-wide initiatives including an Aboriginal and Torres Strait Islander recruitment strategy and employee database, community engagement, cultural awareness initiatives and a commitment to doubling Aboriginal and Torres Strait Islander student numbers by 2015.

Headline outcomes from the strategy include the creation of a School for Indigenous Health (an Indigenous clinical school with a faculty-wide function), a Faculty Committee for Indigenous Health (reporting to the dean and responsible for setting and reviewing performance targets), Aboriginal and Torres Strait Islander community participation in decision making, an Aboriginal and Torres Strait Islander health student services program, and articulation of Aboriginal and Torres Strait Islander health outcomes in faculty strategic planning documents.

The strategy is viewed as a comprehensive model that explicitly involves faculty executive, centralises reporting and monitoring, and devolves operational responsibilities to each school. This comprehensiveness is seen as critical to its success. To date, the faculty has implemented the head of school arrangement, allocated program funding, and established the Faculty Committee for Indigenous Health. Every school must report to the committee and the committee decides what action is needed. Philanthropic support is also a success factor; however, full



operationalisation has been delayed by a year due to global financial issues (it is now expected to become fully operational in 2013).

The University of Western Australia – governance structures and key performance indicators

Responsibility for Aboriginal and Torres Strait Islander higher education permeates the University of Western Australia's decision-making and accountability structures, from the Vice-Chancellor down. Aboriginal and Torres Strait Islander participation rates are included in the indicators by which the Vice-Chancellor's performance is assessed and rewarded.

Structurally, the School of Indigenous Studies is positioned at the same level as a faculty and is led by a dean. The dean, like other faculty heads, reports directly to the Senior Deputy Vice-Chancellor and is a member of all high-level decision-making bodies, including the Academic Board, the Academic Council, the Planning and Budget Committee, the Senior Management Group, the Vice-Chancellor's Advisory Group, and various working parties and committees. The engagement of Aboriginal and Torres Strait Islander staff at all levels in the university's governance has enabled staff to gain a broader understanding of the sector and develop leadership skills.

Positioning the School of Indigenous Studies alongside the faculties provides sustained input into all university strategic planning, including the Operational Priorities Plan. Aboriginal and Torres Strait Islander engagement in formal and informal governance structures at senior management level and across the university has meant that Aboriginal and Torres Strait Islander higher education is embedded in the university's policy and planning decisions from the outset. This has had a direct impact on the consideration of Aboriginal and Torres Strait Islander education within university budget processes and improved the provision of funding for Aboriginal and Torres Strait Islander programs. The university's approach seeks to 'normalise' Aboriginal and Torres Strait Islander matters within university business, and ensure deans' and other senior managers' awareness of the significance of Aboriginal and Torres Strait Islander matters. Reporting and accountability measures promote shared responsibility for Aboriginal and Torres Strait Islander education outcomes.

Acronyms and abbreviations

ABS	Australian Bureau of Statistics
AFB	Away-from-Base (see glossary)
ACER	Australian Council for Educational Research
ACT	Australian Capital Territory
AIATSIS	Australian Institute of Aboriginal and Torres Strait Islander Studies
APA	Australian Postgraduate Award (see glossary)
CAEPR	Centre for Aboriginal Economic Policy Research, the Australian National University
COAG	Council of Australian Governments (see glossary)
CQUniversity	formerly known as Central Queensland University
DEEWR	Department of Education, Employment and Workplace Relations
DIISR	Department of Innovation, Industry, Science and Research
DIISRTE	Department of Industry, Innovation, Science, Research and Tertiary Education
FTE	full-time equivalent (see glossary)
HDR	higher degree by research (see glossary)
HECS-HELP	Higher Education Contribution Scheme – Higher Education Loan Program (see glossary)
HEPPP	Higher Education Participation and Partnerships Program (see glossary)
IHEAC	Indigenous Higher Education Advisory Council (see glossary)
ITAS-TT	Indigenous Tutorial Assistance Scheme – Tertiary Tuition (see glossary)
JSA	Job Services Australia
NCVER	National Centre for Vocational Education Research
OECD	Organisation for Economic Co-operation and Development
RMIT	Royal Melbourne Institute of Technology
RTS	Research Training Scheme (see glossary)
SCOTese	Standing Council on Tertiary Education, Skills and Employment
SES	socio-economic status (see ‘low socio-economic status’ in glossary)
TAFE	Technical and Further Education (see glossary)
UQ	University of Queensland
UWA	University of Western Australia
VET	vocational education and training (see glossary)



Glossary

Aboriginal and Torres Strait Islander Education Action Plan 2010–2014: A plan ‘developed by the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA) as part of the Council of Australian Governments’ (COAG’s) reform agenda to improve life outcomes for Aboriginal and Torres Strait Islander Australians. [The Ministerial Council] approved the plan in April 2010 and it was subsequently endorsed by COAG in May 2011’ (MCEECDYA 2010).

ABSTUDY: ‘ABSTUDY provides a means-tested living allowance and other supplementary benefits to eligible secondary and tertiary students. Primary students living at home and aged 14 years or more on 1 January in the year of study may also be eligible for assistance. ABSTUDY is delivered by Centrelink’ (DEEWR 2011a).

Attainment: Educational attainment is expressed by the highest completed level of education, defined according to the Australian Standard Classification of Education (ASCED) (ABS 2001). Attainment in this document, therefore, refers to the completion of a qualification.

Australian Postgraduate Awards (APAs): APAs provide financial support to Australian postgraduate students of exceptional research promise who undertake their higher degree by research at an Australian higher education provider.

Away-from-Base (AFB): ‘The Away from Base (AFB) program covers travel costs for higher education and Vocational Education and Training students studying an approved “mixed-mode” course. A “mixed-mode” course is a nationally accredited course that is delivered through a combination of distance education and face-to-face teaching for students who are based in their home communities and undertake occasional intensive study periods on campus’ (DEEWR 2011b).

Base Funding Review: The *Higher Education Base Funding Review: final report* offers recommendations on the principles for public investment in Australian higher education and proposals to ensure that Australian higher education remains internationally competitive (Lomax-Smith, Watson & Webster 2011). The Minister for Tertiary Education, Senator Chris Evans, released the report in December 2011.

Closing the Gap: ‘Closing the Gap is a commitment by all Australian governments to improve the lives of Indigenous Australians, and in particular provide a better future for Indigenous children. A national integrated Closing the Gap strategy has been agreed through the Council of Australian Governments (COAG) ... COAG has agreed to specific timeframes for achieving six Closing the Gap targets, relating to Indigenous life expectancy, infant mortality, early childhood development, education and employment’ (FaHCSIA 2011).

Compact: See ‘mission-based compact’.

Commonwealth Grant Scheme: ‘The Commonwealth Grant Scheme (CGS) provides funding to higher education providers for Commonwealth-supported places (CSPs) in bachelor courses of study and some CSPs in sub-bachelor, non-research postgraduate, medicine and other courses of study specified by the Minister’ (DIISRTE 2011a).

Commonwealth-supported place: Commonwealth-supported places are substantially subsidised student places available at all public universities and at a

handful of private higher education providers. They are funded by the Commonwealth Government through the Commonwealth Grant Scheme. Previously called a 'HECS' place.

Council of Australian Governments (COAG): COAG is the peak intergovernmental forum in Australia, comprising the Prime Minister, state premiers, territory chief ministers and the President of the Australian Local Government Association (COAG 2012).

Full-time equivalent (FTE): A member of staff who at a reference date has a full-time work contract in respect of their current duties has a full-time equivalent of 1.00. The full-time equivalent for a member of staff who at a particular reference date has a fractional full-time work contract in respect of their current duties (i.e. is working a fraction of a normal full-time working week) will be less than 1.0.

Group of Eight: The Group of Eight is a coalition of eight leading Australian universities with an intensive research focus and comprehensive capabilities in general and professional education. The group consists of the Australian National University, the University of New South Wales, the University of Adelaide, the University of Queensland, the University of Melbourne, the University of Western Australia, Monash University and the University of Adelaide.

Higher degree by research (HDR): A higher degree by research 'is a Research Doctorate or Research Masters course for which at least two-thirds of the student load for the course is required as research work' (*Commonwealth Scholarships Guidelines (Research) 2010*, p. 5, *Higher Education Support Act 2003*).

Higher education: Education involving qualifications under the Australian Qualification Framework at associate degree and above, as well as diploma and advanced diploma qualifications accredited under higher education arrangements.

Higher Education Contribution Scheme (HECS): The system introduced in 1989 which required higher education students in places subsidised by the Commonwealth Government to make a contribution to the cost of their course, underpinned by income contingent loans. 'HECS' places are now called 'Commonwealth-supported places' for which there is a 'student contribution amount' with loans and discounts for up-front payment under HECS-HELP.

Higher education institutions: Refers to all institutions offering accredited higher education qualifications. This includes both public and private and self-accrediting and non-self-accrediting institutions.

Higher Education Loan Program (HELP): A program to help eligible students pay their student contributions (HECS-HELP), tuition fees (FEE-HELP) and overseas study expenses (OS-HELP) through loans that are repaid through the taxation system (through either compulsory or voluntary repayments). HECS-HELP also covers the discount that Commonwealth-supported students receive if they pay student contributions up front. There are bonuses for voluntary repayments.

Higher Education Participation and Partnerships Program (HEPPP): 'The Higher Education Participation and Partnerships Program (HEPPP) aims to ensure that Australians from low SES backgrounds who have the ability to study at university get the opportunity to do so. It provides funding to universities listed in Table A of the *Higher Education Support Act 2003* to undertake activities and implement strategies that improve access to undergraduate courses for people from low SES

backgrounds, as well as improving the retention and completion rates of those students. In addition, the HEPPP aims to assist eligible universities to meet the Australian Government's ambition that 20% of domestic undergraduate students will be from low SES backgrounds by 2020' (DIISRTE 2011b).

Indigenous Education Unit (IEU): Located in universities around Australia, these units provide support to Aboriginal and Torres Strait Islander students. They further Aboriginal and Torres Strait Islander academic studies, create a network of Aboriginal and Torres Strait Islander students and academics, and provide an Aboriginal and Torres Strait Islander presence on university campuses (DEEWR 2011f). They often have another name and may also be called an 'Indigenous centre' or 'Indigenous unit'.

Indigenous Higher Education Advisory Council (IHEAC): IHEAC 'provides policy advice to the Australian Government on higher education, research and research training issues in relation to Aboriginal and Torres Strait Islander higher education students and staff' (DEEWR 2011e).

Indigenous Staff Scholarships: 'Indigenous Staff Scholarships provide professional development opportunities to Aboriginal and Torres Strait Islander staff working at universities. The scholarships are part of the Australian Government's plan to help improve education outcomes for Aboriginal and Torres Strait Islander people in higher education' (DEEWR 2011g).

Indigenous Support Program: 'The Indigenous Support Program (ISP) provides grants to higher education providers to assist them to meet the needs of their Indigenous students and to advance the goals of the National Aboriginal and Torres Strait Islander Education Policy (AEP). The Indigenous Support Program operates under the *Higher Education Support Act 2003*' (DEEWR 2011h).

Indigenous Tutorial Assistance Scheme – Tertiary Tuition (ITAS-TT): The ITAS-TT program provides funding for supplementary tuition to Aboriginal and Torres Strait Islander students studying university award-level courses and some specified Australian Qualifications Framework–accredited vocational education training courses at ITAS-funded institutions. Tuition is managed by education providers and is available only for subjects in a student's formal education program. It is not usually available for basic literacy, numeracy, enabling and bridging courses (DEEWR 2010b).

Low socio-economic status (SES) students: The Index of Education and Occupation from the latest available Australian Bureau of Statistics Socio-Economic Indexes for Areas is used to determine low socio-economic status. The index value for each postcode is used to identify a postcode nationally as low (bottom 25% of the population), medium (middle 50%) or high (top 25%). The number of students from a low SES background is then calculated by summing the number of students whose home postcodes as reported by university enrolment data are low SES postcodes.

Mission-based compact: A mission-based compact is a three-year agreement between a university and the Australian Government. A compact provides a framework for a university (i.e. a Table A or Table B higher education provider) to pursue its distinctive mission and strategic goals while contributing to the Australian Government's national objectives for higher education, research, research training and innovation. Current compacts cover the period 2011–13 (DIISRTE 2012c; DEEWR 2011i).

National Aboriginal and Torres Strait Islander Education Policy: The National Aboriginal and Torres Strait Islander Education Policy (also known as the 'AEP') is a national policy agreed between the Australian Government and each state and territory government. It informs education programs for Aboriginal and Torres Strait Islander Australians (DEST 1989; DEEWR 2011m).

Parity target: The Panel has recommended that the parity target for student enrolments and staff/researcher numbers should be based on the proportion of the total population aged between 15 and 64 who are Aboriginal and Torres Strait Islander people. This means that the initial national parity target for student enrolments and staff/researcher numbers would be 2.2% and revised in line with new population data following each national census (ABS 2012a). The initial parity target of 2.2% is based on 2006 Census data.

Table A provider: The 38 universities listed in Table A of the *Higher Education Support Act 2003* (also known as 'HESA') are Table A higher education providers. Providers listed in Table A of the Act are eligible for all Australian Government grants and their students can receive all forms of assistance. The following universities are currently listed in Table A:

1. Australian Catholic University
2. Australian National University
3. Batchelor Institute of Indigenous Tertiary Education
4. Charles Darwin University
5. Charles Sturt University
6. CQUniversity
7. Curtin University of Technology
8. Deakin University
9. Edith Cowan University
10. Flinders University of South Australia
11. Griffith University
12. James Cook University
13. La Trobe University
14. Macquarie University
15. Monash University
16. Murdoch University
17. Queensland University of Technology
18. RMIT University
19. Southern Cross University
20. Swinburne University of Technology
21. University of Adelaide
22. University of Ballarat
23. University of Canberra
24. University of Melbourne
25. University of Newcastle
26. University of New England
27. University of New South Wales
28. University of Queensland
29. University of South Australia
30. University of Southern Queensland
31. University of Sydney
32. University of Tasmania

- 33. University of Technology, Sydney
- 34. University of the Sunshine Coast
- 35. University of Western Australia
- 36. University of Western Sydney
- 37. University of Wollongong
- 38. Victoria University

TAFE institution: A Technical and Further Education (TAFE) institution is a registered training organisation owned and operated by a state government. TAFE institutes deliver the majority of publicly funded vocational education and training.

Tertiary education: The OECD defines tertiary education as programs at International Standard Classification of Education (ISCED) levels 5B, 5A and 6. Programs below ISCED level 5B are not considered tertiary level (OECD 2008). The OECD definition has been used throughout this report.

University: An Australian university is an institution that meets nationally agreed criteria and is established or recognised as a university under state, territory or Commonwealth legislation (*National Protocols for Higher Education Approval Processes*, section 1.13). In this report, universities refer to Table A providers in the *Higher Education Support Act 2003*.

Vocational education and training (VET): Vocational education and training provides skills and knowledge for work through a national system of public and private registered training organisations. Registered training organisations deliver Certificates I to IV, VET diplomas and advanced diplomas, and VET graduate certificates.

Appendix I: Terms of reference

Context: Aboriginal and Torres Strait Islander participation and outcomes in higher education

Aboriginal and Torres Strait Islander people continue to be underrepresented in the higher education sector. In spite of increased numbers of Aboriginal and Torres Strait Islander higher education students, the gap between Aboriginal and Torres Strait Islander and non-Indigenous students has widened over the past decade across a number of indicators including access, participation and completion rates. Aboriginal and Torres Strait Islander staff numbers remain low and continue to be concentrated in non-academic positions in institutions. Increasing the number of academic staff also presents a challenge, due to the relatively low number of Aboriginal and Torres Strait Islander students and staff undertaking research.

Action must be taken to ensure that Aboriginal and Torres Strait Islander people have access to the life chances that a quality university education provides to ensure equal participation in Australia's economic and social progress. University students and staff should also benefit from the knowledge and perspectives Aboriginal and Torres Strait Islander people bring.

The Australian Government recognises the need to transform participation and outcomes for Aboriginal and Torres Strait Islander students and staff in higher education. This commitment was evident in the Government's support of the Bradley Review of Higher Education's recommendation:

That the Australian Government regularly review the effectiveness of measures to improve higher education access and outcomes for Indigenous people in consultation with the Indigenous Higher Education Advisory Council (IHEAC) (Recommendation 30).

Increased access and outcomes for Aboriginal and Torres Strait Islander people in higher education will also contribute to reaching the COAG Closing the Gap target to 'halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade' and to support the new generation of Aboriginal and Torres Strait Islander students to succeed in higher education.

Terms of Reference

The Review will deliver on the Government's commitment to Recommendation 30 of the Bradley Review and contribute to the Government's achievement of the COAG target.

The Review is to provide advice and make recommendations in relation to:

- achieving parity for Aboriginal and Torres Strait Islander students, researchers, academic and non-academic staff;
- best practice and opportunities for change inside universities and other higher education providers (spanning both Indigenous specific units and whole-of-university culture, policies, activities, and programs);

- the effectiveness of existing Commonwealth Government programs that aim to encourage better outcomes for Indigenous Australians in higher education; and
- the recognition and equivalence of Indigenous knowledge in the higher education sector.

The Review will propose a strategic framework to enable the Government and the higher education sector to collectively address higher education access and outcomes for Aboriginal and Torres Strait Islander people to ensure parity in the sector.

The strategic framework will identify key priorities and actions/opportunities for consideration by the Government and the higher education sector to reduce the gaps between Aboriginal and Torres Strait Islander and non-Indigenous university students and staff across a range of outcomes.

The Review Panel

The Review will be directed by a Panel of experts, chaired by Professor Larissa Behrendt, Professor of Law and Indigenous Studies at the University of Technology, Sydney. The Panel Members will be the Chair of the Indigenous Higher Education Advisory Council, Professor Steven Larkin, and senior executive representatives from the Department of Education, Employment and Workplace Relations (DEEWR) and the Department of Industry, Innovation, Science and Research (DIISR). The Panel will consider and incorporate the advice of key stakeholders, especially IHEAC, and will be supported by a joint DEEWR/DIISR Secretariat.

Completion of Review

The Review Panel will report to the Minister for Tertiary Education and the Minister for Innovation, Industry, Science and Research within 12 months of its appointment. The Review will produce a strategic framework that will be informed by targeted research and stakeholder consultations and will contain practical recommendations for implementation by the Government and the sector.

Appendix II: Review process and personnel

The review process

In 2008, the Australian Government accepted the Review of Australian Higher Education (the Bradley Review). The Bradley Review recommended that the Australian Government regularly review the effectiveness of measures to improve higher education access and outcomes for Indigenous people in consultation with the Indigenous Higher Education Advisory Council (IHEAC).

To this end, the Australian Government established the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, announced on 14 April 2011.

The review panel

The review was led by a panel chaired by **Professor Larissa Behrendt**, Professor of Law and Director of Research at the Jumbunna Indigenous House of Learning at the University of Technology, Sydney. The other members of the panel were:

- Professor Steven Larkin, IHEAC Chair, Pro-Vice-Chancellor for Indigenous Leadership, Charles Darwin University
- Mr Robert Griew, Associate Secretary, Department of Industry, Innovation, Science, Research and Tertiary Education
- Ms Patricia Kelly, Deputy Secretary, Department of Industry, Innovation, Science, Research and Tertiary Education.

At the beginning of the review, Mr Griew was an Associate Secretary of the Department of Education, Employment and Workplace Relations (DEEWR) while Ms Kelly was a Deputy Secretary of the Department of Innovation, Industry, Science and Research (DIISR). Mr Griew's portfolio was subsequently separated from DEEWR and merged into the newly formed Department of Industry, Innovation, Science, Research and Tertiary Education (DIISRTE) in a machinery of government change that was announced on 12 December 2011 and established on 15 December 2011.

The Panel was supported by staff and a secretariat from the Department of Industry, Innovation, Science, Research and Tertiary Education.

Commissioned research

The Review Panel commissioned several research papers. These are listed in Appendix V.

Consultations

The Review Panel conducted national consultations with a range of stakeholders. The Chair visited 39 universities and had several meetings with other key stakeholders. Senior departmental staff went to New Zealand and visited universities and government agencies. Secretariat staff also recorded student interviews, quotes from which intersperse this report. A list of universities consulted is provided in

Appendix IV. Details of the consultations are provided in a separate document available from the Review website: www.innovation.gov.au/IHER.

The Panel was also informed by three additional consultation processes. An initial roundtable was held with a selection of Aboriginal and Torres Strait Islander academics on 24 May 2011 to explore the issue of 'Indigenous Knowledges' and to set a vision for Aboriginal and Torres Strait Islander participation in higher education. Key thinkers were brought together in Canberra on 29 August 2011 to explore innovative and pragmatic solutions to enhance Aboriginal and Torres Strait Islanders' access, participation, retention and success within the higher education sector through to employment and career options. A series of consultations with peak bodies and community organisations was conducted on behalf of the Review Panel by Indigenous communications consultants Cox Inall Ridgeway. A list of attendees to these consultations is provided at Appendix IV.

IHEAC also invited Aboriginal and Torres Strait Islander holders of PhD degrees to a forum that informed IHEAC's contribution to the Review. This forum was called the 'Aboriginal and Torres Strait Islander Academic Doctors' Forum' and was held in Canberra on 7–8 November 2011.

Submissions

On 19 September 2011, the Panel released its *Context paper and call for submissions* and an accompanying commissioned research paper, *Background paper on Indigenous Australian higher education: trends, initiatives and policy implications* by Ekaterina Pechenkina and Professor Ian Anderson, to assist parties who were interested in lodging a submission to the Review. The context paper canvassed key issues the Review Panel investigated and provided key statistics relating to Aboriginal and Torres Strait Islander people in higher education. The background paper provided a further overview of Aboriginal and Torres Strait Islander participation in higher education.

The period for making submissions formally closed on 18 November 2011.

Seventy-five submissions were received:

- 3 submissions were from Australian Government agencies.
- 4 submissions were from state or territory government agencies.
- 23 submissions were from organisations.
- 21 submissions were from private individuals.
- 17 submissions were from universities.
- 7 submissions were from university bodies.

A list of all submissions is provided at Appendix III.

Appendix III: Submissions

Submissions were received from the following organisations and individuals listed in alphabetical order. Most of the submissions received are posted on the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People page of the Department of Industry, Innovation, Science, Research and Tertiary Education website. The web address is: www.innovation.gov.au/IHER.

Organisation/individual	Submission no.
Aboriginal and Torres Strait Islander Healing Foundation	27
Academy of the Social Sciences in Australia	65
Arnold, Josie; Peters, Andrew—individual submission	22
Australian Catholic University	37
Australian Catholic University – Faculty of Education	69
Australian Government – Health Workforce Australia	63
Australian Government – National Health and Medical Research Council	74
Australian Indigenous Education Foundation	57
Australian Indigenous Mentoring Experience	6
Australian National University	30
Australian National University – National Centre for Epidemiology and Population Health	53
Beregovsky, Juzy—individual submission	43
Bond University	66
Canuto, Kootsy – individual submission	76
CareerTrackers Indigenous Internship Program	36
Centre for Independent Studies	54
Charles Darwin University	75
Coyne, Tammy – individual submission	77
Council of Australian Postgraduate Associations Inc.	56
Curtin University	49
Curtin University – Curtin Student Guild	47
Fredericks, Bronwyn—individual submissionw	48
Government of New South Wales –	71

Organisation/individual	Submission no.
Department of Education and Communities	
Government of New South Wales – Department of Family and Community Services	51
Government of South Australia – Department of Further Education, Employment, Science and Technology	17
Government of Western Australia – Department of Indigenous Affairs	58
Grant, Deann—individual submission	15
Group of Eight	16
Guthrie, Jill; Dance, Phyll; Kelly, Paul; Lokuge, Kamalini; McPherson, Michelle; Faulkner, Samantha—individual submission	10
Indigenous Higher Education Advisory Council	73
Indigenous Lawyers Association of Queensland	52
James Cook University – School of Education	14
Jones, Anthony Linden—individual submission	1
Jones, Sue—individual submission	13
Kelly, Loretta; Barac, Antony—individual submission	72
Koramannil, Ganesh—individual submission	40
La Trobe University	20
Law Council of Australia	70
Medical Deans Australia and New Zealand Inc.	25
Miller, Jillian—individual submission	41
Minerals Council of Australia	21
Murdoch University	5
National Aboriginal and Torres Strait Islander Higher Education Consortium	26
National Tertiary Education Union	45
National Union of Students	31
New South Wales Aboriginal Land Council Northern Region Local Aboriginal Land Councils	23
NSW/ACT Higher Education Network Aboriginal Corporation	50
O'Donnell, Carol—individual submission	3

Organisation/individual	Submission no.
Oldfield, Janine—individual submission	4
Page, Susan; Asmar, Christine—individual submission	35
Pakeha, Eike—individual submission	44
Parrott, Lionel—individual submission	19
Pechenkina, Ekaterina; Smith, Penelope—individual submission	55
Penrith, Aletha—individual submission	7
Pigram, Hayley—individual submission	2
RMIT University	67
Ross, Kirstin—individual submission	18
Royal Women's Hospital	32
Smith, David—individual submission	68
The Smith Family	34
St Ann's College Inc.	8
Stanley, Philip—individual submission	9
Swinburne University of Technology	24
Universities Australia	59
University of Ballarat	29
University of New England	46
University of Newcastle	28
University of Queensland	42
University of Queensland – Emmanuel College	64
University of Sydney	33
University of Sydney – The Women's College	12
University of Sydney – Students' Representative Council	60
University of Western Australia	61
University of Western Sydney	62
Victoria University	11
Victorian Aboriginal Education Association Inc.	38
Western Sydney Aboriginal Mainstream Advancement Board	39



Appendix IV: Consultations

University consultation meetings

1	Southern Cross University	18 August 2011
2	University of New England	19 August 2011
3	Curtin University	24 August 2011
4	Edith Cowan University	24 August 2011
5	University of Western Australia	25 August 2011
6	Murdoch University	25 August 2011
7	Monash University	1 September 2011
8	University of Newcastle	7 September 2011
9	Queensland University of Technology	9 September 2011
10	La Trobe University	13 September 2011
11	University of the Sunshine Coast	27 September 2011
12	CQUniversity	28 September 2011
13	University of Southern Queensland	29 September 2011
14	Swinburne University of Technology	30 September 2011
15	Flinders University	6 October 2011
16	University of South Australia	7 October 2011
17	University of Adelaide	7 October 2011
18	Deakin University	14 October 2011
19	Victoria University	20 October 2011
20	Charles Sturt University	27 October 2011
21	Griffith University	11 November 2011
22	RMIT University	15 November 2011
(7)	Monash University (follow-up)	17 November 2011
23	University of Tasmania	18 November 2011
24	University of Technology, Sydney	23 November 2011
25	University of Wollongong	24 November 2011
26	Macquarie University	24 November 2011
27	University of New South Wales	25 November 2011
28	University of Sydney	25 November 2011
29	University of Western Sydney	1 December 2011

(19)	Victoria University (follow-up teleconference)	1 December 2011
(2)	University of New England (follow-up teleconference)	5 December 2011
30	University of Queensland	8 December 2011
31	James Cook University	9 December 2011
(20)	Charles Sturt University (follow-up teleconference)	13 December 2011
32	Australian Catholic University	10 January 2012
(14)	Swinburne University of Technology (follow-up)	11 January 2012
33	University of Canberra	18 January 2012
34	Charles Darwin University	24 January 2012
35	Batchelor Institute of Indigenous Tertiary Education	25 January 2012
36	University of Notre Dame	27 January 2012
37	University of Melbourne	30 January 2012
38	University of Ballarat	1 February 2012
(22)	RMIT University (follow-up)	2 February 2012
39	Australian National University	6 February 2012

Non-university consultation meetings

1	Professor Mark McMillan	15 November 2011
2	Professor Judy Atkinson	16 November 2011
3	Mr Greg Phillips Professor Lester Irabinna Rigney Professor Michael McDaniel	7 December 2012
4	Ms Mary Kelly Queensland University of Technology Queensland Collaborative Approach to Widening Participation	11 January 2012
5	ACT Government Department of Education and Training and Chief Minister and Cabinet Directorate	19 January 2012
6	Mr Andrew McIntosh CPA	1 February 2012
7	Mr Russell Taylor Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) (IHEAC member)	6 February 2012
8	Mr Asmi Wood Australian National University (IHEAC member)	6 February 2012
9	Mr Aaron Smith, Engineer	7 February 2012



10	Professor Peter Lee Southern Cross University (teleconference)	9 February 2012
11	Professor Robert Morgan Tranby Aboriginal College	9 February 2012
12	Professor Paul Chandler University of Wollongong (IHEAC member) (teleconference)	9 February 2012
13	Professor Ian Anderson University of Melbourne (IHEAC member)	10 February 2012
14	Mr Frank Gafa National Union of Students (teleconference)	10 February 2012
15	Queensland Government Department of Education, Training and Employment	17 February 2012
16	Mr Geoff Scott NSW Aboriginal Land Council (teleconference)	21 February 2012
17	Dr Megan Clark Commonwealth Scientific and Industrial Research Organisation (CSIRO) (teleconference)	5 March 2012
18	Professor Andrew Wells Australian Research Council (ARC) (teleconference)	7 March 2012
19	NSW Government Department of Premier and Cabinet	7 March 2012
20	Griffith University Council of Elders (videoconference)	7 March 2012
21	Professor Boni Robertson Griffith University (teleconference)	30 April 2012
22	National VET Equity Advisory Council (NVEAC) (teleconference) Mr Tiga Bayles, Chair, NVEAC Mr Tony Dreise, Equity Advocate, NVEAC Mr Martin Powell, NVEAC Secretariat Ms Anne Alexander, NVEAC Secretariat	3 May 2012

Indigenous Knowledge roundtable: 24 May 2011

Professor Larissa Behrendt	Chair of the Review Panel
Professor Steven Larkin	Chair of IHEAC
Professor Aileen Moreton-Robinson	Deputy Chair of IHEAC
Professor Lester Irabinna Rigney	Dean of Indigenous Education University of Adelaide
Mr Greg Phillips	Dean's Advisor, Indigenous Health Monash University
Mr Gary Thomas	Director, Indigenous Education La Trobe University (Facilitator)

Key thinkers' forum: 29 August 2011

Associate Professor Berice Anning	University of Western Sydney
Ms Francesca Beddie	National Centre for Vocational Education Research
Ms Felicity Carr	Australian Institute of Aboriginal and Torres Strait Islander Studies
Professor Paul Chandler	University of Wollongong
Ms Josie Douglas	Commonwealth Scientific and Industrial Research Organisation
Ms Terry Dunbar	Charles Darwin University
Associate Professor Jacinta Elston	James Cook University
Mr Frank Gafa	National Union of Students
Mr Paul Gray	Oxford University
Associate Professor Susan Green	University of New South Wales
Professor Shane Houston	University of Sydney
Ms Susan Jabbs	Department of Innovation, Industry, Science and Research
Mr Neil Jarvis	Graham (Polly) Farmer Foundation
Ms Patricia Kelly	Department of Innovation, Industry, Science and Research
Professor Steven Larkin	Charles Darwin University
Associate Professor Tess Lea	University of Sydney
Ms Karina Lester	University of Adelaide
Mr Adam Linforth	Australian Indigenous Mentoring Experience



Dr Doug Marmion	Australian Institute of Aboriginal and Torres Strait Islander Studies
Professor John Maynard	University of Newcastle
Mr Michael McDaniel	University of Technology, Sydney
Mr Cydde Miller	Department of Health and Ageing
Ms Lindy Moffatt	Australian Institute of Aboriginal and Torres Strait Islander Studies
Professor Aileen Moreton-Robinson	Queensland University of Technology
Mr Richard Potok	Aurora Project
Mr Jonathon Potskin	Australian Institute of Aboriginal and Torres Strait Islander Studies
Dr Kaye Price	University of Southern Queensland
Ms Rebecca Richards	Oxford University
Associate Professor Daryle Rigney	Flinders University
Dr Chris Sarra	Queensland University of Technology
Mr Gary Thomas	La Trobe University
Dr Jakelin Troy	Australian Institute of Aboriginal and Torres Strait Islander Studies
Ms Sheena Watt	Australian Council of Trade Unions
Ms Melissa Williams	University of Western Sydney

New Zealand universities and government agencies: 4–9 March 2012

Mr Jim Peters	Pro-Vice-Chancellor Māori University of Auckland
Associate Professor Pare Keiha	Pro-Vice-Chancellor Māori Auckland University of Technology
Professor Linda Tuhiwai Smith	Pro-Vice-Chancellor Māori University of Waikato
Professor Graham Smith	Chief Executive Officer and Vice-Chancellor <i>Te Whare Wānanga o Awanuiārangī</i> [Indigenous University, New Zealand]
Professor Sir Mason Durie	Deputy Vice-Chancellor Assistant Vice-Chancellor, Māori and Pasifika Massey University



Rāwiri Tinirau	Project Manager MANU AO Academy [National Inter-University Māori Academy for Academic and Professional Advancement]
Ms Frances White and members of <i>Te Rau Whakaara</i>	<i>Te Rau Whakaara</i> [Māori student advice] Massey University
Hon Steve Maharey	Vice-Chancellor Massey University
Senior University staff	Massey University
Staff	Deputy Vice-Chancellor's (Māori and Pasifika) Office Massey University
Ms Andrea Schöllman	Group Manager, Tertiary Group Ministry of Education
Ms Paula Rawiri	Group Manager, Group Māori Ministry of Education
Davie Earle	Chief Research Analyst, Tertiary Group Ministry of Education
Marny Dickson	Chief Policy Analyst, Tertiary Group Ministry of Education
Dr Colin J Webb	Deputy Chief Executive Tertiary Education Commission
Mr David Nicholson	General Manager Strategy, Planning and Information Directorate Tertiary Education Commission
Ms Frannie Aston	Chief Advisor, Tertiary Education Strategy (TES) Priorities Strategy, Planning and Information Directorate Tertiary Education Commission
Ms Helen Lomax	Senior Advisor, Māori Strategy, Planning and Information Directorate Tertiary Education Commission
Dr Airini	Principal Advisor, Pacific Strategy, Planning and Information Directorate Tertiary Education Commission
Professor Angus MacFarlane	Professor of Māori Research University of Canterbury
Mr Darryn Russell	Assistant Vice-Chancellor Māori University of Canterbury
Ms Lynne-Harata Te Aika	School of Māori and Indigenous Studies University of Canterbury



Student interviews

Georgina Kiely	Murdoch University	4 October 2011
Chris Wilson	Flinders University	1 November 2011
Esther Blewit	Flinders University	1 November 2011
Jamilla Jean Olive Rebecca Sekiou	Flinders University	1 November 2011
Yaritji Green	Flinders University	1 November 2011
Simone Ulalka Tur	Flinders University	1 November 2011
Kim O'Donnell	Flinders University	1 November 2011
Casey Maree Kickett	University of Western Australia	3 November 2011
Marlia Miyalan Fatnowna	University of Western Australia	3 November 2011
Declan Scott	University of Western Australia	3 November 2011
Dylan Collard	University of Western Australia	3 November 2011
Cameron Howard	University of Western Australia	3 November 2011
Bianca Jade Howard	University of Western Australia	3 November 2011
Billy Kickett Morris	University of Western Australia	3 November 2011
Grace Dominique Plichta	University of Western Australia	3 November 2011
Janie Kennedy-Fillery	University of Western Australia	3 November 2011
Dr Jared Damien Thomas	University of South Australia	2 November 2011
Frances Wyld	University of South Australia	2 November 2011
Lana Florence Quall	University of South Australia	2 November 2011
Kylie Margaret Ellis	University of South Australia	2 November 2011
John Clifford Browne	University of South Australia	2 November 2011
Nicole Copley	University of the Sunshine Coast	7–8 November 2011
Brendan Powell	University of the Sunshine Coast	7–8 November 2011
Melinda Mann-Yasso	CQUniversity	8 November 2011
Bridgette Saplos	CQUniversity	8 November 2011
Rachel Kathleen Dunphy	CQUniversity	8 November 2011
Roslyn Dunphy	CQUniversity	8 November 2011
Adeah Kabai	CQUniversity	23 January 2012
Joseph Peter Sabitino	Queensland University of Technology	10 November 2011

Jordan Raymond-Monro	Queensland University of Technology	10 November 2011
Isaiah Banu	Queensland University of Technology	10 November 2011
Lazarus Cinnabar	Queensland University of Technology	10 November 2011
Andrew Iselin	Queensland University of Technology	10 November 2011
Jessica Michelle Monique Weinbus	Queensland University of Technology	10 November 2011
Whitney Marilyn Eileen Elizabeth Hunt	Queensland University of Technology	10 November 2011
Jordan Seeto	Queensland University of Technology	10 November 2011
Ashley Jamieson	University of Southern Queensland	8 November 2011
Sam Cooms	University of Southern Queensland	8 November 2011
Katherine Williams	University of Queensland	10 January 2012
Crystal Williams	University of Queensland	10 January 2012
Mathew Anderson	University of Queensland	10 January 2012

Cox Inall Ridgeway consultations

Ms Carla McGrath	National Centre of Indigenous Excellence	Sydney 9 December 2011
Mr Stephen Ryan	Chairperson NSW Aboriginal Land Council Education Endowment Fund	Sydney 9 December 2011
Mr Yuseph Deen	Acting Zone Director Southern Zone NSW Aboriginal Land Council	Canberra 13 December 2011
Mr Nick Parmeter	Director, Civil Justice Division Law Council of Australia	Canberra 13 December 2011
Mr Romlie Mokak	Chief Executive Officer Australian Indigenous Doctors Association	Canberra 13 December 2011
Mr Simon Gordon	General Manager Policy, Research and Government Affairs Reconciliation Australia	Canberra 13 December 2011



Dr Gavin Lind	Executive Director Minerals Tertiary Education Council Minerals Council of Australia	Canberra 14 December 2011
Ms Therese Postma	Assistant Director Social Policy Minerals Council of Australia	Canberra 14 December 2011
Ms Megan Lilly	Director of Education and Training Australian Industry Group	Melbourne 19 December 2011
Mr Simon Nish	Manager of Indigenous Programs and Community Engagement Rio Tinto	Melbourne 19 December 2011
Ms Sheena Watt	Indigenous Officer Australian Council of Trade Unions	Melbourne 19 December 2011
Ms Rosie Southwood	Manager Aboriginal Affairs Wesfarmers	Melbourne 19 December 2011
Ms Liz Furler	Chief Executive Officer Principals Australia	Teleconference 20 December 2011
Mr Ian Dalton	Executive Director Australian Parents Council	Teleconference 20 December 2011
Mr Stephen Bolton	Senior Advisor, Employment, Education and Training Australian Chamber of Commerce and Industry	Teleconference 20 December 2011
Mr Frank Gafa	National Indigenous Officer National Union of Students	Teleconference 20 December 2011
Mr Richard Potok	Aurora Project	Teleconference 22 December 2011

Cross-sectoral forum: increasing Aboriginal and Torres Strait Islander participation in education for the professions. Canberra, 30 March 2012

Mr Colin Ah You	Director, Indigenous Programs Delivery Team, DEEWR
Mr Geoff Barker	Director, PM+D Architects Pty Ltd
Mr Nino Bellantonio	President, Architects Accreditation Council of Australia
Mr Rueben Berg	Director, Indigenous Architecture Victoria
Ms Cath Brokenborough	National Environmental Health and Safety Manager Chair of Indigenous Engagement and Reconciliation, Lend Lease
Mr Danny Brookes	President, Student Organised Network for Architecture in Australia
Dr Melanie Dodd	Chair, Association of Architecture Schools of Australasia

Ms Carroll Go-Sam	Researcher, Aboriginal Environments Research Centre, University of Queensland
Ms Christine Harding	Chief Executive Officer, Architects Accreditation Council of Australia
Mr Dillon Kombumerri	Principal Indigenous Architect, NSW Government Architect's Office
Ms Martha Liew	National Education Manager, Australian Institute of Architects
Professor Stephen Loo	Chair, National Education Committee, Australian Institute of Architects; Australian Council of Deans of Built Environment and Design (discussion group leader)
Mr Mike Norman	Assistant Director, Indigenous Programs Delivery Team, DEEWR
Mr Richard Potok	Director, The Aurora Project
Mr Craig Ritchie	Branch Manager, Indigenous and Equity Branch, DIISRTE
Mr Julian Wigley	GHD Pty Ltd; Remote Housing, NT Department of Housing and Local Government
Professor Tony Williams	Discipline network member
Mr Sean Armistead	CareerTrackers
Ms Caroline Armstrong	Higher Education Executive, CPA Australia
Professor Wendy Brabham	Director, Institute of Koorie Education, Deakin University
Professor Barry Cooper	Head, School of Accounting, Economics and Finance, Deakin University; Australian Business Deans' Council
Mr Lloyd Driscoll	Executive General Manager, Member Knowledge, Institute of Public Accountants
Ms Jasmin Fielder	Director, Indigenous Higher Education Policy, DIISRTE
Ms Saretta Fielding	Chief Executive Officer, Yarnteen Ltd
Associate Professor Mark Freeman	Discipline Scholar, Australian Learning and Teaching Council, Learning and Teaching Academic Standards Resources for Accounting project
Professor James Guthrie	Head of Academic Relations, the Institute of Chartered Accountants in Australia
Professor Kerry Jacobs	ACT Council Member, the Institute of Chartered Accountants in Australia
Ms Luisa Lombardi	Lecturer, School of Accounting, Economics and Finance, Deakin University



Mr Christian Lugnan	Executive Officer, Office of the Registrar of Indigenous Corporations; 1000 Indigenous Accountants Steering Group
Ms Clare Page	Group Manager, Workforce Participation
Mr Bernie Pearce	Policy and Projects Manager, Australian Indigenous Doctors' Association Ltd
Ms Linda Powell	First Assistant Secretary, Office for Aboriginal and Torres Strait Islander Health
Dr Richard Seymour	Program Director, Innovation and Enterprise, University of Sydney Business School
Mr Gavin Tye	Indigenous Relationship Development Officer, the Institute of Chartered Accountants in Australia, CPA Australia, the Institute of Public Accountants (discussion group leader)
Emeritus Professor Christine Ewan	Consultant
Dr Kaye Price	Centre for Australian Indigenous Knowledges, University of Southern Queensland



Appendix V: Commissioned research

The following papers were commissioned by the Panel and informed this report:

ACER 2011, 'Literature review relating to the current context and discourse of Indigenous tertiary education in Australia', Australian Council for Educational Research, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.

— 2012, 'Overarching analysis of submissions to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People', Australian Council for Educational Research, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra.

Anderson, I 2011, 'Indigenous pathways into the professions', University of Melbourne, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.

Pechenkina, E & Anderson, I 2011, *Background paper on Indigenous Australian higher education: trends, initiatives and policy implications*, Department of Education, Employment and Workplace Relations, Canberra, <<http://www.deewr.gov.au/Indigenous/HigherEducation/ReviewofIndigenousHigherEducation/Submissions/Documents/IndigenousHigherEducationReview-ResearchPaper.pdf>>.

Aurora Project 2011, 'The need for increased support for Aboriginal and Torres Strait Islander students: statistical analysis and some lessons from the United States', Aurora Project, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.

Wilson, A & Battiste, M 2011, 'Environmental scan of educational models supporting Aboriginal post-secondary education', Aboriginal Education Research Centre, University of Saskatchewan, Saskatoon, Canada, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.

Brady, W 2012, 'Indigenous student support in Australian universities', unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra.

Moreton-Robinson, A, Walter, M, Singh, D & Kimber, M 2011, 'On stony ground: governance and Aboriginal and Torres Strait Islander participation in Australian universities', Queensland University of Technology/University of Tasmania, unpublished report to the Review of Higher Education Access and

Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.

- Penetito, WT 2011, 'What is good for Māori is good for the institution as a whole', Victoria University of Wellington, New Zealand, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Rigney, L-I 2011, 'Indigenous higher education reform and Indigenous knowledges', University of Adelaide, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Rodgers-Falk, P 2011, 'Growing the number of Aboriginal and Torres Strait Islander law graduates: barriers to the profession', unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Strelein, L 2011, 'AIATSIS—an incubator for Indigenous researchers? Lessons from the Indigenous Visiting Research Fellowship and AIATSIS Grants Program', Australian Institute of Aboriginal and Torres Strait Islander Studies, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Taylor, J, Gray, M, Hunter, B, Yap, M & Lahn, J 2011, 'Higher education and the growth of Indigenous participation in professional and managerial occupations', Centre for Aboriginal Economic Policy Research, Australian National University, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Walter, M 2011, 'Embedding Aboriginal and Torres Strait Islander presence: opening knowledge pathways', University of Tasmania, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Warrior, R 2012, 'Native higher education in the United States and Canada: a report for the Review of Higher Education Access and Outcomes for Aboriginal and Torres Straits Islanders', University of Illinois at Urbana-Champaign, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra.

References

- ABS 2001, *Australian Standard Classification of Education (ASCED)*, 28 August 2001, cat. no. 1272.0, Australian Bureau of Statistics, Canberra, viewed 12 June 2012, <<http://www.abs.gov.au/ausstats/abs@.nsf/mf/1272.0>>.
- 2006, *Census of population and housing*, Australian Bureau of Statistics, Canberra.
- 2008a, *National Aboriginal and Torres Strait Islander social survey, 2008*, cat. no. 4714.0, Australian Bureau of Statistics, Canberra, viewed 29 February 2012, <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/4714.0Main%20Features42008?opendocument&tabname=Summary&prodno=4714.0&issue=2008&num=&view>>.
- 2008b, *SEIFA: socio-economic indexes for areas*, Australian Bureau of Statistics, Canberra, viewed 1 June 2012, <http://www.abs.gov.au/websitedbs/D3310114.nsf/home/Seifa_entry_page>.
- 2009, 'Experimental life tables for Aboriginal and Torres Strait Islander Australians, 2005–2007', Australian Bureau of Statistics, Canberra.
- 2011a, *Schools, Australia, 2010*, cat. no. 4221.0, Australian Bureau of Statistics, Canberra, viewed 21 May 2012, <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4221.02010?OpenDocument>>.
- 2011b, *Topics @ a glance: Aboriginal and Torres Strait Islander peoples: population*, Australian Bureau of Statistics, Canberra, viewed 1 June 2012, <<http://www.abs.gov.au/websitedbs/c311215.nsf/web/Aboriginal+and+Torres+Strait+Islander+Peoples+-+Population>>.
- 2012a, *Australian demographic statistics, Sep 2011*, 'Table 11: Estimated resident Aboriginal and Torres Strait Islander population, age groups: states and territories: at 30 June 2006', 'Table 12: Estimated resident Australian non-Indigenous population, age groups: states and territories: at 30 June 2006', data cube: Excel spreadsheet, cat. no. 3101.0, Australian Bureau of Statistics, Canberra, viewed 1 June 2012, <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.0Sep%202011>>.
- 2012b, *Schools, Australia, 2011*, 3 February 2012, cat. no. 4221.0, Australian Bureau of Statistics, Canberra, viewed 21 May 2012, <<http://www.abs.gov.au/ausstats/abs@.nsf/mf/4221.0>>.
- Access Economics 2008, *An overview of the economic impact of Indigenous disadvantage*, report by Access Economics for Reconciliation Australia.
- ACER 2012, 'Overarching analysis of submissions to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People', Australian Council for Educational Research, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra.

- AIATSIS 2011, *Guidelines for ethical research in Australian Indigenous studies*, Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra, viewed 1 June 2012, <<http://www.aiatsis.gov.au/research/docs/GERAISjune2011.pdf>>.
- AIDA 2011, *Annual report 2010*, Australian Indigenous Doctors' Association Ltd, Canberra, viewed 25 May 2012, <http://www.aida.org.au/pdf/AnnualReports/AIDA_Annual_Report_2010.pdf>.
- Anderson, I 2008, 'The knowledge economy and Aboriginal health development', Dean's Lecture, Melbourne, 13 May 2008.
- 2011, 'Indigenous pathways into the professions', University of Melbourne, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Pechenkina, E & Anderson, I 2011, *Background paper on Indigenous Australian higher education: trends, initiatives and policy implications*, Department of Education, Employment and Workplace Relations, Canberra, viewed 1 June 2012, <<http://www.deewr.gov.au/Indigenous/HigherEducation/ReviewofIndigenousHigherEducation/Submissions/Documents/IndigenousHigherEducationReview-ResearchPaper.pdf>>.
- Anderson, L, Singh, M, Stehbens, C & Ryerson, L 1998, *Equity issues: every university's concern, whose business? An exploration of universities' inclusion of Indigenous peoples' rights and interests*, report to the Department of Employment, Education, Training and Youth Affairs, Capricornia Aboriginal and Torres Strait Islander Education Centre, Central Queensland University.
- APSC 2010, *APS Statistical Bulletin, State of the Service Series 2009–10*, Australian Public Service Commission, viewed 29 February 2012, <<http://www.apsc.gov.au/stateoftheservice/0910/statistics/table57.html>>.
- 2011, *State of the service report 2010–11*, Australian Public Service Commission, Canberra, viewed 29 February 2012, <<http://www.apsc.gov.au/stateoftheservice/1011/>>.
- Ara Irititja Project 2011, *Ara Irititja Project*, viewed 4 June 2012, <<http://www.irititja.com/>>.
- ARC 2011a, *ERA 2012 submission guidelines: excellence in research for Australia*, Australian Research Council, Canberra, viewed 17 May 2012, <http://www.arc.gov.au/pdf/era12/ERA2012_SubmissionGuidelines.pdf>.
- 2011b, *The Excellence in Research for Australia (ERA) initiative*, 24 October 2011, Australian Research Council, Canberra, viewed 17 May 2012, <<http://arc.gov.au/era/default.htm>>.
- Asmar, C, Mercier, OR & Page, S 2009, "You do it from your core": priorities, perceptions and practices of research among Indigenous academics in Australian and New Zealand universities', in Angela Brew and Lisa Lucas (eds), *Academic research and researchers*, Open University Press and McGraw-Hill, Maidenhead, UK, pp. 146–60.

- ATN 2008, *Review of Australian Higher Education: ATN response*, Australian Technology Network of Universities (ATN) submission to the Review of Australian Higher Education, viewed 29 May 2012, <<http://www.deewr.gov.au/HigherEducation/Review/Documents/Submissions2008/ATNHigherEducationReviewFINAL.pdf>>.
- AUQA 2011, *Australian Universities Quality Agency: report of an audit of University of Wollongong*, AUQA Audit Report Number 116, Australian Universities Quality Agency, Melbourne, viewed 25 May 2012, <http://www.teqsa.gov.au/sites/default/files/auditreport_uow_2011.pdf>.
- Aurora Project 2011a, *Indigenous Scholarships*, Aurora Project, viewed 6 June 2012, <<http://www.indigenousscholarships.com.au/>>.
- 2011b, 'The need for increased support for Aboriginal and Torres Strait Islander students: statistical analysis and some lessons from the United States', Aurora Project, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Australian Government 2011, *Indigenous Economic Development Strategy 2011–2018*, 15 December 2011, Canberra, viewed 27 February 2012, <<http://www.indigenous.gov.au/ieds/>>.
- 2012a, *Budget 2012–13*, Canberra, viewed 6 June 2012, <<http://www.budget.gov.au/2012-13/>>.
- 2012b, *Closing the Gap: Prime Minister's report 2012*, Canberra, viewed 1 June 2012, <http://www.fahcsia.gov.au/sa/indigenous/pubs/closing_the_gap/Documents/closing_the_gap_2012.PDF>.
- Australian Treasury 2010, *Australia's future tax system: report to the Treasurer*, December 2009, Part 1: Overview, Commonwealth of Australia, Canberra, viewed 1 June 2012, <http://taxreview.treasury.gov.au/content/Content.aspx?doc=html/pubs_report_s.htm>.
- Barrie, S 2004, 'A research-based approach to generic graduate attributes policy', *Higher Education Research and Development*, vol. 23, no. 3, pp. 261–75.
- Battiste, M 2002, *Indigenous knowledge and pedagogy in First Nations education: a literature review with recommendations*, prepared for the National Working Group on Education and the Minister of Indian Affairs, Indian and Northern Affairs Canada, Ottawa, Canada.
- Wilson, A & Battiste, M 2011, 'Environmental scan of educational models supporting Aboriginal post-secondary education', Aboriginal Education Research Centre, University of Saskatchewan, Saskatoon, Canada, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Bessarab, D, Solonec, C, Gibbs, T, Lehmann, D & Wright, M (eds) 2009, *Not just scholars but leaders: learning circles in Indigenous health research*, Telethon

- Institute for Child Health Research, Curtin University of Technology, University of Western Australia & Combined Universities Centre for Rural Health, Perth.
- Biermann, S & Townsend-Cross, M 2008, 'Indigenous pedagogy as a force for change', *Australian Journal of Indigenous Education*, vol. 37S, pp. 146–54.
- Bradley, D, Noonan, P, Nugent, H & Scales, B 2008, *Review of Australian Higher Education: final report*, report to the Department of Education, Employment and Workplace Relations, Canberra.
- Brady, W 2012, 'Indigenous student support in Australian universities', unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra.
- Calma, T 2008, *Preventing crime and promoting rights for Indigenous young people with cognitive disabilities and mental health issues*, Human Rights and Equal Opportunity Commission, viewed 24 May 2012, <http://www.hreoc.gov.au/social_justice/publications/preventing_crime/cog_di_sr.pdf>.
- Campbell, A 2010, 'Developing generic skills and attributes of international students: the (ir)relevance of the Australian university experience', *Journal of Higher Education Policy and Management*, vol. 32, no. 5, pp. 487–97.
- Cassells, R, McNamara, J, Gong, H & Bicknell, S 2011, *Unequal opportunities: life chances for children in the 'lucky country'*, AMP Foundation, National Centre for Social and Economic Modelling & The Smith Family, Sydney.
- Chen, X & Carroll, CD 2005, *First-generation students in postsecondary education: a look at their college transcripts*, US Department of Education, Washington, DC.
- Choy, SP 2002, *Access and persistence: findings from 10 years of longitudinal research on students*, American Council on Education, Center for Policy Analysis, Washington, DC, viewed 24 May 2012, <<http://inpathways.net/access.pdf>>.
- COAG 2012, *Council of Australian Governments (COAG)*, Council of Australian Governments, Canberra, viewed 1 June 2012, <<http://www.coag.gov.au/>>.
- COAG Reform Council 2011, *Skills and workforce development 2010: comparing performance across Australia*, COAG Reform Council, Sydney.
- Craven, R, Tucker, A, Munns, G, Hinkley, J, Marsh, H & Simpson, K 2005, *Indigenous students' aspirations: dreams, perceptions and realities*, Department of Education, Science and Training, Canberra.
- DEEWR 2008, *National report to parliament on Indigenous education and training*, 2008, Department of Education, Employment and Workplace Relations, Canberra.
- 2010a, *Annual national report of the Australian vocational education and training system 2010*, Department of Education, Employment and Workplace Relations, Canberra, viewed 21 May 2012, <<http://www.voced.edu.au/content/ngv50601>>.

- 2010b, *Indigenous Education (Targeted Assistance) Act 2000: program guidelines: 2009 to 2012*, Department of Education, Employment and Workplace Relations, Canberra, viewed 1 June 2012, <<http://www.deewr.gov.au/Indigenous/HigherEducation/PolicyGuidelines/Documents/ITASGuidelines.pdf>>.
- 2011a, *ABSTUDY policy and guidelines*, Department of Education, Employment and Workplace Relations, Canberra, viewed 12 June 2012, <<http://www.deewr.gov.au/Indigenous/Schooling/Programs/Pages/abstudy.aspx>>.
- 2011b, *Away from Base*, Department of Education, Employment and Workplace Relations, Canberra, viewed 12 June 2012, <<http://www.deewr.gov.au/Indigenous/HigherEducation/PolicyGuidelines/Pages/AwayfromBase.aspx>>.
- 2011c, *Increasing Indigenous public sector employment*, Department of Education, Employment and Workplace Relations, Canberra, viewed 29 February 2012, <<http://www.deewr.gov.au/Indigenous/Employment/Pages/PublicSectorEmployment.aspx>>.
- 2011d, *Indigenous cadetship support*, Department of Education, Employment and Workplace Relations, Canberra, viewed 1 June 2012, <<http://www.deewr.gov.au/Indigenous/Employment/Programs/IEP/Pages/IndigenousCadetshipSupport.aspx>>.
- 2011e, *Indigenous Higher Education Advisory Council (IHEAC)*, Department of Education, Employment and Workplace Relations, Canberra, viewed 1 June 2012, <<http://www.deewr.gov.au/Indigenous/HigherEducation/Programs/IHEAC/Pages/Home.aspx>>.
- 2011f, *Indigenous higher education centres*, Department of Education, Employment and Workplace Relations, Canberra, viewed 1 June 2012, <<http://www.deewr.gov.au/Indigenous/HigherEducation/Programs/Pages/IndigenousHigherEducationCentres.aspx>>.
- 2011g, *Indigenous Staff Scholarships*, Department of Education, Employment and Workplace Relations, Canberra, viewed 1 June 2012, <http://www.deewr.gov.au/Indigenous/HigherEducation/Programs/Pages/indigenous_staff_scholarships.aspx>.
- 2011h, *Indigenous Support Program*, Department of Education, Employment and Workplace Relations, Canberra, viewed 1 June 2012, <<http://www.deewr.gov.au/Indigenous/HigherEducation/Programs/Pages/IndigenousSupport.aspx>>.
- 2011i, *Indigenous Youth Leadership Program*, Department of Education, Employment and Workplace Relations, Canberra, viewed 1 June 2012, <<http://www.deewr.gov.au/indigenous/Schooling/Programs/IYLP/Pages/IYLP.aspx>>.
- 2011j, *Indigenous Youth Mobility: program summary*, Department of Education, Employment and Workplace Relations, Canberra, viewed 1 June 2012,

<http://www.deewr.gov.au/Indigenous/Schooling/Programs/YouthMobilityProgram/Pages/ProgramSummary.aspx>>.

- 2011k, 'Internal evaluation of selected DEEWR programs directed towards the support of higher education access and outcomes for Aboriginal and Torres Strait Islander students: prepared for the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People Review Panel', unpublished internal report for the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- 2011l, *Mission-based compacts and performance funding for universities*, Department of Education, Employment and Workplace Relations, Canberra, viewed 1 June 2012, <http://www.deewr.gov.au/HigherEducation/Policy/Pages/Compacts.aspx>>.
- 2011m, *National Aboriginal and Torres Strait Islander Education Policy (AEP)*, Department of Education, Employment and Workplace Relations, Canberra, viewed 6 June 2012, <http://www.deewr.gov.au/Indigenous/Schooling/PolicyGuidelines/Pages/aep.aspx#01>>.
- 2011n, *Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People: context paper and call for submissions*, Department of Education, Employment and Workplace Relations, Canberra, viewed 1 June 2012, <http://www.deewr.gov.au/Indigenous/HigherEducation/ReviewofIndigenousHigherEducation/Submissions/Documents/IndigenousHigherEducationReview-ContextPaper.pdf>>.
- 2011o, 'Strategy evaluation of programs directed towards the support of Aboriginal and Torres Strait Islander students in higher education', unpublished internal report for the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- 2012, 'Studies assistance guidelines', unpublished internal paper, Department of Education, Employment and Workplace Relations, Canberra.
- n.d., 'CHESN data: retentions, attrition, transitions and completions', unpublished internal paper on Commonwealth Higher Education Student Support Number (CHESN) data, Department of Education, Employment and Workplace Relations, Canberra.

Department of Finance and Deregulation 2010, *Strategic review of Indigenous expenditure*, Department of Finance and Deregulation, Canberra, viewed 29 February 2012, http://www.finance.gov.au/foi/disclosure-log/2011/docs/foi_10-27_strategic_review_indigenous_expenditure.pdf>.

DEST 1989, *National Aboriginal and Torres Strait Islander Education Policy (AEP)*, Department of Education, Science and Training, Canberra, viewed 29 February 2012, <http://www.dest.gov.au/archive/schools/indigenous/aep.htm>>.

DEST 2006, *National report to parliament on Indigenous education and training, 2004*, Department of Education, Science and Training, Canberra, viewed 1

- June 2012,
http://www.dest.gov.au/sectors/indigenous_education/publications_resource/s/profiles/national_report_indigenous_education_and_training_2004.htm>.
- DIIRD n.d., *Opening doors for all Victorians: the Tertiary Education Access Plan*, Department of Innovation, Industry and Regional Development, Government of Victoria, Melbourne, viewed 21 May 2012,
http://www.dbi.vic.gov.au/data/assets/pdf_file/0018/224613/Tertiary_Education_Access-Plan.pdf>.
- DIISR 2011a, *Defining quality for research training in Australia: a consultation paper*, Department of Innovation, Industry, Science and Research, Canberra, viewed 15 May 2012,
<http://www.innovation.gov.au/Research/ResearchWorkforceIssues/Documents/DefiningQualityforResearchTraininginAustralia.pdf>>.
- 2011b, *Research skills for an innovative future: a research workforce strategy to cover the decade to 2020 and beyond*, Department of Innovation, Industry, Science and Research, Canberra, viewed 17 May 2012,
<http://www.innovation.gov.au/Research/ResearchWorkforceIssues/Documents/ResearchSkillsforanInnovativeFuture.pdf>>.
- 2011c, *Strategic roadmap for Australian research infrastructure*, Department of Innovation, Industry, Science and Research, Canberra, viewed 4 June 2012,
<http://www.innovation.gov.au/science/researchinfrastructure/Pages/default.aspx>>.
- DIISRTE 2011a, *Commonwealth Grant Scheme (CGS)*, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra, viewed 1 June 2012,
<http://www.deewr.gov.au/highereducation/programs/funding/commonwealthgrantscheme/Pages/Home.aspx>>.
- 2011b, *Higher Education Participation and Partnerships Program*, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra, viewed 1 June 2012,
<http://www.deewr.gov.au/HigherEducation/Programs/Equity/Pages/HEPPPProgram.aspx>>.
- 2012a, 'DIISRTE higher education statistics', unpublished internal data from the University Statistics Section, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra.
- 2012b, 'March 2012 JSA caseload breakdown', unpublished internal report, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra.
- 2012c, *Mission-based compacts*, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra, viewed 1 June 2012,
<http://www.innovation.gov.au/research/missionbasedcompacts/Pages/default.aspx>>.
- 2012d, *National Research Priorities: 2012 process to refresh the National Research Priorities: consultation paper*, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra, viewed 1 June 2012,

- <http://www.innovation.gov.au/Research/Documents/2012RefreshingtheNRPs.pdf>>.
- 2012e, 'Student accommodation', unpublished e-fact sheet, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra, p. 6.
- Dow, KL 2011, *Review of Student Income Support Reforms*, Department of Education, Employment and Workplace Relations, Canberra, viewed 1 June 2012, http://www.deewr.gov.au/HigherEducation/Programs/YouthAllowance/Documents/RSISR_Report.pdf>.
- Durie, M 2011, *Ngā tini whetū: navigating Māori futures*, Huia Publishers, Wellington.
- Evans, C (Minister for Tertiary Education, Skills, Jobs and Workplace Relations) & King, C (Member for Ballarat) 2011, *University of Ballarat students to benefit from \$24.8 million Gillard Government grant*, media release, Canberra, 7 December, viewed 6 June 2012, <http://ministers.deewr.gov.au/evans/university-ballarat-students-benefit-248-million-gillard-government-grant>>.
- FaHCSIA 2011, *Closing the Gap*, Department of Families, Housing, Community Services and Indigenous Affairs, Canberra, viewed 1 June 2012, <http://www.fahcsia.gov.au/sa/indigenous/progserv/ctg/Pages/default.aspx>>.
- Ferrari, J 2006, 'Aborigines lifted by great expectations', *Australian*, Higher Education Supplement, p. 25.
- Gale, T, Hattam, R, Parker, S, Comber, B, Bills, D & Tranter, D 2010, *Interventions early in school as a means to improve higher education outcomes for disadvantaged (particularly low SES) students, Component B: A survey of the nature and extent of outreach activities conducted by Australian higher education (Table A) providers*, report by the University of South Australia to the Department of Education, Employment and Workplace Relations, Canberra, viewed 8 May 2012, <http://www.deewr.gov.au/HigherEducation/Publications/Pages/InterventionsEarlyInSchool.aspx>>.
- Garrett, P (Minister for the Environment, Heritage and the Arts) 2009, *Australia becomes a party to UNESCO convention on cultural diversity*, media release, Canberra, 23 September, viewed 6 June 2012, <http://www.arts.gov.au/sites/default/files/pdfs/Garrett%20UNESCO%20media%20release%2022%20Sept%2009.pdf>>.
- Gray, M & Hunter, B 2011, *Changes in Indigenous labour force status: establishing employment as a social norm?*, CAEPR Topical Issue No. 7/2011, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra, viewed 4 May 2012, <http://caepr.anu.edu.au/Publications/topical/2011TI7.php>>.
- Green, W, Hammer, S & Star, C 2009, 'Facing up to the challenge: why is it so hard to develop graduate attributes?', *Higher Education Research and Development*, vol. 28, no. 1, pp. 17–29.

- Hager, P 2006, 'Nature and development of generic attributes', in Paul Hager and Susan Holland (eds), *Graduate attributes, learning and employability*, Springer, Dordrecht, The Netherlands, pp. 17–47.
- Heckman, JJ & Rubinstein, Y 2001, 'The importance of noncognitive skills: lessons from the GED testing program', *American Economic Review*, vol. 92, no. 2, pp. 145–9.
- Hossain, D, Gorman, D, Williams-Mozley, J & Garvey, D 2008, 'Bridging the gap: identifying needs and aspirations of Indigenous students to facilitate their entry to university', *Australian Journal of Indigenous Education*, vol. 37, pp. 9–17.
- Human Rights and Equal Opportunity Commission 2008, *Ratification of 2003 UNESCO Convention for the Safeguarding of Intangible Cultural Heritage*, Human Rights and Equal Opportunity Commission, Sydney, viewed 6 June 2012, <http://www.hreoc.gov.au/legal/submissions/2008/20081024_UNESCO.html>.
- 2009, *United we stand: support for United Nations Indigenous rights declaration a watershed moment for Australia*, Human Rights and Equal Opportunity Commission, Sydney, viewed 6 June 2012, <http://www.hreoc.gov.au/about/media/media_releases/2009/21_09.html>.
- IAEWGIES 2012, *Indigenous engagement with science: towards deeper understandings*, public consultation draft report by the Inspiring Australia Expert Working Group on Indigenous Engagement with Science to the Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra, viewed 24 May 2012, <<http://www.innovation.gov.au/Science/InspiringAustralia/ExpertWorkingGroup/Documents/IndigenousEngagementwithScienceTowardsDeeperUnderstandings.pdf>>.
- IHEAC 2011, *National Indigenous Higher Education Workforce Strategy*, developed by the Indigenous Higher Education Advisory Council with the support of the Department of Education, Employment and Workplace Relations, Canberra, viewed 8 May 2012, <<http://www.deewr.gov.au/Indigenous/HigherEducation/Programs/IHEAC/Documents/NIHEWS.pdf>>.
- Indigenous Nursing Education Working Group 2002, *Gettin em n keepin em*, Department of Health and Ageing, Canberra, viewed 6 June 2012, <<http://www.indiginet.com.au/catsin/images/get%20em1.pdf>>.
- James, R, Bexley, E, Anderson, M, Devlin, M, Garnett, R, Marginson, S & Maxwell, L 2008, *Participation and equity: a review of the participation in higher education of people from low socioeconomic backgrounds and Indigenous people*, report to Universities Australia, University of Melbourne, Centre for the Study of Higher Education, Melbourne.
- James, R & Devlin, M 2006, *Improving Indigenous outcomes and enhancing Indigenous culture and knowledge in Australian higher education*, report by the Indigenous Higher Education Advisory Council to the Minister for Education, Science and Training, Department of Education, Science and Training, Canberra.

- Lamb, S, Walstab, A, Teese, R, Vickers, M & Rumberger, R 2004, *Staying on at school: improving student retention in Australia*, report to the Queensland Department of Education and the Arts, Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne, Melbourne.
- Lane, J 2009, 'Indigenous participation in university education', *Issue Analysis*, vol. 110, Centre for Independent Studies, St Leonards, NSW.
- Laycock, A, Walker, D, Harrison, N & Brands, J 2009, *Supporting Indigenous researchers: a practical guide for supervisors*, Cooperative Research Centre for Aboriginal Health, Casuarina, NT, viewed 17 May 2012, <http://www.lowitja.org.au/files/craah_docs/supervisors_guide1.pdf>.
- Lomax-Smith, J, Watson, L & Webster, B 2011, *Higher Education Base Funding Review: final report*, Department of Education, Employment and Workplace Relations, Canberra.
- Mackean, T, Mokak, R, Carmichael, A, Phillips, GL, Prideaux, D & Walters, TR 2007, 'Reform in Australian medical schools: a collaborative approach to realising Indigenous health potential', *Medical Journal of Australia*, vol. 186, no. 20, pp. 544–6.
- Malin, M, Franks, C & CCRE (Centre for Clinical Research Excellence) Research Course Development Committee 2007, *Workbook 1: What is research?*, Aboriginal Health Council of South Australia, Adelaide.
- MCEECDYA 2010, *Aboriginal and Torres Strait Islander Education Action Plan 2010–2014*, Ministerial Council for Education, Early Childhood Development and Youth Affairs & Education Services Australia, Carlton South, Victoria, viewed 29 February 2012, <http://www.mceecdya.edu.au/mceecdya/atsieap_action_plan_201014_press_release.33444.html>.
- Moreton-Robinson, A, Walter, M, Singh, D & Kimber, M 2011, 'On stony ground: governance and Aboriginal and Torres Strait Islander participation in Australian universities', Queensland University of Technology & University of Tasmania, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Nakata, M 2007, 'The cultural interface', *Australian Journal of Indigenous Education*, vol. 36S, pp. 7–14.
- NAP 2008, *National Assessment Program: Literacy and Numeracy: achievement in reading, writing, language conventions and numeracy*, National Assessment Program, Australian Curriculum Assessment and Reporting Authority, Sydney, viewed 21 May 2012, <http://www.nap.edu.au/Documents/National%20Report/2ndStageNationalReport_18Dec_v2.pdf>.
- 2009, *National Assessment Program: Literacy and Numeracy: achievement in reading, writing, language conventions and numeracy*, National Assessment Program, Australian Curriculum Assessment and Reporting Authority, Sydney, viewed 21 May 2012, <http://www.nap.edu.au/Documents/National%20Report/NAPLAN_2009_National_Report.pdf>.

- 2010, *National Assessment Program: Literacy and Numeracy: achievement in reading, writing, language conventions and numeracy*, National Assessment Program, Australian Curriculum Assessment and Reporting Authority, Sydney, viewed 21 May 2012, <http://www.nap.edu.au/Documents/National%20Report/NAPLAN_2010_National_Report.pdf>.
- 2011, *National Assessment Program: Literacy and Numeracy: achievement in reading, writing, language conventions and numeracy*, National Assessment Program, Australian Curriculum Assessment and Reporting Authority, Sydney, viewed 21 May 2012, <http://www.nap.edu.au/Documents/National%20Report/NAPLAN_2011_National_Report.pdf>.
- NATESE 2012, *SCOTese: COAG Standing Council on Tertiary Education, Skills and Employment*, National Advisory for Tertiary Education, Skills and Employment, Brisbane, viewed 1 June 2012, <<http://www.scotese.natese.gov.au/>>.
- NATSIHC 2003, *National strategic framework for Aboriginal and Torres Strait Islander health: framework for action by governments*, National Aboriginal and Torres Strait Islander Health Council, Canberra, viewed 6 June 2012, <<http://www.health.act.gov.au/c/health?a=dlpubpoldoc&document=818>>.
- NCVER 2010, *Australian vocational education and training statistics: Indigenous students 2010*, National Centre for Vocational Education Research, Adelaide, viewed 1 June 2012, <<http://www.ncver.edu.au/publications/2393.html>>.
- 2011, *Australian vocational education and training statistics: student outcomes 2011*, National Centre for Vocational Education Research, Adelaide, viewed 1 June 2012, <<http://www.ncver.edu.au/publications/2442.html>>.
- Nguyen, N & NCVER 2010, 'Early post-school outcomes of Indigenous youth: the role of literacy and numeracy', *Longitudinal Surveys of Australian Youth Briefing Paper 22*, National Centre for Vocational Education Research, Adelaide.
- NHMRC 2002, *The NHMRC road map: a strategic framework for improving Aboriginal and Torres Strait Islander health through research*, National Health and Medical Research Council, Canberra, viewed 1 June 2012, <<http://www.nhmrc.gov.au/guidelines/publications/r27-r28>>.
- NHMRC 2003, *Values and ethics: guidelines for ethical conduct in Aboriginal and Torres Strait Islander health research*, National Health and Medical Research Council, Canberra.
- NHMRC 2009, *National statement on ethical conduct in human research 2007: updated 2009*, National Health and Medical Research Council, Canberra, viewed 1 June 2012, <<http://www.nhmrc.gov.au/node/1278>>.
- NHMRC 2010, *NHMRC road map II: a strategic framework for improving the health of Aboriginal and Torres Strait Islander people through research*, National Health and Medical Research Council, Canberra, viewed 1 June 2012, <<http://www.nhmrc.gov.au/guidelines/publications/r47>>.

- NIHEC 2010, *Health workforce target: analysis and recommendations: Part 1: Indigenous health workforce*, National Indigenous Health Equality Council, Canberra, viewed 6 June 2012, <[http://www.natsihec.gov.au/internet/nihec/publishing.nsf/Content/9C39D2D324B7758ACA2578640083C52B/\\$File/Part%201%20-%20Indigenous%20Health%20Workforce.pdf](http://www.natsihec.gov.au/internet/nihec/publishing.nsf/Content/9C39D2D324B7758ACA2578640083C52B/$File/Part%201%20-%20Indigenous%20Health%20Workforce.pdf)>.
- NTEU 2011, *'I'm not a racist, but ...': report on cultural respect, racial discrimination, lateral violence and related policy at Australia's universities*, National Indigenous Unit, National Tertiary Education Union, South Melbourne.
- OCPE 2010, *State of the Service report 2009–10*, Office of the Commissioner for Public Employment, Darwin.
- OECD 2008, *Tertiary education for the knowledge society: Volume 1: Special features: governance, funding, quality; Volume 2: Special features: equity, innovation, labour market, internationalisation*, Organisation for Economic Co-operation and Development, Paris.
- Oliver, B 2011, *Assuring graduate outcomes*, Australian Learning and Teaching Council, Sydney.
- Pechenkina, E, Kowal, E & Paradies, Y 2011, 'Indigenous Australian students' participation rates in higher education: exploring the role of universities', *Australian Journal of Indigenous Education*, vol. 40, pp. 59–68.
- Penetito, WT 2011, 'What is good for Māori is good for the institution as a whole', Victoria University of Wellington, New Zealand, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- PhillipsKPA 2006, *Giving credit where credit is due: a national study to improve outcomes in credit transfer and articulation from vocational and technical education to higher education: final report*, Richmond, Victoria, viewed 21 May 2012, <http://www.mceetya.edu.au/verve/resources/National_Study_final_report_June_2006_FINAL.pdf>.
- Radloff, A, de la Harpe, B, Scoufis, M, Dalton, H, Thomas, J, Lawson, A, David, C & Girardi, A 2009, *The bfactor project: understanding academic staff beliefs about graduate attributes*, Australian Learning and Teaching Council, Sydney, viewed 24 May 2012, <<http://www.olt.gov.au/system/files/G17-638%20RMIT%20deLaHarpe%20BFactor%20graduate%20attributes%202009.pdf>>.
- Reconciliation Australia 2010, *What is a RAP?*, Reconciliation Australia, viewed 4 June 2012, <<http://www.reconciliation.org.au/home/reconciliation-action-plans/what-is-a-rap->>>.
- Rigney, L-I 2011, 'Indigenous higher education reform and Indigenous knowledges', University of Adelaide, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.

- Rodgers-Falk, P 2011, 'Growing the number of Aboriginal and Torres Strait Islander law graduates: barriers to the profession', unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Santoro, N 2010, "'If it weren't for my mum ...': the influence of Australian Indigenous mothers on their children's aspirations to teach", *Gender and Education*, vol. 22, no. 4, pp. 419–29.
- SCRGSP 2011a, *Overcoming Indigenous disadvantage: key indicators 2011: overview*, Steering Committee for the Review of Government Service Provision, Productivity Commission, Melbourne.
- 2011b, *Overcoming Indigenous disadvantage: key indicators 2011: report*, Steering Committee for the Review of Government Service Provision, Productivity Commission, Melbourne.
- Sinclair, M 2004, *The pedagogy of 'good' PhD supervision: a national cross-disciplinary investigation of PhD supervision*, Department of Education, Science and Training, Canberra, viewed 1 June 2012, <http://www.dest.gov.au/sectors/higher_education/publications_resources/su/mmaries_brochures/the_pedagogy_of_good_phd_supervision.htm>.
- State Services Authority 2010, *The state of the public sector in Victoria 2009–10*, State Services Authority, Melbourne.
- Taylor, J 1994, 'Measuring the occupational segregation of Australia's Indigenous workforce: a census-based analysis', *Social Indicators Research*, vol. 31, no. 2, pp. 175–204.
- Taylor, J, Gray, M, Hunter, B, Yap, M & Lahn, J 2011, 'Higher education and the growth of Indigenous participation in professional and managerial occupations', Centre for Aboriginal Economic Policy Research, Australian National University, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Te Kete Ipurangi n.d., *Te kotahitanga: raising Māori student achievement*, Te Kete Ipurangi, viewed 20 March 2012, <<http://tekotahitanga.tki.org.nz/>>.
- Thomas, L & Quinn, J 2007, *First generation entry into higher education: an international study*, Society for Research into Higher Education and Open University Press, Maidenhead, UK.
- Thomas, R 2008, *Indigenous Higher Education Advisory Council submission to the Review of Australian Higher Education*, submission to the Review of Australian Higher Education, Department of Education, Employment and Workplace Relations, Canberra, viewed 22 November 2011, <<http://www.deewr.gov.au/HigherEducation/Review/Documents/Submissions2008/173IHEAC.pdf>>.
- Thomson, S & De Bortoli, L 2008, *Exploring scientific literacy: how Australia measures up: the PISA 2006 survey of students' scientific, reading and mathematical literacy skills*, Australian Council for Educational Research, viewed 1 June 2012, <<http://research.acer.edu.au/ozpisa/2/>>.

- Thomson, S, De Bortoli, L, Nicholas, M, Hillman, K & Buckley, S 2010, *PISA in brief: highlights from the full Australian report: challenges for Australian education: results from PISA 2009: the PISA 2009 assessment of students' reading, mathematical and scientific literacy*, Australian Council for Educational Research, viewed 1 June 2012, <<http://www.acer.edu.au/documents/PISA-2009-In-Brief.pdf>>.
- Tinto, V 2008, 'Access without support is not opportunity', essay adapted from keynote address at the annual conference of the National Institute for Staff and Organizational Development, University of Texas at Austin, viewed 8 May 2012, <<http://www.insidehighered.com/views/2008/06/09/tinto>>.
- Trudgett, M 2008, 'An investigation into the support provided to Indigenous postgraduate students in Australia', EdD thesis, University of New England.
- 2009, 'Build it and they will come: building the capacity of Indigenous units in universities to provide better support for Indigenous Australian postgraduate students', *Australian Journal of Indigenous Education*, vol. 38, pp. 9–18.
- 2011, 'Western places, academic spaces and Indigenous faces: supervising Indigenous Australian postgraduate students', *Teaching in Higher Education*, vol. 16, no. 4, pp. 389–99.
- UN 2007, *United Nations Declaration on the Rights of Indigenous Peoples*, United Nations, viewed 6 June 2012, <http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf>.
- UNESCO 2003, *Convention for the Safeguarding of the Intangible Cultural Heritage*, United Nations Educational, Scientific and Cultural Organization, Paris, viewed 6 June 2012, <<http://unesdoc.unesco.org/images/0013/001325/132540e.pdf>>.
- 2005, *Convention on the Protection and Promotion of the Diversity of Cultural Expressions*, United Nations Educational, Scientific and Cultural Organization, Paris, viewed 6 June 2012, <<http://unesdoc.unesco.org/images/0014/001429/142919e.pdf>>.
- Universities Australia 2011, *National best practice framework for Indigenous cultural competency in Australian universities*, Universities Australia, Canberra.
- Walter, M 2011, 'Embedding Aboriginal and Torres Strait Islander presence: opening knowledge pathways', University of Tasmania, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Education, Employment and Workplace Relations, Canberra.
- Warrior, R 2012, 'Native higher education in the United States and Canada: a report for the Review of Higher Education Access and Outcomes for Aboriginal and Torres Straits Islanders', University of Illinois at Urbana-Champaign, unpublished report to the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra.

Watt, S & Smith, S 2008, *Submission to Department of Education, Employment and Workplace Relations Review of Australian Higher Education*, National Union of Students, Indigenous Department, viewed 1 June 2012, <<http://www.deewr.gov.au/HigherEducation/Review/Documents/Submissions2008/327NUSIndigenous.pdf>>.



Index

A

- Aboriginal and Torres Strait Islander biodiversity management and planning (CSIRO), 189
- Aboriginal and Torres Strait Islander co-benefits from carbon economies (CSIRO), 189
- Aboriginal and Torres Strait Islander communities
 - ethical research practice in research involving, 111
 - and Monash University
 - Monash Country Lines Archive, 191
 - support for
 - recommendation, xix, 68
 - see also community-based approach to Aboriginal and Torres Strait Islander education
- Aboriginal and Torres Strait Islander content in curriculums, 90–2
 - standards, 93
- Aboriginal and Torres Strait Islander early career researchers
 - competitive funding, 116
 - research capacity building, 109, 110, 195–7
 - case studies, 196–7
 - critical success factors, 195
 - key challenges, 196
- Aboriginal and Torres Strait Islander education
 - community-based approach see community-based approach to Aboriginal and Torres Strait Islander education
- Aboriginal and Torres Strait Islander Education Action Plan 2010–2014*, ix, xii, 23, 24
- Aboriginal and Torres Strait Islander employment support networks, 126–7
- Aboriginal and Torres Strait Islander fellowships, 109–10
- Aboriginal and Torres Strait Islander HDR students
 - Australian Postgraduate Awards funding for, 85, 106–7
 - cohort support for, 103–5, 194–5
 - case studies, 194–5
 - critical success factors, 194
 - key challenges, 194
 - funding for fieldwork, 105
 - recommendation, xxi, 108–9
 - needs of, 100
 - numbers of, 99–100, 101
 - from regional and remote areas
 - support for, 76
 - research capacity building, 103–5, 195–7
 - case studies, 196–7
 - critical success factors, 195
 - key challenges, 196
 - research training
 - funding, 104, 105–6
 - supervision of, 101–3, 192–3
 - case studies, 192–3
 - critical success factors, 192
 - key challenges, 192
 - support for provided by Indigenous Education Units, 60
 - support networks, 81
 - use of term, xi

- see *also* research teams and models for research success
- Aboriginal and Torres Strait Islander higher education staff, xiv, 8
 - academic and research staff, 124–5, 128–31
 - increasing numbers of, 129–30, 130–1
 - professional development, 129
 - profile, 128–9
 - recruitment, 130–1
 - research workforce national targets, 130
 - workloads, 129
 - general/non-academic staff, 124–8
 - challenges, 124
 - recruitment and retention, 125–6
 - increasing numbers of, 123, 124–5, 126, 129–30, 131, 197–9
 - case studies, 198–9
 - critical success factors, 197
 - key challenges, 197
 - in professional roles, 127–8
 - support for, 123–32
 - recommendations, xxiii, 132
- Aboriginal and Torres Strait Islander higher education strategy
 - development of, xv, 143–4
 - recommendations, xxiii–xxiv, 144
- Aboriginal and Torres Strait Islander higher education strategy and evaluation framework, 143–7
 - recommendations, xxiii–xxiv, 144, 147
 - see *also* monitoring and evaluation framework
- Aboriginal and Torres Strait Islander higher education students, 7–8
 - research, 8–9
 - see *also* Aboriginal and Torres Strait Islander students
- Aboriginal and Torres Strait Islander intellectual and professional leaders
 - sponsoring cohort of, xiv
- Aboriginal and Torres Strait Islander knowledge and perspectives, xiv, 4, 10, 89–98, 183–91
 - and academic teaching practices, 95–6
 - as contested concept within the academy, 90
 - curriculum and pedagogy, 183–5
 - digitisation of see digitisation of Aboriginal and Torres Strait Islander knowledge and data
 - embedding of in curriculums, 91–2
 - inclusion of in graduate attributes, 94
 - and intellectual property, 98
 - recommendations, xxi, 96, 98
 - research undertaken by Aboriginal and Torres Strait Islander researchers in relation to, 118–9
 - teachers with appreciation of, 32–3
 - and university administration, research and faculties, 55
 - in university curriculums, 90–1, 91–2
 - see *also* Indigenous and Western knowledge systems
- Aboriginal and Torres Strait Islander labour force participation, 35
- Aboriginal and Torres Strait Islander managers, 9
- Aboriginal and Torres Strait Islander paraprofessionals
 - encouragement of to undertake higher education, 36, 37, 38
- Aboriginal and Torres Strait Islander Pathways Action Plan (SCOTese), 45
- Aboriginal and Torres Strait Islander people
 - advantages of higher education for, 4–5
 - and aspiration to undertake higher education, 28
 - and enabling programs, 46–7

- and higher education, ix, xi, 3–5, 5, 10, 17
 - barriers to achievement of full potential, x
- income of, 7
- need to feel universities are places where they belong, 50
- population, 6
- professional pathways for
 - coordinated approach to, 64–5
 - see *also* Aboriginal and Torres Strait Islander professionals
- representation of in higher education system, ix, 4
- and VET, 6–7, 39–40
- in workforce, 7
 - see *also* Aboriginal and Torres Strait Islander workforce
- Aboriginal and Torres Strait Islander perspectives see Aboriginal and Torres Strait Islander knowledge and perspectives
- Aboriginal and Torres Strait Islander postgraduate summer school (University of Melbourne), 103, 196–7
- Aboriginal and Torres Strait Islander professional networks
 - and professional associations/bodies, 66–7
- Aboriginal and Torres Strait Islander professional organisations
 - and support of Aboriginal and Torres Strait Islander communities
 - recommendation, xix, 68
 - and universities, 62
- Aboriginal and Torres Strait Islander professionals, 9, 61–3
 - building class of, xiii, 62
 - recommendation, xix, 68
 - coordinated approach to professional pathways, 64–5
 - distribution of, 64
 - economic and social benefits of, 63–4
 - higher education staff, 127–8
 - numbers of, 63
- Aboriginal and Torres Strait Islander research, xiv
 - and competitive funding, 116–8
 - fostering, 109
 - opportunities for, 68
 - see *also* ethical research practice; research training for Aboriginal and Torres Strait Islander students
- Aboriginal and Torres Strait Islander research capability, 109–22
 - ARC and, 117–8
 - NHMRC and, 116–7
 - recommendations, xxi–xxii, 96, 98, 108–9, 121–2
- Aboriginal and Torres Strait Islander research strategies, 110–1
 - recommendation, xxii, 121
- Aboriginal and Torres Strait Islander Research Strategy (University of Western Sydney), 203–4
- Aboriginal and Torres Strait Islander research workforce plan
 - under Research Workforce Strategy, 131
- Aboriginal and Torres Strait Islander Researcher Network (RMIT University), 201
- Aboriginal and Torres Strait Islander researchers, 89, 99
 - AIATSIS and, 119–21
 - ARC and
 - recommendation, xxii, 121–2
 - fast-tracking Aboriginal and Torres Strait Islander research students into researcher positions, 129
 - and research undertaken in relation to Indigenous knowledges and perspectives, 118–9
 - research workforce national targets, 130

- strategic approach to support, 115, 118
- support for, 202–4
 - case studies, 203–4
 - critical success factors, 203
 - key challenges, 203
- see *also* Aboriginal and Torres Strait Islander early career researchers; Aboriginal and Torres Strait Islander HDR students; Aboriginal and Torres Strait Islander higher education staff; research teams and models for research success
- Aboriginal and Torres Strait Islander Researchers' Network, xxi, 108
- Aboriginal and Torres Strait Islander Researchers' Network (ARC), 104–5, 117–8
- Aboriginal and Torres Strait Islander school students, 6
 - academic achievement and attainment, 18–9
 - aspiration to participate in higher education, 20, 28
 - and ATAR, 19
 - dropout rates, 28
 - eligibility for university, 19
 - encouragement of academic excellence, 32
 - encouragement of by universities to undertake higher education, 26–7
 - factors influencing success at school, 21–2
 - focus on high-performing students to go on to university, 32
 - fostering interest in research in, 109
 - and higher education, xi–xii, 17–8, 26, 94
 - literacy and numeracy, 18–9, 28, 29
 - low expectations of by teachers, 20–1
 - mentor and case management support, 29–30
 - peer networks, 29–30
 - reluctance of high-performing students to go on to university, 20
 - university outreach programs and, 21, 26, 27–32
 - Year 12 completion rates, 6, 18, 26, 156
- Aboriginal and Torres Strait Islander-specific support to universities and students, 69–88
 - funding directly to students, 69
 - funding directly to third parties or employers, 69
 - funding directly to universities, 69
 - recommendations, xix–xx, 74
 - see *also* Indigenous-specific funding support provided by government to universities
- Aboriginal and Torres Strait Islander student success see Aboriginal and Torres Strait Islander students; Aboriginal and Torres Strait Islander success in higher education
- Aboriginal and Torres Strait Islander students
 - age profile, 56
 - mature-age students, 56, 84
 - broadening choice of fields of study, 81–2
 - challenges, 56
 - counselling/pastoral care services, 80
 - dropout rates, 11, 18, 81, 82
 - enrolment, retention and completion rates, x, 4, 10, 55, 56
 - financial support for, xiii, 83–8
 - Commonwealth scholarships, 86–8
 - income support, 83–6
 - mature-age students, 84
 - recommendation, xx, 88
 - removal of existing and potential anomalies, 85–6
 - pathways to higher degrees by research, 107–8
 - recognition of part completions of study, 82–3
 - support for when changing universities, 79
 - support networks, 81

- supporting success of, xii–xiii, xiv, 55
 - recommendations, xviii, 52
 - see also Aboriginal and Torres Strait Islander success in higher education
 - see also Aboriginal and Torres Strait Islander higher education students; Aboriginal and Torres Strait Islander-specific support to universities and students; disadvantaged learners, particularly Aboriginal and Torres Strait Islander students
- Aboriginal and Torres Strait Islander students from regional and remote areas
 - access to high-speed technology and virtual networks, 76–7
 - housing for, xiii, 75, 77–8
 - mixed mode and reverse block release programs, 75–6
 - pastoral support for, 80
 - support for, 74–80
 - recommendations, xx, 79–80
- Aboriginal and Torres Strait Islander Studies Unit (University of Queensland), 211–2
- Aboriginal and Torres Strait Islander success in higher education, 55, 56–68
 - case management approach, 172–3
 - case study, 172–3
 - critical success factors, 172
 - key challenges, 172
 - monitoring and evaluation of, xv, 55
 - whole-of-university approach to see whole-of-university approach to Aboriginal and Torres Strait Islander student success
- Aboriginal and Torres Strait Islander Teaching and Learning Frameworks, xiv
- Aboriginal and Torres Strait Islander teaching and learning strategy
 - recommendation, xxi, 96
- Aboriginal and Torres Strait Islander trainees and cadets, 126, 127
- Aboriginal and Torres Strait Islander water values and planning research (CSIRO), 189–90
- Aboriginal and Torres Strait Islander workforce
 - pathways to higher education from, xii, 34–8
 - case study, 161
 - community sector, 36
 - critical success factors, 160
 - key challenges, 160
 - private sector, 36
 - public sector, 35–6
 - recognition of prior learning and experience, 39
 - support, 38
- Aboriginal and Torres Strait Islander Workforce and Staff Exchange Project (Royal Women's Hospital, Melbourne), 66
- Aboriginal Astronomy Centre (Macquarie University), 190
- Aboriginal Family Therapy Training Program (La Trobe University), 178–9
- Aboriginal Power Cup
 - University of South Australia and UniSA College and, 166–7
- Aboriginal Teacher Mentor Training Program (University of Wollongong), 187
- ABSTUDY, xx, 83–4, 88
 - Living Allowance, xiii, 83–4, 85
 - reclassification of some course and, 86
- ABSTUDY Away-from-Base, 75–6
- ABSTUDY scholarship debt, xiii
- academic teaching practices
 - and Aboriginal and Torres Strait Islander perspectives, 95–6
- Access Economics
 - on advantages of improvement of quality of life of Aboriginal and Torres Strait Islander people, 4
- accommodation see housing

- Accounting and Architecture Discipline Leaders Forum
 - and Aboriginal and Torres Strait Islander participation in accounting and architecture, 66
- alternative entry programs see enabling programs
- Ara Irititja project
 - digitally stored information, 97
- Ashurst Australia
 - financial support for Aboriginal and Torres Strait Islander students, 67
- The Aspiration Initiative, 164
 - and Aboriginal and Torres Strait Islander school students, 24–5
 - and Aboriginal and Torres Strait Islander students, 67
- aspiration programs, 163–7
 - case studies, 164–7
 - critical success factors, 163
 - key challenges, 164
- ASPIRE program (University of New South Wales), 29
- Aurora Project
 - and Aboriginal and Torres Strait Islander school students, 24, 32
 - and Charlie Perkins Trust
 - The Aspiration Initiative, 164
 - website and guidebooks, 170–1
 - and consolidated information for students on full range of scholarship programs, 87
- Australian and New Zealand Standard Research Classification (ANZSRC), 114–5
 - and Indigenous-specific research topics, 114
- Australian Bureau of Statistics
 - and Indigenous research code
 - recommendation, xxii, 121
- Australian Catholic University
 - Indigenous Thematic Plan, 138
- Australian Centre for Educational Leadership (Faculty of Education, University of Wollongong)
 - and Aboriginal Teacher Mentor Training Program, 187
- Australian Centre for Indigenous Knowledges and Education (ACIKE) (Charles Darwin University and Batchelor Institute of Indigenous Tertiary Education), 211
- Australian Diabetes Educators' Association
 - and Graduate Certificate of Diabetes Education (Institute of Koorie Education, Deakin University), 183–4
- Australian Employment Covenant, 36
 - and Aboriginal and Torres Strait Islander workforce, 36
- Australian Government
 - and enabling programs, 47
 - and higher education, ix
 - and Indigenous MBA scholarships, 38
 - and mission-based compact agreements with universities, 141–2
 - recommendations for
 - Aboriginal and Torres Strait Islander higher education strategy, xxiii–xxiv, 144
 - Aboriginal and Torres Strait Islander higher education strategy and evaluation framework, xxiv, 147
 - access to information by potential Aboriginal and Torres Strait Islander students, xviii, 52
 - AIATSIS digitisation of Aboriginal and Torres Strait Islander data, xxi, 98
 - allocation of funding for research training, xxi, 108–9
 - enabling courses for disadvantaged learners, particularly Aboriginal and Torres Strait Islander students, xviii, 48–9
 - financial support for Aboriginal and Torres Strait Islander students, xx, 88
 - ITAS-TT program, xix–xx, 74

- monitoring and evaluation framework for Aboriginal and Torres Strait Islander higher education strategy, xxiii–xxiv, 144
- parity targets, xvi, 12
- pathway to higher education from schools, xvii, 33–4
- review of AIATSIS, xxii, 122
- revision of Away-from-Base funding guidelines, xx, 80
- revision of guidelines for HEPPP, xvii, 34
- revision of National Research Priorities re closing the gap and protection of Indigenous culture and knowledge, xxii, 121
- support for Aboriginal and Torres Strait Islander staff, xxiii, 132
- and research funding, 115
- Australian Indigenous Doctors' Association (AIDA), 67
- Australian Indigenous Education Foundation
 - and Shalom College Gamarada Scholarship Program (UNSW), 176
- Australian Indigenous Education Foundation (AIEF)
 - and Aboriginal and Torres Strait Islander school students, 24, 25
- Australian Indigenous Mentoring Experience (AIME), 164–5
 - and Aboriginal and Torres Strait Islander school students, 24, 25, 29
 - Core Program, 165
 - Outreach Program, 165
- Australian Institute for Teaching and School Leadership
 - and cultural competence, 95
- Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS)
 - and Aboriginal and Torres Strait Islander researchers, 119–21
 - challenges and opportunities, 120
 - and digitisation of Aboriginal and Torres Strait Islander knowledge and data, xiv, 96–7
 - and ethics committee to review the ethical aspects of research projects, 111
 - functions of, 119–20
 - and guidance to universities on ethical research practice, 112
 - Guidelines for ethical research in Australian Indigenous studies*, 111, 200
 - Indigenous Research Grants program, 112, 120, 121
 - Indigenous Visiting Research Fellowship program, 120–1, 125
 - recommendations for
 - and digitisation of Aboriginal and Torres Strait Islander data, xxi, 98
 - ethical research practice, xxii, 121
 - review of, 120
 - recommendation, xxii, 122
- Australian Medical Council
 - inclusion of Aboriginal and Torres Strait Islander knowledge in attributes of its accredited health professionals, 94
- Australian Postgraduate Award funding
 - reclassification of some courses and, 86
- Australian Postgraduate Awards, xx, 88
- Australian Postgraduate Awards scheme
 - funding for Aboriginal and Torres Strait Islander HDR students, 85, 105, 106–7
 - recommendation, xxi, 108–9
- Australian Research Council (ARC)
 - and Aboriginal and Torres Strait Islander research capability, 177
 - Aboriginal and Torres Strait Islander Researchers' Network, 104, 117–8
 - and competitive funding, 116, 117–8
 - Discovery Indigenous scheme, xxii, 117–8, 122
 - recommendations for
 - and Aboriginal and Torres Strait Islander researchers, xxii, 121–2
 - Aboriginal and Torres Strait Islander Researchers' Network, xxi, 108
 - and Indigenous research code, xxii, 121

- Special Research Initiatives scheme, 104
- Australian tertiary admission rank (ATAR) *see* Aboriginal and Torres Strait Islander school students
- Australia's future tax system – report to the Treasurer*
 - and tax status of income support and supplementary payments, 85
- Away-from-Base education delivery
 - Curtin University's reverse block program, 174
 - quality standards for
 - recommendation, xx, 79–80
 - see also* ABSTUDY Away-from-Base; mixed mode and reverse block release programs; mixed mode Away-from-Base courses
- Away-from-Base funding guidelines
 - revision of
 - recommendation, xx, 79–80

B

- Badanami Centre for Indigenous Education (University of Western Sydney)
 - Indigenous graduate attribute, 182
- Batchelor Institute of Indigenous Tertiary Education
 - and Australian Centre for Indigenous Knowledges and Education, 211
 - Collaborative Research Network funding, 206–7
- BHP Billiton
 - and Indigenous MBA scholarships, 38
 - Iron Ore Scholarship programs, 67
- Bouverie Centre (La Trobe University)
 - and Aboriginal Family Therapy Training Program, 178–9
- Bradley Review, ix, 3, 10
 - and income support, xiii, 84
- Buranga Centre (University of the Sunshine Coast), 157
- business *see* private sector
- Business Council of Australia
 - and Indigenous network, 126
 - and recruitment of Aboriginal and Torres Strait Islander people into employment, 37–8, 67

C

- cadets *see* Aboriginal and Torres Strait Islander trainees and cadets
- Capricornia Correctional Centre
 - and Nulloo Yumbah (CQUniversity), 162
- Carbon Farming Initiative offset regime, 189
- career advisers
 - and encouragement of Aboriginal and Torres Strait Islander students to consider higher education, xvii, 33
 - see also* vocational education and training (VET) teachers and career advisers
- CareerTrackers
 - and Lend Lease internships for Aboriginal and Torres Strait Islander university students, 68
- Centre for Aboriginal Economic Policy Research
 - on economic benefits of higher education, 4–5
- Centre for Aboriginal Studies (Curtin University of Technology), 166, 174
- Centre for Aboriginal Studies in Music (University of Adelaide), 185
- Centre for Australian Indigenous Knowledge (University of Southern Queensland), 60, 172–3
- Centre for Research Excellence in Aboriginal Health and Wellbeing

NHMRC grant (*From marginalised to empowered: transformative methods for Aboriginal health and wellbeing*), 119, 205, 206

Centrelink
and ABSTUDY Away-from-Base, 75–6

Centrelink-based income support payments, 84–5

Charles Darwin University
and Aboriginal and Torres Strait Islander representation on human ethics committees, 111–2
and Australian Centre for Indigenous Knowledges and Education, 211
Centre of Indigenous Knowledge and Education, 118
Flinders University and Northern Territory Government
Northern Territory Medical Program, 180–1
governance and higher education partnerships, 211
incorporation of Indigenous education objectives into the institution's strategic plan, 138
Pro-Vice-Chancellor (Indigenous Leadership), 141, 211

Charles Sturt University
and Aboriginal and Torres Strait Islander representation on human ethics committees, 111
and best practice in cultural competency, 136
and Djirruwang Aboriginal and Torres Strait Islander Mental Health Program, 179–80
ethical research practice, 201–2
Human Research Ethics Committee, 202
and incorporation of Aboriginal and Torres Strait Islander perspectives into the curriculum, 92
Indigenous Research Ethics Committee, 202
Indigenous trainees, 126
and Indigenous trainees in general staff positions, 126
and New South Wales Police Force
Indigenous Police Recruitment Our Way Delivery training program, 180
pathway support for fostering Aboriginal and Torres Strait Islander academics, 204
pathway to higher education from VET, 159
TAFE Pathways and Partnerships program, 46
Teacher Education in Community pilot project, 174–5
and Wiradjuri Council of Elders
Wiradjuri Language and Cultural Heritage Program, 191

Charlie Perkins Scholarships for study at the University of Oxford and the University of Cambridge, 170–1

Charlie Perkins Trust for Children & Students
and Aurora Project
The Aspiration Initiative, 164
website and guidebooks, 170–1

Closing the Gap, 3
Aboriginal and Torres Strait Islander knowledge and research and, 89
COAG-based reporting and, 145
in disciplines where Aboriginal and Torres Strait Islander students underrepresented, xi
higher education and, xi, 3
professional pathways and, 65
revision of National Research Priorities and
recommendation, xxii, 121

Closing the Gap targets
schools, 22–3

Commonwealth Bank
cadetships for Aboriginal and Torres Strait Islander students, 68

Commonwealth Grant Scheme
and enabling programs, 47

- reform of
 - recommendation, xviii, 48–9
- Commonwealth Scholarships for Aboriginal and Torres Strait Islander students, xiii, 86–7
 - amalgamation of, 88
 - recommendation, xx, 88
- Commonwealth Scientific and Industrial Research Organisation (CSIRO)
 - Aboriginal and Torres Strait Islander biodiversity management and planning, 189
 - Aboriginal and Torres Strait Islander co-benefits from carbon economies, 189
 - Aboriginal and Torres Strait Islander engagement strategy, 116
 - Aboriginal and Torres Strait Islander water values and planning research, 189–90
- community sector
 - employment of Aboriginal and Torres Strait Islander people in, 36
- community-based approach to Aboriginal and Torres Strait Islander education, 177–9
 - case studies, 177–9
 - critical success factors, 177
 - key challenges, 177
- completion rates see enrolment, retention and completion rates
- consultation process, xi
- Cooperative Research Centres (CRC) for Aboriginal Health, 118
- Cooperative Research Centres (CRC) for Remote Economic Participation, 118
- correctional centres
 - pathway to higher education from
 - case studies, 162–3
 - critical success factors, 161
 - key challenges, 162
- Council of Elders (Griffith University), 92, 209–10
- counselling/pastoral care services
 - audit of, 80
- CQUniversity
 - ethical research practice, 202
 - Family Behavioural Intervention Program Indigenous Family Violence Prevention Forum, 202
 - Nulloo Yumbah, 162
 - pathway to higher education from correctional centres, 162
 - and Queensland Centre for Domestic and Family Violence Research, 202
 - supervision practices, 193
- curriculum and pedagogy, 183–5
 - case studies, 183–5
 - critical success factors, 183
 - key challenges, 183
- curriculums
 - Aboriginal and Torres Strait Islander content in, 90–3, 95–6
 - standards, 93
- Curtin University of Technology
 - Centre for Aboriginal Studies, 166, 174
 - Indigenous Australian Engineering Summer School, 51, 165–6
 - Indigenous Pathway into Engineering program, 165
 - reverse block delivery – regional and remote areas, 174

D

- Deakin University
 - Institute of Koorie Education, 177–8, 184
 - Bachelor of Nursing, 184
 - Graduate Certificate of Diabetes Education, 183–4

- Kitarra Centre on-campus residential facility, 78
 - Master of Public Health, 184–5
- Department of Education, Employment and Workplace Relations (DEEWR)
 - study assistance for Aboriginal and Torres Strait Islander employees, 37
- Department of Industry, Innovation, Science, Research and Tertiary Education
 - and housing for students from regional and remote areas, 77
 - information reported to by universities, 145–6
 - and ITAS-TT, 73
- Diabetes Australia (Victoria)
 - and Graduate Certificate of Diabetes Education (Institute of Koorie Education, Deakin University), 184
- digitisation of Aboriginal and Torres Strait Islander knowledge and data, xiv, 96–8
 - recommendation, xiv, 97
- disadvantaged learners, particularly Aboriginal and Torres Strait Islander students
 - enabling courses for
 - recommendation, xviii, 48–9
- Discovery Indigenous scheme (ARC), xxii, 117–8, 122, 204
- Djinggi Program (University of Wollongong), 186
- Djirruwang Aboriginal and Torres Strait Islander Mental Health Program (Charles Sturt University), 179–80
- dropout rates, 11, 18, 81, 82
 - see *also* enrolment, retention and completion rates

E

- Early Career Fellowships (NHMRC), 117
- Edith Cowan University
 - and culturally competent curriculums, 92
 - Pro-Vice-Chancellor (Equity and Indigenous), 141
- Elder-in-Residence (Badanami Centre for Indigenous Education, University of Western Sydney), 182
- Elder-in-Residence program (University of Newcastle), 152
- Elders
 - role of cross-cultural understanding and respect in universities, 208–10
- ‘elders in residence’ counselling services, 80
- Elders on Campus program (University of Western Sydney), 209
- Elders-in-Residence program (Griffith University), 92, 209–10
- employers
 - and encouragement of Aboriginal and Torres Strait Islanders to undertake higher education
 - recommendation, xvii, 46
 - and support of Aboriginal and Torres Strait Islander communities
 - recommendation, xix, 68
 - see *also* Aboriginal and Torres Strait Islander-specific support to universities and students
- enabling programs, 46–9
 - improving reach of, 48
- enrolment, retention and completion rates, x, 4, 10, 55, 56, 82–3
 - postgraduate courses, 108
 - see *also* dropout rates
- ethical research practice, 111–2, 199–202
 - case studies, 200–2
 - critical success factors, 199–200
 - key challenges, 200
 - recommendations, xxii, 121

Excellence of Research in Australia (ERA) initiative, 113–5
and assessment of research regarding Aboriginal and Torres Strait Islander people, 114
Expert Working Group on Indigenous Engagement with Sciences (Inspiring Australia), 66
and promotion of Indigenous knowledge, 94

F

faculties

and supporting success of Aboriginal and Torres Strait Islander students, xii, xiii

Faculty Committee for Indigenous Health (Monash University), 213

family and community support for higher education, 49

financial support for Aboriginal and Torres Strait Islander students, xiii, 175–6

case studies, 176

Commonwealth scholarships, 86–7

critical success factors, 175

income support, 83–6

mature-age students, 84

removal of existing and potential anomalies, 85–6

key challenges, 175

recommendation, xx, 88

First Nation peoples

place of in Australian society and culture, 6

Flinders University

and Charles Darwin University and Northern Territory Government

Northern Territory Medical Program, 180–1

and submission of research proposals to directors of Indigenous research areas, 111–2

Focus School Next Steps initiative, 187

Focusing Australia's Publicly Funded Research Review, 114–5

and National Research Priorities, 113

From marginalised to empowered: transformative methods for Aboriginal health and wellbeing (NHMRC Centre for Research Excellence in Aboriginal Health and Wellbeing grant), 119, 205–6

G

Gamarada Scholarship Program (Shalom College, University of New South Wales), 176

Global Indigenous Elders Alliance, 209

government

and Aboriginal and Torres Strait Islander student success, 57

helping VET student to transition to higher education, 42–3

see also Australian Government; public sector

graduate attributes

defined, 93–4

to include understanding of contemporary issues confronting Aboriginal and Torres Strait Islander people, 93–4

see also Indigenous graduate attributes

Griffith University

and best practice in cultural competency, 136

Council of Elders, 92, 209–10

Elders-in-Residence program, 92, 209–10

GUMURRII Student Support Unit, 60

Indigenous Community Engagement, Policy and Partnership arrangement, 209–10

Guidelines for ethical research in Australian Indigenous studies (AIATSIS), 111, 200

GUMURRII Student Support Unit (Griffith University), 60

H

higher degree by research (HDR)

- Aboriginal and Torres Strait Islander students and, xi, xiv, 98–108
 - pathways to, 107–8
 - recommendations, xxi, 108–9
- see *also* Aboriginal and Torres Strait Islander HDR students

higher education

- Aboriginal and Torres Strait Islander people and, ix, xi, 3–5, 5, 10, 17
- Aboriginal and Torres Strait Islander school students and, xi–xii, 17–8, 26–7
- advantages of for Aboriginal and Torres Strait Islander people, 5
- Australian government and, ix
- and Closing the Gap, xi, 3–4
- family and community support for, 49
- function of, 4
- pathways to, xii, 17–8
 - see *also* Aboriginal and Torres Strait Islander workforce; enabling programs; schools; vocational education and training (VET)
- see *also* information about higher education and universities; universities

higher education – research

- Aboriginal and Torres Strait Islander higher education students and, 8–9
- see *also* research capability; research training for Aboriginal and Torres Strait Islander students

Higher Education Base Funding Review

- and enabling programs, 47, 48

Higher Education Contribution Scheme, 83

Higher Education Information Management System (HEIMS), 145–6

Higher Education Loan Program, 83

Higher Education Participation and Partnerships Program, 23

Higher Education Participation and Partnerships Program (HEPPP), 25–6, 27

- ‘Participation’ component, 25
- ‘Partnerships’ component, 25
- revision of guidelines for
 - recommendation, xvii, 34

higher education sector

- helping VET students to transition to higher education, 43
- see *also* universities

higher education staff see Aboriginal and Torres Strait Islander higher education staff

Higher Education Standards Panel

- and quality standards for Away-from-Base education delivery
 - recommendation, xx, 79–80

higher education students see Aboriginal and Torres Strait Islander higher education students; Aboriginal and Torres Strait Islander students

higher education system

- function of, 4
- representation of Aboriginal and Torres Strait Islander people in, ix, 4

housing

- suitable and affordable, for students from regional and remote areas, xiii, 75, 77–8

I

income

- of Aboriginal and Torres Strait Islander people, 7

income support, xiii, 83–6

Indigenous Academic Internship Program (Charles Sturt University), 204

- Indigenous Access Scholarships, 86, 87
- Indigenous and Western knowledge systems
 - interface between, 188–91
 - case studies, 189–91
 - critical success factors, 188
 - key challenges, 188
- Indigenous Australian Engineering Summer School (Curtin University of Technology), 51
- Indigenous Australian Student Services (Southern Cross University), 61
- Indigenous Business and Industry Scholarships (University of Newcastle), 153
- Indigenous Capacity Building Grant in Population Health Research (NHMRC)
 - Not just scholars but leaders: learning circles in Indigenous health research*, 119, 205–6
- Indigenous Commonwealth Accommodation Scholarships, 86
- Indigenous Commonwealth Education Costs Scholarships, 86, 87
- Indigenous Community Engagement, Policy and Partnership arrangement (Griffith University), 209–10
- Indigenous Cultural Competency in Australian Universities Project (IHEAC–Universities Australia), 92
- Indigenous Economic Development Strategy 2011–2018*, ix
- Indigenous education quality and standards framework, 93
- Indigenous Education Statements
 - universities, 146, 147
- Indigenous education strategies
 - universities, 138, 153–4
- Indigenous Education Units, 57
 - and outreach into schools and other sectors, 61
 - role of, 59
 - services provided by, 57–8
 - support for students, xii, 57–61
 - postgraduate and higher degree by research students, 60
 - recommendations, xviii, 52
 - universities and, 11–2, 56–7, 157, 171
 - whole-of-university approach to, 59–60, 137
- Indigenous Employment Program, 126–7
- Indigenous employment strategies
 - universities, 124
 - University of Newcastle, 131, 198
 - University of South Australia, 199
- Indigenous Enabling Commonwealth Accommodation Scholarships, 86
- Indigenous Enabling Commonwealth Education Costs Scholarships, 86
- Indigenous Family Violence Prevention Forum (CQUniversity), 202
- Indigenous graduate attributes, 181–2
 - case study, 182
 - critical success factors, 181
 - key challenges, 181
- Indigenous Graduate Program (University of South Australia), 199
- Indigenous Graduate Students Association (University of Melbourne)
 - and Murrup Barak (Melbourne Institute for Indigenous Development, University of Melbourne)
 - Symposium of Aboriginal and Torres Strait Islander Research, 197
- Indigenous Health Strategy (Monash University), 212–3
- Indigenous Higher Degree by Research Student Fee Waivers (Charles Sturt University), 204
- Indigenous Higher Education Advisory Council (IHEAC)
 - and development of Aboriginal and Torres Strait Islander higher education strategy, xxiii–xxiv, 143–4
 - and National Indigenous Higher Education Workforce Strategy, 123

- and pathway from VET to higher education, 46
- recommendations for
 - Aboriginal and Torres Strait Islander higher education strategy, xxiv, 147
 - pathway from VET to higher education, xviii, 46
- Indigenous knowledge see Aboriginal and Torres Strait Islander knowledge and perspectives
- Indigenous MBA scholarships, 38
- Indigenous Pathway into Engineering program (Curtin University of Technology), 165
- Indigenous perspectives see Aboriginal and Torres Strait Islander knowledge and perspectives
- Indigenous Police Recruitment Our Way Delivery (IPROWD) training program
 - Charles Sturt University and New South Wales Police Force, 180
- Indigenous postgraduate research capacity-building program and pathway support
 - Queensland University of Technology, 196
- Indigenous Preparatory Programs (Pre-Programs) (University of New South Wales), 169–70
- Indigenous research code
 - recommendation, xxiii, 121
- Indigenous Research Ethics Committee (Charles Sturt University), 202
- Indigenous Research Grants program (AIATSIS), 112, 120, 121
- Indigenous Research/Researchers Seed Funding (Charles Sturt University), 204
- Indigenous Scholarships website, 170
- Indigenous Science and Engineering Camp for students in Years 9 and 10 (University of Western Australia, School of Indigenous Studies), 30, 167
- Indigenous-specific funding support provided by government to universities, xii–xiii
 - recommendations, xix–xx
 - see *also* Aboriginal and Torres Strait Islander-specific support to universities and students
- Indigenous Staff Higher Degree by Research Pathways (Charles Sturt University), 204
- Indigenous Staff PhD Release Scheme (Charles Sturt University), 204
- Indigenous Staff Scholarships program
 - Aboriginal and Torres Strait Islander higher education staff, 125
- Indigenous Student Research Network (Queensland University of Technology), 104
- Indigenous students' guide to postgraduate scholarships in Australia and overseas*, 171
- Indigenous students' guide to undergraduate scholarships in Australia*, 171
- Indigenous Students' Research Network
 - and Indigenous postgraduate research capacity- building program (Queensland University of Technology), 196–7
- Indigenous Support Program, xix
 - funding, 70–1
 - recommendation, xix–xx, 74
 - revised approach to, 71
 - and Indigenous Education Statements, 147
 - and Indigenous employment strategies, 125
- Indigenous Thematic Plan (Australian Catholic University), 138
- Indigenous Trainee Program (Charles Sturt University), 204
- Indigenous Tutorial Assistance Scheme – Tertiary Tuition (ITAS-TT) program, xiii, 71–4, 157, 162, 172 problems with,
 - 72–3 recommendations, xix–xx, 74
 - refocus on student needs and outcomes, 73–4
- Indigenous Visiting Research Fellowship (IVRF) program (AIATSIS), 120–1, 125
- Indigenous Youth Leadership Program, 23, 24
- information about higher education and universities
 - access to by potential Aboriginal and Torres Strait Islander students, 49–52, 170–1
 - case study, 170–1
 - critical success factors, 170

- key challenges, 170
- recommendation, xviii, 52
- provided by university outreach programs for Aboriginal and Torres Strait Islander school students, 21, 31
- Institute of Koorie Education (Deakin University), 177–8, 183–5
 - Bachelor of Nursing, 184
 - Graduate Certificate of Diabetes Education, 183–4
 - Kitarra Centre on-campus residential facility, 78
 - Master of Public Health, 184–5
- intellectual property
 - and Aboriginal and Torres Strait Islander knowledge, 97–8

J

- James Cook University
 - and cohort support for HDR students, 104, 194–5
 - School of Indigenous Australian Studies postgraduate program, 194–5
- Job Services Australia (JSA)
 - and encouragement of Aboriginal and Torres Strait Islander people to seek VET qualifications, 40–1
- justice system
 - Aboriginal and Torres Strait Islander people in, 161
 - see *also* correctional centres

K

- Kitarra Centre on-campus residential facility
 - Institute of Koorie Education (Deakin University), 78
- Kunarr Indigenous Alumni program (University of Newcastle), 198

L

- La Trobe University
 - Aboriginal Family Therapy Training Program, 178–9
- Lend Lease
 - internships for Aboriginal and Torres Strait Islander university students, 68
- literacy and numeracy, 18–9, 28, 29
 - see *also* science and mathematics; university outreach programs
- Lowitja Institute
 - Supporting Indigenous researchers: a practical guide for supervisors*, 103, 192–3
 - and University of Melbourne postgraduate summer school program, 196–7

M

- Macquarie University
 - Aboriginal Astronomy Centre, 190
 - Master of Indigenous Education degree, 33, 161
 - pathways to higher education from Aboriginal and Torres Strait Islander workforce, 161
 - Warawara – Department of Indigenous Studies, 161
- Māori and Indigenous program
 - support for HDR students, 104
- Māori Knowledge and Development research evaluation model, 115
- mathematics see literacy and numeracy; science and mathematics
- Melbourne Business School
 - and Indigenous MBA scholarships, 38
- minerals industry

- engagement with Aboriginal and Torres Strait Islander communities and support of Aboriginal and Torres Strait Islander education, 67
- mining industry
 - and upskilling of Aboriginal and Torres Strait Islander employees, 37
- mixed mode and reverse block release programs
 - for Aboriginal and Torres Strait Islander students from regional and remote areas, 75
 - Curtin University's reverse block program, 174
- mixed mode Away-from-Base courses, 78–9
- Monash Country Lines Archive, 191
- Monash Indigenous Centre
 - and Faculty of Information Technology and Yanyuwa people of Borroloola, Northern Territory
 - and Monash Country Lines Archive, 191
- Monash University
 - and Aboriginal and Torres Strait Islander communities
 - Monash Country Lines Archive, 191
 - Faculty Committee for Indigenous Health, 213
 - Indigenous Health Strategy, 212–3
 - School for Indigenous Health, 213
- monitoring and evaluation framework
 - for Aboriginal and Torres Strait Islander higher education strategy, xv, 144–7
 - COAG-based reporting, 145
 - departmental reporting, 145–6
 - recommendation, xxiv, 147
- Murri Pathways (Queensland Department of Education, Training and Employment), 156
- Murrup Barak (Melbourne Institute for Indigenous Development, University of Melbourne)
 - and University of Melbourne Indigenous Graduate Students Association
 - Symposium of Aboriginal and Torres Strait Islander Research, 197
- Muru Marri Indigenous Health Unit (Faculty of Medicine, University of New South Wales)
 - and Shalom College Gamarada Scholarship Program, 176
- MyUniversity website
 - potential Aboriginal and Torres Strait Islander students and
 - recommendation, xviii, 52

N

- National Aboriginal and Torres Strait Islander Education Policy, ix, 138
- National Agreement for Skills and Workforce Development, 42–3, 44
- National Australia Bank
 - and Indigenous MBA scholarships, 38
- National best practice framework for Indigenous cultural competency in Australian universities* (Universities Australia – IHEAC), 91, 92, 93–4, 110–2, 135–6
 - guiding principles, 135–6, 139–40
 - and Indigenous education strategies, 138
- National Broadband Network
 - and access to high-speed technology and virtual networks for Aboriginal and Torres Strait Islander students from regional and remote areas, 76
- National Health and Medical Research Council (NHMRC)
 - and Aboriginal and Torres Strait Islander research capability, 116–7
 - Centre for Research Excellence in Aboriginal Health and Wellbeing grant (*From marginalised to empowered: transformative methods for Aboriginal health and wellbeing*), 119, 205, 206
 - and competitive funding, 116
 - and ethical research practices, 111

Indigenous Capacity Building Grant in Population Health Research (*Not just scholars but leaders: learning circles in Indigenous health research*), 119, 205, 206
 Indigenous Grant Review Panels, 112
 Indigenous Research Grant Panel, 116
The NHMRC road map: a strategic framework for improving Aboriginal and Torres Strait Islander health through research, 117
 specific Indigenous Researcher grants to Postgraduate Scholarship and Early Career Fellowship holders, 117
Values and ethics: guidelines for ethical conduct in Aboriginal and Torres Strait Islander health research, 111, 201
 National Indigenous Higher Education Workforce Strategy (NIHEWS), xiv, 123, 124, 125, 131
 National Indigenous Reform Agreement see Closing the Gap
 National Partnership Agreements
 and Closing the Gap targets
 schools, 22–3
 National Professional Standards for Teachers, 32, 95
 National Research Priorities
 and Aboriginal and Torres Strait Islander knowledge and research, 112–3
 and Aboriginal and Torres Strait Islander-led research, 110
 revision of and Closing the Gap
 recommendation, xxii, 121
National statement on ethical conduct in human research (NHMRC, ARC and Australian Vice-Chancellors' Committee), 201
 national tutor database, xx, 74
 National VET Equity Advisory Council
 and pathway from VET to higher education, 45
 recommendation, xviii, 46
 New South Wales Police Force
 and Charles Sturt University
 Indigenous Police Recruitment Our Way Delivery (IPROWD) training program, 180
 New Zealand Ministry of Education see Te Kotahitanga (University of Waikato School of Education and Pounamu Education Research and Development Centre)
 New Zealand Māori and Indigenous postgraduate network, 195
 Ngarara Willim Centre (RMIT University), 136
The NHMRC road map: a strategic framework for improving Aboriginal and Torres Strait Islander health through research, 117
 Northern Territory Government
 Flinders University and Charles Darwin University
 Northern Territory Medical Program, 180–1
 Northern Territory Medical Program
 Flinders University, Charles Darwin University and Northern Territory Government, 180
Not just scholars but leaders: learning circles in Indigenous health research (NHMRC Indigenous Capacity Building Grant in Population Health Research), 119, 205, 206
 Nulloo Yumbah (CQUniversity), 162
 Nura Gili centre (University of New South Wales), 170

O

Office of Aboriginal and Torres Strait Islander Employment and Engagement (University of Western Sydney), 208–9
 Onemda VicHealth Koori Health Unit (University of Melbourne)
 and Institute of Koorie Education, Deakin University
 and Master of Public Health graduates, 184
 Oorala Aboriginal Centre (University of New England)

Aboriginal and Torres Strait Islander Campus Mentor and
Woodford Correctional Centre, Queensland, 163
Overcoming Indigenous disadvantage: key indicators, 145

P

- the Panel see Review Panel
- parity, x–xi, 10–1
- parity targets, x–xi, 10–1
 - and mission-based compacts, 141–2
 - recommendations, xvi, 12–3, 142
 - reward payment structures and, xv
 - university governance, xv, 141–2
- Parkes University Study Centre
 - and Charles Sturt University, 159
- part completions of study
 - recognition of, 82–3
- pastoral care services see counselling/pastoral care services
- pathways to higher education, xii, 17
 - see also Aboriginal and Torres Strait Islander workforce; enabling programs; schools;
vocational education and training (VET)
- pedagogy see curriculum and pedagogy; ‘Reconciliation Pedagogy’
- population
 - Aboriginal and Torres Strait Islander people, 6
- postgraduate students
 - support for provided by Indigenous Education Units, 60
 - use of term, xi
- private sector
 - employment of Aboriginal and Torres Strait Islander people in, 36
 - encouragement of Aboriginal and Torres Strait Islander people to undertake higher
education, 37, 67
- professional associations/bodies
 - and Aboriginal and Torres Strait Islander professional networks, 66–7
 - collaboration with universities, 179
 - and driving demand for Aboriginal and Torres Strait Islander professionals, xiii–xiv, 65
 - and encouragement of Aboriginal and Torres Strait Islanders to undertake higher
education
 - recommendation, xvii, 46
 - and support of Aboriginal and Torres Strait Islander communities
 - recommendation, xix, 68
- professionals
 - and knowledge of needs of Aboriginal and Torres Strait Islander communities, xiii–xiv, 89
 - see also Aboriginal and Torres Strait Islander professionals
- professions
 - collaboration with universities, 179–81
 - case studies, 179–81
 - critical success factors, 179
 - key challenges, 179
 - definition, 63
 - see also Aboriginal and Torres Strait Islander professionals
- public sector
 - employment of Aboriginal and Torres Strait Islander people in, 35–6 encouragement
of Aboriginal and Torres Strait Islander people to undertake higher
education, 37, 67

Q

- Queensland Centre for Domestic and Family Violence Research, 202
- Queensland Consortium
 - pathway to higher education from schools, 157
- Queensland Department of Education, Training and Employment
 - Murri Pathways, 156
 - partnership with Queensland universities to stimulate interest in higher education by people from low-income and Aboriginal and Torres Strait Islander backgrounds, 31–2
- Queensland University of Technology
 - Indigenous postgraduate research capacity-building program and pathway support, 196
 - Indigenous Student Research Network and Postgraduate Research Capacity Program, 104
 - pathway to higher education from VET, 160
 - Pre-Entry Law and Justice Program for Indigenous Students, 160
 - and professional development of teachers, 33
 - and Stronger Smarter Institute, 187
 - see also Stronger Smarter Institute
- Questacon ScienceLines
 - and Aboriginal and Torres Strait Islander students, teachers and community members, 116

R

- racism
 - universities and, 134
- readiness/enabling programs, 167–70
 - case studies, 168–70
 - critical success factors, 168
 - key challenges, 168
- Reconciliation Action Plans, 138–9
 - and Aboriginal and Torres Strait Islander higher education staff, 125
 - and Aboriginal and Torres Strait Islander workforce, 36, 67
 - universities and, 125, 138–9
- ‘Reconciliation Pedagogy’
 - Wilton Yerlo, University of Adelaide, 168–9
- Refreshing the National Research Priorities*, 112–3
- regional and remote areas
 - Aboriginal and Torres Strait Islander population, 6, 74
 - support for Aboriginal and Torres Strait Islander students from/in, 74–80, 173–5
 - case studies, 173–5
 - critical success factors, 173
 - key challenges, 173
 - recommendations, xx, 79–80
- Relocation Scholarships, xiii
- research
 - Australian Government funding for, 115
 - culturally appropriate assessment of, 112
 - see also ethical research practice
- research capability
 - role of, 98
 - see also Aboriginal and Torres Strait Islander research capability
- Research skills for an innovative future: a research workforce strategy to cover the decade and beyond* report, 128
- research teams and models for research success, 205–7



- case studies, 205–7
- critical success factors, 205
- key challenges, 205
- see *also* Aboriginal and Torres Strait Islander HDR students; Aboriginal and Torres Strait Islander researchers
- research training for Aboriginal and Torres Strait Islander students, 110
 - funding, 105
 - recommendation, xxi, 108–9
- Research Training Scheme (RTS)
 - funding for Aboriginal and Torres Strait Islander HDR students
 - recommendation, xxi, 108–9
 - and funding of research training, 105
- Research Workforce Strategy, 114
 - Aboriginal and Torres Strait Islander research workforce plan under, 131
 - see *also* *Research skills for an innovative future: a research workforce strategy to cover the decade and beyond* report
- researchers
 - function of, 89
 - see *also* Aboriginal and Torres Strait Islander researchers
- retention rates see enrolment, retention and completion rates
- reverse block release see mixed mode and reverse block release programs
- the Review see Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People (the Review)
- Review of Australian Higher Education (chair: Prof. Denise Bradley) see Bradley Review
- Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People (the Review)
 - aims, ix–x, 3, 5, 10–2
 - consultations, 151
 - scope of, x–xi
 - terms of reference, x
- Review of Student Income Support Reforms, xiii, 84
- Review Panel
 - vision of, xi, 61–2, 109
- RMIT University
 - Aboriginal and Torres Strait Islander Researcher Network, 201
 - ethical research practice, 201
 - Human Research Ethics Committee, 201
 - Ngarara Willim Centre
 - and best practice in cultural competency, 136
- Roberta Sykes Scholarships for study at Harvard University and other overseas universities, 171
- Royal Women’s Hospital, Melbourne
 - Aboriginal and Torres Strait Islander Workforce and Staff Exchange Project, 66

S

- School for Indigenous Health (Monash University), 213
- School of Indigenous Australian Studies postgraduate program (James Cook University), 194–5
- School of Indigenous Studies (University of Western Australia), 213
- schools
 - Aboriginal and Torres Strait Islander students see Aboriginal and Torres Strait Islander school students
 - Closing the Gap targets, 22–3
 - National Partnership Agreements, 22

- pathway to higher education from, xi, 17–34
 - case studies, 156–7
 - critical success factors, 156
 - key challenges, 156
 - recommendations, xvii, 33–4
- science and mathematics, 82 peer
 - networks and, 29–30 university
 - outreach and, 27, 29–30
- secondary school teacher attributes
 - to include cultural competence, 94–5
- Smarter Schools National Partnership Agreements (Low Socio-economic Status School Communities; Literacy and Numeracy), 22
- Southbank Institute of Technology
 - Diploma of Justice (Aboriginal and Torres Strait Islander), 160
- Southern Cross University
 - Indigenous Australian Student Services, 61
- special entry programs *see* enabling programs
- Standing Council on Tertiary Education, Skills and Employment (SCOTese)
 - and Aboriginal and Torres Strait Islander Pathways Action Plan, 45
- Stronger Smarter Institute
 - and Aboriginal and Torres Strait Islander school students, 24, 32
 - and professional development of teachers, 33
 - Queensland University of Technology and, 187
- Stronger Smarter Leadership Program
 - and embedding of Aboriginal and Torres Strait Islander knowledge and perspectives into curriculums, 96
- Stronger Smarter Learning Communities project, 187
- Student Start-up Scholarships, xiii
- students
 - use of term, xi
- submissions, xi
- support networks, 81
- Symposium of Aboriginal and Torres Strait Islander Research
 - Murrup Barak (Melbourne Institute for Indigenous Development, University of Melbourne) and University of Melbourne Indigenous Graduate Students Association, 197

T

- TAFE2HE (University of Ballarat), 158
- Te Kotahitanga (University of Waikato School of Education and Pounamu Education Research and Development Centre), 33, 96, 187–8
- teacher education, 185–8
 - case studies, 186–8
 - critical success factors, 186
 - key challenges, 186
- teachers
 - Aboriginal and Torres Strait Islander education subjects to be included in training of, 32–3
 - with appreciation of Aboriginal and Torres Strait Islander perspectives, 32
 - and encouragement of Aboriginal and Torres Strait Islander students to consider higher education
 - recommendation, xvii, 33
 - low expectations of Aboriginal and Torres Strait Islander school students of, 20–1
 - quality of and student learning outcomes, 32–3, 94–5

- see also secondary school teacher attributes; vocational education and training (VET) teachers and career advisers
- Technical and Further Education (TAFE)
 - use of to provide geographical access to higher education, 45
- Telethon Institute for Child Health Research, 205–6
 - and NHMRC Centre for Research Excellence in Aboriginal Health and Wellbeing grant (*From marginalised to empowered: transformative methods for Aboriginal health and wellbeing*), 119, 205, 206
 - and NHMRC Indigenous Capacity Building Grant in Population Health Research (*Not just scholars but leaders: learning circles in Indigenous health research*), 119, 205, 206
- terms of reference of the Review, x
- Tertiary Education Quality and Standards Agency (TEQSA), 93
- TRACKS Tertiary Preparation Program (University of New England), 162–3
- trainees see Aboriginal and Torres Strait Islander trainees and cadets
- tutoring support see Indigenous Tutorial Assistance Scheme – Tertiary Tuition (ITAS-TT) program

U

- Umuliko Indigenous Higher Education Research Centre (Wollotuka Institute, University of Newcastle), 152
- UniSA College
 - and Aboriginal Power Cup, 166–7
- universities
 - and Aboriginal and Torres Strait Islander professional organisations, 62
 - Aboriginal and Torres Strait Islander research strategies, 110–1
 - Aboriginal and Torres Strait Islander staff, xiv
 - and Aboriginal and Torres Strait Islander student success, 56–7
 - adoption of a whole-of-university approach to Aboriginal and Torres Strait Islander student success see whole-of-university approach to Aboriginal and Torres Strait Islander student success
 - to be places where Aboriginal and Torres Strait Islander people feel they belong, 50
 - collaboration with professions, 179–81
 - case studies, 179–81
 - critical success factors, 179
 - key challenges, 179
 - commitment of to teaching Aboriginal and Torres Strait Islander knowledge, 90–1
 - and coordinated approach to professional pathways for Aboriginal and Torres Strait Islander people, 64–5
 - and development of Aboriginal and Torres Strait Islander Teaching and Learning Frameworks, xiv
 - and development of Aboriginal and Torres Strait Islander teaching and learning strategies, 91
 - embedding of Aboriginal and Torres Strait Islander knowledge and perspectives in curriculums, 91–2
 - encouragement of Aboriginal and Torres Strait Islander school students to undertake higher education, 26–7
 - and encouragement of Aboriginal and Torres Strait Islander VET students to consider higher education, 44
 - and ethical research practice in research involving Aboriginal and Torres Strait Islander communities, 111–2
 - and inclusion of to cultural competence in teacher training, 95
 - Indigenous Education Statements, 146, 147
 - Indigenous education strategies, 138
 - and Indigenous Education Units, 11–2, 56–7, 157, 171

- and Indigenous Employment Program, 126–7
- Indigenous employment strategies, 125, 131
- and Indigenous employment strategies, 125
- Indigenous-specific funding support provided by government to, xii–xiii
- mission-based compact agreements with, 141–2
- monitoring and evaluation framework *see* monitoring and evaluation framework
- and parity targets, 11
- and racism, 134
- and recognition of prior learning and experience
 - of Aboriginal and Torres Strait Islander workers, 39
- recommendations for
 - access to information by potential Aboriginal and Torres Strait Islander students, xviii, 52
 - development and implementation of Aboriginal and Torres Strait Islander teaching and learning strategy, xxi, 96
 - development of Aboriginal and Torres Strait Islander research strategies, xxii, 121
 - enabling courses for disadvantaged learners, particularly Aboriginal and Torres Strait Islander students, xviii, 48–9
 - financial support for Aboriginal and Torres Strait Islander students, xx, 88
 - higher degrees by research, xxi, 108
 - Indigenous Education Units, xviii, 52
 - Indigenous Tutorial Assistance Scheme – Tertiary Tuition (ITAS-TT) program, xx, 74
 - Indigenous-specific funding support provided by government to, xix–xx, 74
 - monitoring and evaluation framework for Aboriginal and Torres Strait Islander higher education strategy, xxiv, 147
 - parity targets, xvi, 12–3
 - support for Aboriginal and Torres Strait Islander staff, xxiii, 132
 - and support for Aboriginal and Torres Strait Islander students from regional and remote areas, xx, 79–80
 - and support of Aboriginal and Torres Strait Islander communities, xix, 68
 - work with employers and professional bodies to encourage Aboriginal and Torres Strait Islanders to undertake higher education, xvii, 46
- Reconciliation Action Plans, 125, 138–9
- recruitment of students from VET, 41–2
- role of Elders in, 208–10
- sharing best practice, 61
- and students changing universities, 79
- and use of TAFE and VET to improve geographical access to higher education, 45
- use of term, x
- see also* Aboriginal and Torres Strait Islander-specific support to universities and students; academic teaching practices; higher education; higher education sector; information about higher education and universities
- Universities Australia website
 - and best practice, 61
- university culture and governance
 - and Aboriginal and Torres Strait Islander higher education outcomes, xv, 55, 133–42
 - bringing community knowledge to campus, 208–10
 - case studies, 208–10
 - critical success factors, 208
 - key challenges, 208
 - culture, 133–6
 - cultural competency and awareness, 135–6
 - cultural environment, 134, 135–6
 - racism, 134–6
 - decision-making and accountability structures, 210

- case studies, 211–3
- critical success factors, 210
- key challenges, 210–1
- governance, 136–41
 - Aboriginal and Torres Strait Islander representation, 137
 - Aboriginal and Torres Strait Islander representation at highest levels, 140
 - Indigenous education strategies, 138
 - Reconciliation Action Plans, 138–9
 - shifting responsibility and accountability for Aboriginal and Torres Strait Islander outcomes to senior university leadership, 139
 - and whole-of-university approach to Aboriginal and Torres Strait Islander success in higher education, 136–7, 138
- recommendations, xxiii, 141
- University of Adelaide
 - Centre for Aboriginal Studies in Music, 185
 - Wilton Yerlo Student Experience of Learning and Teaching system, 168
 - Wilton Yerlo University Preparatory Program, 168–9
- University of Ballarat
 - and off-campus access to higher education through TAFEs, 45–6
 - pathway to higher education from VET, 158
 - TAFE2HE, 158
- University of Melbourne
 - Aboriginal and Torres Strait Islander postgraduate summer school, 103, 196–7
 - Aboriginal and Torres Strait Islander Students initiative, 103
 - Onemda VicHealth Koori Health Unit, 184
- University of New England
 - ethics panel to consider Indigenous research, 111
 - pathway to higher education from correctional centres, 162–3
 - TRACKS Tertiary Preparation Program, 162–3
- University of New South Wales
 - ASPIRE program
 - and students from low SES backgrounds, including Aboriginal and Torres Strait Islander students, 28–9
 - Indigenous Preparatory Programs (Pre-Programs), 169–70
 - Shalom College
 - accommodation support program, 77–8
 - Gamarada Scholarship Program, 176
- University of Newcastle
 - and Aboriginal and Torres Strait Islander research, 68
 - Bachelor of Aboriginal Professional Practice, 152
 - and best practice in cultural competency, 136
 - Board of Aboriginal and Torres Strait Islander Education and Training, 152
 - and culturally competent curriculums, 92
 - Elder-in-Residence program, 152
 - increasing numbers of Aboriginal and Torres Strait Islander staff, 129
 - Indigenous Business and Industry Scholarships, 153
 - Indigenous Employment Strategy, 131, 198
 - Kunarr Indigenous Alumni program, 198
 - linking key performance indicators with performance of senior management, 139–40
 - pre-medical program for Aboriginal and Torres Strait Islander people, 153
 - school outreach activities, 153
 - Success and Leadership Program, 198
 - whole-of-university approach to Aboriginal and Torres Strait Islander student success, 152–3
 - Wollotuka Institute, 152–3

- Umuliko Indigenous Higher Education Research Centre, 152
- University of Notre Dame
 - blended delivery model – regional and remote areas, 173–4
 - pathway to higher education from VET, 159–60
 - VET Pathways in Nursing and Education program, 45
- University of Queensland
 - Aboriginal and Torres Strait Islander Studies Unit, 211–2
 - Pro-Vice-Chancellor (Indigenous Education), 141, 211
 - UQ College, 169
- University of South Australia
 - Aboriginal and Torres Strait Islander graduate program and professional development fund, 129
 - and Aboriginal Power Cup, 166–7
 - Division of Business Indigenous Scholarships, 176
 - and incorporation of Aboriginal and Torres Strait Islander perspectives into the curriculum, 92
 - Indigenous Employment Strategy – Yaitya Warpulai Tappa (Indigenous Work Path), 199
 - Indigenous employment strategy and professional development, 126
 - Indigenous Graduate Program, 199
 - professional development fund for Aboriginal and Torres Strait Islander staff, 199
 - and submission of research proposals to directors of Indigenous research areas, 112
- University of Southern Queensland
 - Centre for Australian Indigenous Knowledge, 60
 - Individual Tailored Student Support Program, 172–3
- University of Sydney
 - and AIME, 29
 - and best practice in cultural competency, 136
 - College of Health Sciences
 - Aboriginal and Torres Strait Islander enrolment and engagement, 154
 - Deputy Vice-Chancellor (Indigenous Strategy and Services), 141, 153, 155
 - whole-of-university approach to Aboriginal and Torres Strait Islander student success, 154–5
 - Wingara Mura Bunga Burrabugu* – The University of Sydney Aboriginal and Torres Strait Islander Integrated Strategy, 154–5
- University of Technology, Sydney
 - Indigenous Education Strategy, 153–4
 - Indigenous Education Unit—Jumbunna Indigenous House of Learning, 153
 - Indigenous Strategies Committee, 140–1
 - whole-of-university approach to Aboriginal and Torres Strait Islander student success, 153
- University of the Sunshine Coast
 - Buranga Centre, 157
 - Headstart Program, 156–7
 - pathway to higher education from schools, 156–7
- University of Waikato see Te Kotahitanga (University of Waikato School of Education and Pounamu Education Research and Development Centre)
- University of Western Australia
 - Aboriginal Pre-Law Program, 59
 - Centre for Aboriginal Medical and Dental Health, 59
 - and culturally competent curriculums, 92
 - governance structures and key performance indicators and Aboriginal and Torres Strait Islander higher education, 213
 - School of Indigenous Studies, 59, 213
 - Indigenous Science and Engineering Camp for students in Years 9 and 10, 30, 167
- University of Western Sydney

- and Aboriginal and Torres Strait Islander research, 68
- Aboriginal and Torres Strait Islander Research Strategy, 203–4
- Aboriginal and Torres Strait Islander trainees and cadets, 126–7
- Badanami Centre for Indigenous Education
 - Indigenous graduate attribute, 182
- Elders on Campus program, 209–9
- inclusion of Aboriginal and Torres Strait Islander knowledge in graduate attributes, 94
- Office of Aboriginal and Torres Strait Islander Employment and Engagement, 208–9
- University of Wollongong
 - Aboriginal Teacher Mentor Training Program, 187
 - Djinggi Program, 186
 - and relational knowledge approach, 92
- university outreach programs
 - and Aboriginal and Torres Strait Islander school students, 21, 26, 27–32
 - building key skills (literacy and numeracy, mathematics and science) and peer networks, 29–30
 - starting Year 7 or earlier, 28
 - through partnerships, 31
- UQ College (University of Queensland), 169

V

- Values and ethics: guidelines for ethical conduct in Aboriginal and Torres Strait Islander health research* (NHMRC), 111, 201
- Victorian Aboriginal Community Controlled Health Organisation (VACCHO)
 - and Graduate Certificate of Diabetes Education (Institute of Koorie Education, Deakin University), 183–4
- Victorian Consortium for Public Health
 - and Institute of Koorie Education, Deakin University
 - Master of Public Health, 184–5
- Victorian Government
 - Wurreker Strategy (VET policy framework for Indigenous communities), 44
- vocational education and training (VET)
 - and Aboriginal and Torres Strait Islander people, 6–7, 39–40
 - barriers to pathway to higher education from, 41–2
 - as diversion from higher education, 40–1
 - enrolment of Aboriginal and Torres Strait Islander students in higher level VET courses, 39, 44
 - enrolment of Aboriginal and Torres Strait Islander students in low-level VET courses, 41
 - geographical availability of, 40
 - and pathway to higher education, 45
 - pathway to higher education from, xii, 38
 - case studies, 158–60
 - critical success factors, 158
 - improvement of, 44–5
 - key challenges, 158
 - recommendations, xvii–xviii, 46
 - work with employers and professional bodies to encourage Aboriginal and Torres Strait Islanders to undertake higher education
 - recommendations, xvii–xviii, 46
- vocational education and training (VET) providers
 - and enrolment of Aboriginal and Torres Strait Islander students, 39
 - recommendations
 - enabling courses for disadvantaged learners, particularly Aboriginal and Torres Strait Islander students, xviii, 48–9

vocational education and training (VET) teachers and career advisers
and encouragement of Aboriginal and Torres Strait Islander students to consider higher
education, 43

W

Warawara – Department of Indigenous Studies (Macquarie University), 161
whole-of-university approach to Aboriginal and Torres Strait Islander student success, xii,
55, 56, 133, 136–7, 138
case studies
University of Newcastle, 152–3
University of Sydney, 154–5
University of Technology, Sydney, 153–4
and Indigenous Education Units, 59–60, 137
recommendation, xviii, 61
Wilto Yerlo (University of Adelaide)
‘Reconciliation Pedagogy’, 169
Student Experience of Learning and Teaching system, 168
University Preparatory Program, 168–9
Wingara Mura Bunga Burrabugu – The University of Sydney Aboriginal and Torres Strait
Islander Integrated Strategy, 154–5
Wiradjuri Language and Cultural Heritage Program (Wiradjuri Council of Elders and Charles
Sturt University), 191
Wollotuka Institute (University of Newcastle), 152–3
Woodford Correctional Centre, Queensland
and TRACKS Tertiary Preparation Program (University of New England), 162–3
workforce
Aboriginal and Torres Strait Islander people in, 7
see also Aboriginal and Torres Strait Islander workforce
workplaces, 34–5
World Indigenous Network Higher Education Consortium, 209
Wurreker Strategy (Victorian Government VET policy framework for Indigenous
communities), 44

Y

Yaitya Warpulai Tappa (Indigenous Work Path) (University of South Australia), 199
Yalari Foundation
and Aboriginal and Torres Strait Islander school students, 24, 25
Yanyuwa people of Borroloola, Northern Territory
and Monash Indigenous Centre and Faculty of Information Technology
and Monash Country Lines Archive, 191
Year 12 completion rates see Aboriginal and Torres Strait Islander school students
Youth Allowance, xiii

