



Further Education & Indigenous Communities

**Research Report prepared for the
GO Foundation**



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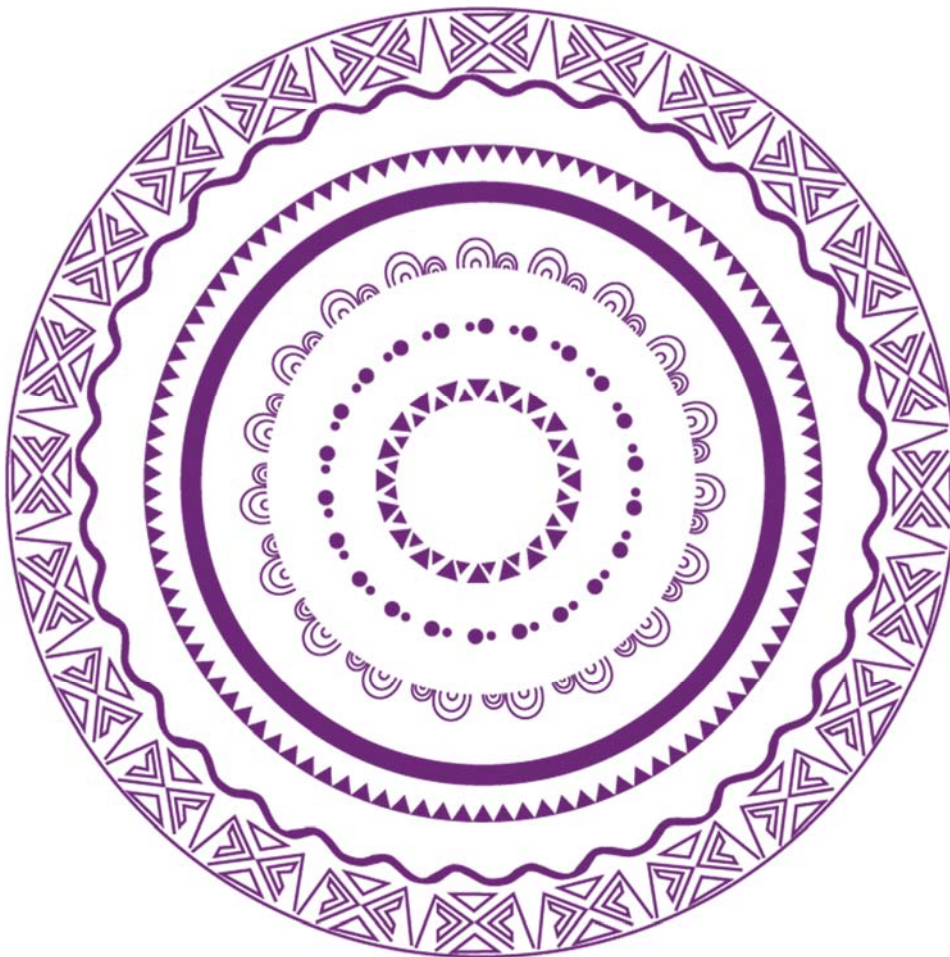


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In 2013, KPMG commissioned Supply Nation certified Indigenous design agency, Gilimbaa, to produce an artwork that reflects the diversity of Indigenous Australia and KPMG's commitment to reconciliation. This artwork tells the story of community, and the importance of community in society. The visual elements created by Gilimbaa have been utilised throughout this document.



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Disclaimers

Inherent Limitations

This report has been prepared as outlined in the Scope Section. The services provided in connection with this engagement comprise an advisory engagement, which is not subject to assurance or other standards issued by the Australian Auditing and Assurance Standards Board and, consequently no opinions or conclusions intended to convey assurance have been expressed.

*No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by, the Goodes O'Loughlin Foundation Limited (**GO Foundation**) management, personnel and stakeholders consulted as part of the process.*

KPMG have indicated within this report the sources of the information provided. We have not sought to independently verify those sources unless otherwise noted within the report. KPMG is under no obligation in any circumstance to update this report, in either oral or written form, for events occurring after the report has been issued in final form. The findings in this report have been formed on the above basis.

Third Party Reliance

This report is solely for the purpose set out in the Scope Section of this report and for the GO Foundation's information and is not to be used for any other purpose without KPMG's prior written consent.

This report has been prepared at the request of the GO Foundation in accordance with the terms of KPMG's engagement letter dated 31 July 2017. Other than our responsibility to the GO Foundation, neither KPMG nor any member or employee of KPMG undertakes responsibility arising in any way from reliance placed by a third party on this report. Any reliance placed is that party's sole responsibility.

Glossary and Terms

Acronym/ Term	Definition
ABS	Australian Bureau of Statistics
ACARA	Australian Curriculum, Assessment and Reporting Authority
ACER	Australian Council for Educational Research
AIHW	Australian Institute of Health and Welfare
AQF	Australian Qualifications Framework. The AQF is a unified system of national qualifications in schools, vocational education and training (TAFE institutes and private providers) and the higher education sector (mainly universities)
ASQA	Australian Skills Quality Authority
ATAR	Australian Tertiary Admission Rank
CAEPR	Centre for Aboriginal Economic Policy Research
DET	Department of Education and Training
Equity Groups	Defined by the Australian Department of Education and Training to describe students that: are from non-English speaking backgrounds (NESB); have a disability; are women in non-traditional areas; identify as Indigenous; are from low SES (socioeconomic status) locations based on postcode of permanent home residence; and are from regional and remote locations based on postcode of permanent home residence.
Further education	Post-secondary education, including adult education and vocational education and training
Indigenous status	Describes a person who self-identifies as being of Aboriginal or Torres Strait Islander descent
NAPLAN	National Assessment Program – Literacy and Numeracy
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NCSEHE	National Centre for Student Equity in Higher Education
NCVER	National Centre for Vocational Education Research
NSW	New South Wales
OECD	Organisation for Economic Cooperation and Development
PM&C	Department of Prime Minister & Cabinet
Post-secondary education	All education beyond secondary school level, including that delivered by universities, further education colleges and community providers
RTO	Registered Training Organisations
SEIFA	Socio-Economic Indexes for Areas
SES	Socioeconomic Status
TAFE	Technical and Further Education
TEQSA	Tertiary Education Quality Standards Agency

Acronym/ Term	Definition
Tertiary education	Formal education beyond secondary education, including higher education, vocational education and training, or other specialist post-secondary education or training
VET	Vocational Education and Training

Preface



Adam Goodes
Co-Founder



Michael O'Loughlin
Co-Founder



Peter Meurer
Chair



Shirley Chowdhary
Chief Executive
Officer

The GO Foundation is very proud to release this research report in conjunction with KPMG Arrilla Indigenous Services on the Promotion of Further Education to Indigenous Communities.

Australia's First Peoples are the oldest living culture in the world. They have a rich history, language and heritage and at GO we believe that this should be the basis of strong pride for all Australians. This incredible heritage should also be the basis on which we empower the next generation of Indigenous Australians to strive, to access opportunities and to reach their full potential. With over 65,000 years of bravery and success before them, our Indigenous students should have the confidence that they are capable of anything.

Yet, the issues that are faced by many Indigenous Australians and their communities today are complex. We acknowledge that there is no silver bullet and there is no one thing that can fix all the issues. However, at GO we do believe that education can open doors and create pathways for students to a brighter future. It's this connection that drives our work at the GO Foundation and led to this Research Report.

For our Indigenous youth to access opportunity and unlock their potential, they, like all young people, must be given the ability to exercise choice. Whilst some students may be looking to go to university, others may be searching for VET related courses or be looking to develop their entrepreneurial ideas. Each student should be given the choice to pursue further education and choice to enter the career or profession they want to. We hope that by providing information on how post-secondary education choices are linked to life outcomes, we can encourage more students to choose further education after Year 12.

The message is clear...Year 12 is not enough. Continue onto further education, pick the type of education that is right for you and you have the ability to change your life for the better and to take your community with you.

We hope that by sharing this report with students across Australia, their communities, and with those who help them make life decisions after Year 12, we can help empower the next generation of Aboriginal and Torres Strait Islander youth. It is time to leave the deficit language of closing the gap behind us and to move together to a language where we focus on potential and ambition, where we place high expectations on our Indigenous youth and where we embrace a language of empowerment and possibility.

We hope that this report continues the good work that has already been started by so many others. Like those people and organisations, we strive to make Australia a country of equal opportunity and wealth, and one where the pride we have in our Aboriginal and Torres Strait Islander heritage and culture propels us forward to a brighter future for all Australians. There is no silver bullet, but we believe that this report further strengthens the view that education can make a real difference.

The GO Foundation acknowledges the generosity of KPMG Arrilla Indigenous Services, Propel Group (Australia) Pty Limited and the Commonwealth Department of Education and Training in developing this report.

Executive Summary

The GO Foundation

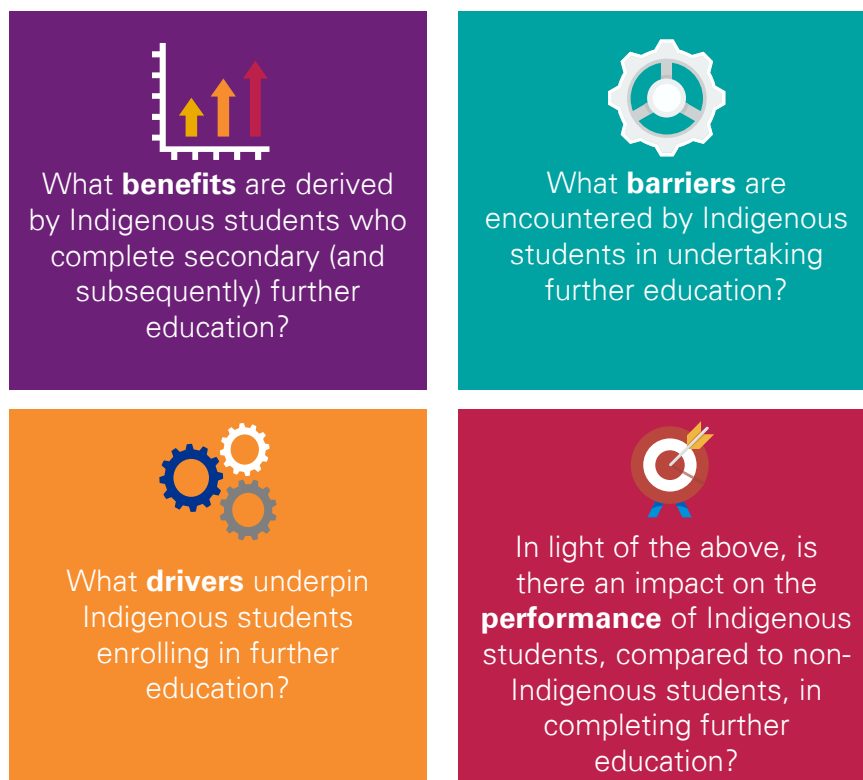
Founded by Adam Goodes and Michael O'Loughlin, the Goodes O'Loughlin Foundation Limited (the 'GO Foundation') was established in 2009 to deliver community programs with a focus on improving health and wellbeing. The focus has since been refined to education as a mechanism to create a brighter future for Indigenous Australians.

The GO Foundation recognises that while some students may pursue university, others may prefer VET related courses, or seek to develop their entrepreneurial ideas.

In this light, each student should be given the choice to pursue further education and enter the career or profession they desire. It is this intent and underlying belief that further education leads to better outcomes that has culminated in the commissioning of this report.

The GO Foundation engaged KPMG Arrilla Indigenous Services to undertake a targeted research exercise to understand the link between post-secondary education and the outcomes for Indigenous students. This research exercise consisted of desktop research of publically available data sources; and information made available by the Department of Prime Minister and Cabinet (PM&C).¹

This report has been framed around four investigative questions, aimed at exploring the complex dimensions and drivers which could both encourage and impede the uptake and completion of further education by Indigenous students. These questions are outlined below and are based on the current GO Foundation model, which targets students in metropolitan and regional communities.



The research findings were tested with a select group of academics in the field of Indigenous education. Their research and insights have shaped a number of considerations, for the GO Foundation to be cognisant of, when promoting a greater uptake of further education in Indigenous communities. As this report presents the data reported publically across numerous sources, the report and its findings do not intend to paint a homogenous picture of Indigenous communities across Australia, but provide a vehicle for enabling choice, as opposed to prescribing a particular path for Indigenous students.

The following section summarises the key findings and insights that emerged from review of the literature; and testing with a small sample of academics. It is important to note that these findings have been delivered in support of the GO Foundation's immediate focus of promoting the uptake of further education in Indigenous communities, with an emphasis on metropolitan and regional areas. As such, they may resonate more with students in these locations, as distinct from students in remote communities.

¹ This information includes aspects of data, which underpinned the 2017 Prime Minister's Closing the Gap Report.

Benefits derived by Indigenous students who complete secondary (and subsequently) further education...



The completion of further education increases employment opportunities and improves earning potential

- Australian Bureau of Statistics (ABS) Census data suggests that Indigenous Australians who have completed further education experience a higher employment rate than Indigenous Australians who have not. In 2011, **the employment rate for Indigenous graduates from a bachelor degree or above was 84 per cent, compared to a 45 per cent employment rate for Indigenous graduates who have completed Year 10.**
- Higher education attainment, appears to be associated with greater earning capacity, with 2016 ABS Census data showing that **approximately 50 per cent of Indigenous Australians who are earning more than \$1,000 a week have completed Year 12.**

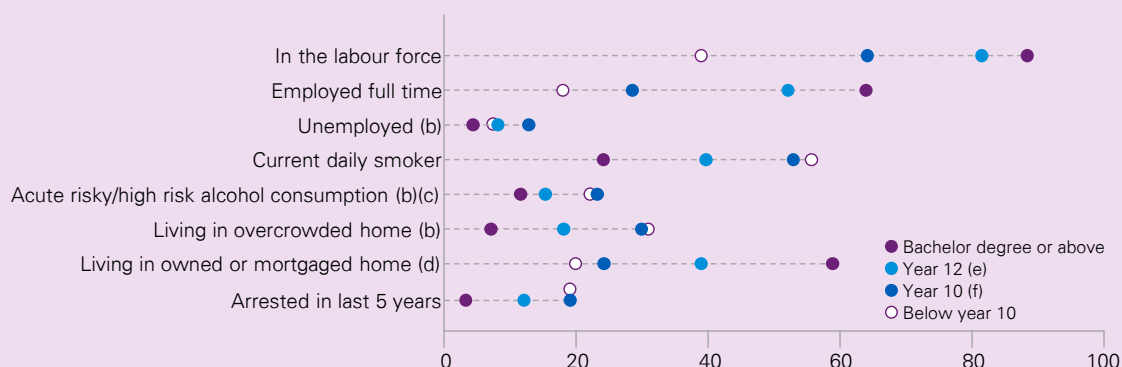


There are benefits for the broader community beyond individual achievement

- The 2008 ABS social trends report (illustrated in Chart 1), shows the numerous benefits associated with completing education, linking the highest educational attainment achieved by Indigenous persons 18 years and over with a selection of wellbeing indicators.

Chart 1: Highest education attainment achieved against selected indicators of wellbeing, 2008

Selected Indicators of Wellbeing (a)



Source: ABS Australian Social Trends March 2011, Education and Indigenous Wellbeing.

- Increasing the number of Indigenous Australians who complete further education may provide a larger and more diverse pool of skilled individuals who can participate in the workforce and work in their communities; benefiting both Indigenous communities and the broader Australian economy.
- **The more Indigenous students who complete further education, the greater variety of role models to inspire future generations of Indigenous school leavers towards different career pathways.**



Education can lead to reduced interaction with the justice system

- **In 2015, the detention rate for Indigenous juveniles was 26 times higher than the rate for non-Indigenous juveniles.**
- Indigenous youths who have left school early or performed poorly at school are more likely to have been charged with, or have been imprisoned for an offence. Evidence relied upon by Government agencies including the New South Wales (NSW) Department of Education and Training, suggests a strong link between school expulsion and incarceration.
- The difference in educational attainment between Indigenous and non-Indigenous Australians may be a driver of the over-representation of Indigenous youth in the justice system.



Educational attainment is correlated with improved health and wellbeing

- The Productivity Commission has cited evidence suggesting that education plays an important role in establishing healthy behaviours. For example, preventative oral health behaviours such as tooth brushing and flossing are developed mainly through education and modelling behaviours by adults in the home environment and/or education outside the home.
- According to 2010-12 ABS data, the difference in life expectancy between Indigenous Australians and the broader population is approximately 10 years. United Nations publications proposed a greater discrepancy in mortality rates, finding that an Indigenous Australian child can expect to die 20 years earlier than a non-indigenous counterpart. The research examined over 90 countries, and Indigenous Australians were found to be one of the worst groups in terms of Indigenous life expectancy.
- Literature suggests that education can result in improved health outcomes, positively impacting individuals. For example, the Australian Institute of Health and Welfare (AIHW) indicated that the **relatively high mortality rates for Indigenous Australians reflect the higher prevalence of modifiable and behavioural risk factors**. These include the disproportionate levels of educational, employment and social disadvantage faced by many Indigenous Australians compared with non-Indigenous Australians.
- The likelihood of engaging in risky health behaviours, such as tobacco use, decreases with higher levels of educational attainment.
- Consultation suggests that education can positively influence the mental wellbeing of Indigenous Australians.



Barriers encountered by Indigenous students in undertaking further education...



High levels of socio-economic disadvantage, combined with the cost of education may be prohibitive

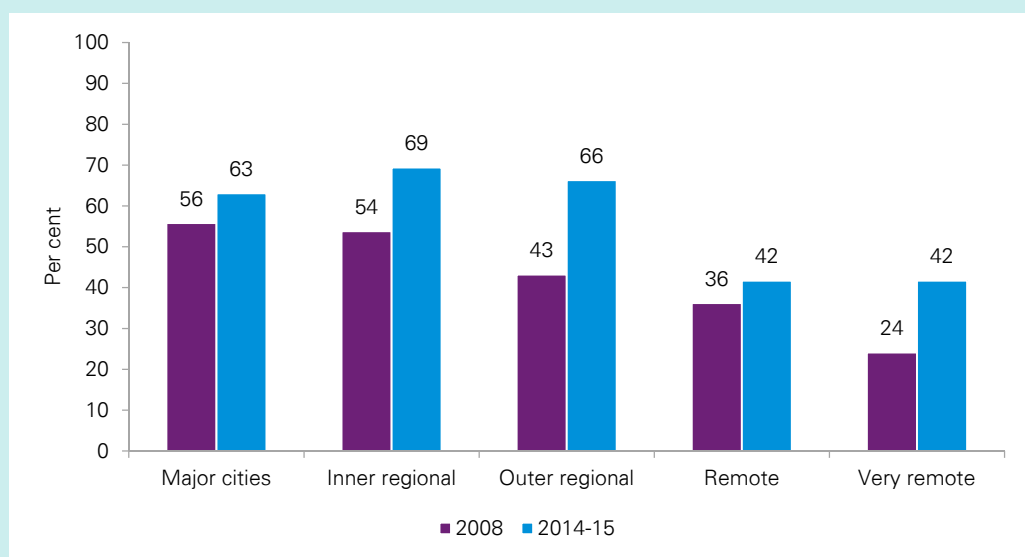
- Indigenous Australians have higher levels of socio-economic disadvantage compared with the non-Indigenous population in a majority of geographies. For example, 2011 ABS Socio-Economic Indexes for Areas (SEIFA) indicated Indigenous Australians were over-represented in the three most disadvantaged deciles. **37 per cent of Indigenous Australians lived in areas in the most disadvantaged decile (the bottom ten per cent), compared with nine per cent of the non-Indigenous population.**
- The real and perceived cost of attending university is often raised as a major barrier for young Indigenous Australians from low socio-economic backgrounds and those who reside further away from metropolitan areas, where educational infrastructure like universities, and TAFEs are available.



Geographic location

- Individuals living in remote areas are often disadvantaged in terms of their physical access to further education. Anecdotally, this is likely to create additional barriers for Indigenous students in particular, as they are faced with a decision to move away from family, country and their network of support, to undertake further education. As illustrated by Chart 2, **while the proportion of Indigenous 20-24 year olds with Year 12 or equivalent attainment has increased over time from 2008 to 2014-15, under half (42 per cent) of the students in very remote areas obtained Year 12 or equivalent compared to those living in major cities (63 per cent) in 2014-15.**

Chart 2: Proportion of 20 – 24 year olds with Year 12 of equivalent attainment based on ABS National Aboriginal and Torres Strait Islander Social Survey, 2008 and 2014-15



Source: National Aboriginal and Torres Strait Islander Social Survey.





Differences in school attendance and high rates of drop-out appear at an early age and compound as students progress through school

- The literature indicates that lower pre-school attendance and school readiness culminates in low levels of achievement, lower intentions of completing Year 12, and lower intentions of pursuing post-secondary education.
- There is a general trend that attendance rates amongst Indigenous students decrease in more remote areas. **The attendance rate in major cities for Indigenous students is approximately 86 per cent compared with approximately 66 per cent in very remote regions.**



Complex application processes present a barrier to university enrolment

- Studies have explored questions around whether students from low socio-economic backgrounds (low SES students) are disadvantaged in the university application process, through comparing student application portfolios between students before and after they receive their Australian Tertiary Admission Rank (ATAR). Research suggests that compared to low SES students, those from high SES backgrounds are more attentive to the application process and more likely to change their strategies in the window immediately after receiving their ATAR.
- Anecdotally, disadvantaged students struggle more with the application process and respond less efficiently to new information in the application process. Consultation indicated that this may be compounded by support networks, including parents and siblings, who often have not completed further education and cannot therefore share their own experiences. This acts as a barrier for Indigenous students entering education or accessing the various supports available.
- Young people from disadvantaged backgrounds are less able to use their cultural capital and social networks when choosing a university. This appears to particularly impact Indigenous students, for whom culture and links to their community are important. Research indicates that mentors and sources of advice on the university application process and availability of vocational pathways may be very useful.



Traditional gender roles limit educational attainment

- Traditional gender roles and caring responsibilities are likely to pose barriers to further education amongst Indigenous communities.
- **While young Indigenous women are more likely to complete Year 12, they are less likely to attain any kind of post-school qualification.**
- Indigenous men are more likely to be affected by high rates of incarceration, which often act as a barrier to obtaining further education.



Drivers underpinning the enrolment of Indigenous students in further education...



The school experience has the potential to impact an Indigenous student's choice to pursue further education

- Studies have highlighted a number of drivers for university enrolment. Students who hold positive attitudes towards school, have positive relationships with their teachers and receive appropriate career guidance are more likely to enrol at university at an earlier age.
- Anecdotally, factors such as the receipt of career advice, guidance and positive school experiences within a culturally appropriate environment increase the likelihood of university participation amongst young people from equity groups like Indigenous students.



Role models and supporting aspirations are powerful drivers of enrolment

- Research suggests that **role models in the community are a key driver of enrolment in further education**. Whilst many Indigenous students are the first in their families to reach education milestones, they often have access to less support and advice than the broader community.
- Research recognises that there is low Indigenous representation amongst university staff. Studies on Indigenous participation in Vocational Education Training (VET) note that where there is a strong link between individual and community aspirations, the benefits of education and training become more visible and higher levels of engagement occur.



Cultural identity is an important driver of participation in education

- **Stronger cultural identity appears to promote greater participation and achievement in education and training.**
- Some students may experience social and cultural alienation because of clashes between Indigenous and non-Indigenous socio-cultural values. These clashes may arise in teaching styles and pedagogies, course content and levels of available support and are considered to be a barrier to the retention of Indigenous students in education.



Promote early engagement in education to better prepare students for further education

The following enablers appear to be important in engaging Indigenous students earlier:

- School readiness and literacy and numeracy acquisition by focusing on the earlier years of schooling.
- Involving parents and communities in schooling.
- The development of aspirations.
- Providing appropriate education and employment options and career advice.



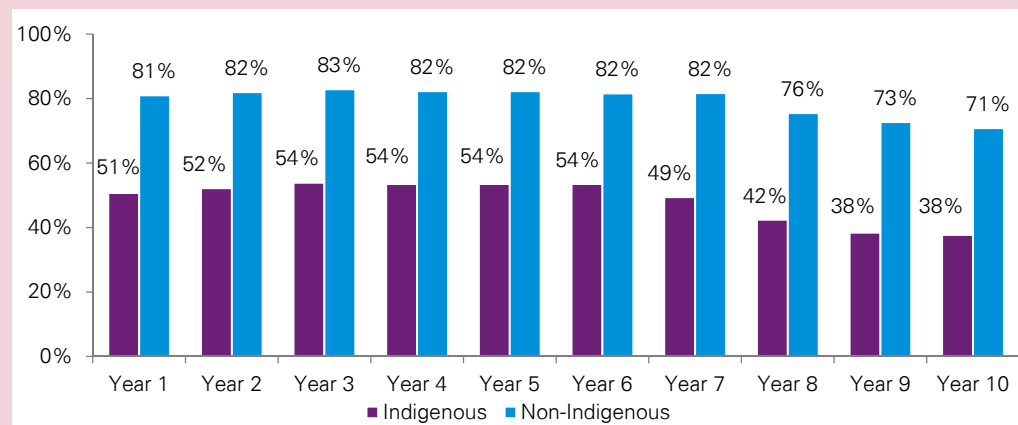
The performance of Indigenous students in completing further education...



Some Indigenous students face challenges and are underperforming from as early as primary school

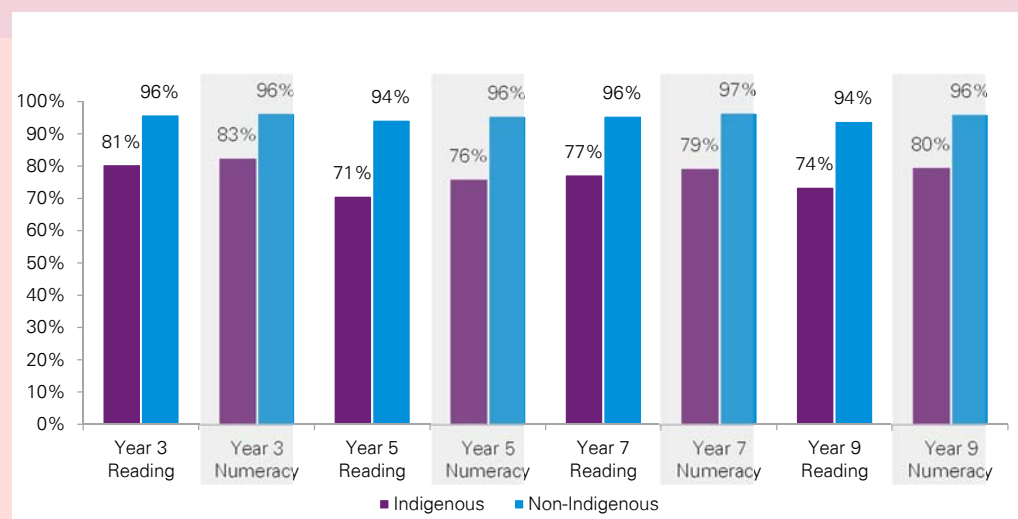
- Data from the Australian Curriculum, Assessment and Reporting Authority (ACARA) shows that the proportion of Indigenous students who have an attendance rate of 90 per cent or more is far less than their non-Indigenous counterparts. This lower attendance rate is believed to subsequently impact performance levels during assessments such as the National Assessment Program – Literacy and Numeracy (NAPLAN).
- The difference in performance between Indigenous and non-Indigenous students appears to continue through primary and secondary education. NAPLAN results show the proportion of Indigenous students reaching the national minimum standards in 2016 is around 70-80 per cent, while the proportion of non-Indigenous students reaching this standard is around 95 per cent.

Chart 3: Percentage of students with an attendance rate of 90 per cent or more, by Indigenous status and year level, 2016



Source: ACARA, National Student Attendance Data Collection 2016.

Chart 4: Proportion of students reaching national minimum standards across education levels, 2016



Source: National Assessment Program, NAPLAN National Report 2016.



Completion rates for further education are low amongst Indigenous Australians

- VET is the preferred secondary learning pathway for Indigenous students. Total Indigenous completion rates in VET have risen in line with enrolments rates, but completion rates remain low. In remote communities, completion rates are lower than for the broader Indigenous cohort.
- Using university offer rates as an indicator of performance, Indigenous Australians are receiving offers from universities at similar levels to non-Indigenous Australians.
- **However, university completion rates for Indigenous students (47 per cent) are much lower than for non-Indigenous students (74 per cent).**



Indigenous students who complete further education are likely to experience employment opportunities and outcomes similar to non-Indigenous Australians

- Performance in employment is a difficult metric as there are countless pathways that an Indigenous student or graduate might take. Consultation suggested that the **employment opportunities and outcomes of Indigenous students who have completed further education are equal to those of non-Indigenous Australians.**
- The proportion of Indigenous Australians working as community and personal service workers, machinery operators and drivers, and labourers exceed their non-Indigenous counterparts.²

² Community and Personal Service Workers assist Health Professionals in the provision of patient care, provide information and support on a range of social welfare matters, and provide other services in the areas of aged care and childcare, education support, hospitality, defence, policing and emergency services, security, travel and tourism, fitness, sports and personal services.



Conclusion

The research is demonstrative of the many social, cultural, and economic benefits which may be derived through the promotion of further education in Indigenous communities. In a landscape in which Australia currently faces skills gaps across specific segments of the economy; challenges in terms of future of workforces; and the emergence of technologies that continue to disrupt society; these benefits underpin the imperative to ensure that all Australian's have equal opportunity to participate socially, culturally and economically.

The literature appears clear - the completion of further education by Indigenous Australians is likely to lead to increased earning capacity, greater employment opportunities, improved health and wellbeing outcomes, and reduced interaction with the justice system. Such implications must be considered in light of individual circumstance, with a recognition of the diversity that exists across Indigenous communities.

If realised, it is likely that the benefits of a greater percentage of Indigenous Australians completing further education will be experienced beyond Indigenous communities, by communities across Australia. The literature suggests however, that there remains complex barriers that impact the enrolment into, and completion of further education by Indigenous students. These barriers differ based on individual circumstance, and are underpinned by a variety of factors. For example, socio-economic disadvantage, location, the cost of education itself as well as the support network surrounding each Indigenous person, shapes their identity, and desire to pursue further education.

There are enablers that that are likely to increase participation in further education by Indigenous Australians. These include enhancing the quality of school experience for Indigenous students to ensure that culture is recognised, such that the aspirations of the individual are developed. Additionally, providing access to career advice and guidance, and information on the various choices and pathways available for Indigenous Students is linked to increasing the quality of the school experience for Indigenous Australians.

While this report has been developed to support the GO Foundation in promoting the uptake of further education in Indigenous communities, it is clear from the literature that a concerted effort must be maintained to ensure that Indigenous Australians have the same choices as non-Indigenous Australians in entering and completing further education if they so wish.



Introduction

Background and purpose

Founded by Adam Goodes and Michael O'Loughlin, the Goodes O'Loughlin Foundation Limited (the 'GO Foundation') was established in 2009 to deliver community programs with a focus on improving health and wellbeing. This focus has since centred on education as a mechanism to create a brighter future for Indigenous Australians.

While university remains a potential pathway for many Indigenous students, the GO Foundation recognises that there are students for whom university may not be the preferred, nor ideal choice. As such, it is committed to promoting pathways which are suitable and most appropriate to each individual.³ Further, the GO Foundation also recognises the diversity that exists across Indigenous communities, particularly the discrete cultures that exists between metropolitan, regional and remote communities. This diversity creates distinct circumstances for remote communities in particular. As such, it is important to note that the GO Foundation's existing model is more suited to urban and regional communities than remote communities. Accordingly, this research report and the findings contained within may not be equally applicable to remote communities as they are to metropolitan and regional Indigenous communities.

The GO Foundation has been engaged by the Department of Education and Training (DET) to develop a communication strategy for the promotion of further education to Indigenous school leavers across Australia. This project seeks to enable the GO Foundation to promote a number of key messages, based on a targeted research exercise (culminating in this research report). It is expected that the communications strategy delivered by the GO Foundation will include an initial series of 2-3 minute videos promoting key messages identified, with the videos being disseminated using a variety of channels (such as websites, social media and email).

To ensure an evidenced based communications strategy is developed, the GO Foundation engaged KPMG Arrilla Indigenous Services to undertake a targeted research exercise to distil the key messages that the videos and future communications materials should focus on. The project included a Scoping Study, delivered to GO Foundation in August 2017 that established the research parameters.⁴ This report is the culmination of the subsequent research effort. While the report was originally expected to be delivered in confidence to the GO Foundation, the broader implications and support it could provide in engaging Indigenous Communities has led to a decision by the GO Foundation to release the document publically.

The report has leveraged publicly available qualitative and quantitative data sources on Indigenous students and their educational outcomes, as well as direct consultations with a group of Indigenous education experts. The research report aims to present the findings of the research exercise undertaken by KPMG Arrilla Indigenous Services to understand the link between post-secondary education and better outcomes for Indigenous students.

³ GO Foundation, 2017, 'History', accessed 19 July 2017. Available at: <https://www.gofoundation.org.au/history>.

⁴ This report has been informed by a scoping study delivered on 29 August 2017 to the GO Foundation.

Scope

The scope of the report relates to four key research questions driven by the GO Foundations existing mode and immediate objectives.

This report provides an evidence base to answer each question, and specifies the implications for communicating the findings with the Indigenous community.

The research report is based on the following considerations:

- The scope of the research is national, with a metropolitan and regional focus. This seeks to reflect the GO Foundation model and where its support and scholarship networks exist. Data and findings reflecting geographic comparisons are reported where relevant however may be less relevant to remote communities.
- The research considered is limited to publicly available sources (as outlined in **Appendix B – Reference List**), and data which was requested and shared by the Department of Education and Training and Department of Prime Minister and Cabinet (made available through a data request as outlined in **Appendix C – Data Request**).
- As such, this research report provides a point-in-time assessment of the current state of further education (including higher education and VET) for Indigenous communities at the time of publication (this assessment is based on the methodology set out in **Appendix D – Methodology**). These include:
 - information received from custodians of the ‘Closing the Gap’ data sets i.e. data received by the Department of Education and the Department of Prime Minister and Cabinet. This included aggregated Indigenous education indicator data such as school enrolment, attendance, performance (NAPLAN), Year 12 attainment, and employment rates by education level;
 - published research reports available online identified through google and google scholar searches, open-access journals and international organisations such as the Organisation of Economic Cooperation and Development (OECD);
 - publication portal of the National Centre for Vocational Education Research;
 - data published by the Australian Bureau of Statistics (ABS) including the Census of Population and Housing; and
 - information shared by academics during the stakeholder consultation phase of this research exercise, for example, a draft paper on the intergenerational effects of education on Indigenous child outcomes By Nicolas Biddle.⁵

It is important to note that the data reflect individuals who have voluntarily identified themselves as Indigenous. Therefore, the data and analysis may not be an absolute or complete and accurate reflection of the current Indigenous population, but rather the best estimate.



⁵ Nicolas Biddle is a Senior Fellow at the Centre for Aboriginal Economic Policy Research at the Australian National University.

Limitations

In interpreting the findings of this research report, it is important to note a number of limitations:

- **Scope and parameters:** the GO Foundation engaged KPMG Arrilla Indigenous Services to undertake a targeted research exercise to understand the link between post-secondary education and the outcomes for Indigenous students. This research report has been based on the scope outlined in the 'Scope' section above, and underpinned by a scoping study delivered in August 2017. This scoping study and four research questions provided the parameters for research and have been based on priority areas identified by the GO Foundation. In establishing the scope of this research report, reference has also been given to the GO Foundation's operational model, which is currently suited to metropolitan and regional areas. While the report touches on aspects of 'remoteness', this was not an area of focus. Importantly, this may mean that the research report is in some areas more aligned to metropolitan and regional areas than remote locations.
- **Availability of data:** the research findings are based on secondary research. No primary research carried out except stakeholder consultations with key academics who specialise in Indigenous education. The purpose of consultations and the approach taken is outlined in **Appendices C and D**.
- **Acknowledgement of broader context:** Indigenous education is an area in which government and non-government-organisations (NGOs) are quite active. While there are numerous grants, supports and initiatives made available by both public agencies and NGOs, these were not within the ambit of the report. While there are numerous websites that will provide further access and information to the supports available to support Indigenous students at various points of the education lifecycle, the following three provide a starting point:
 - **Indigenous.gov.au:** <http://www.indigenous.gov.au> – An Australian Government website that connects Indigenous Australians with Commonwealth Government policies and programs
 - **Overcoming Indigenous Disadvantage** <http://www.pc.gov.au/research/ongoing/overcoming-indigenous-disadvantage> - A recurring report which seeks to measure the wellbeing of Australia's Indigenous peoples.
 - **Higher Education** <https://www.pmc.gov.au/indigenous-affairs/education/higher-education> - A website that provides links to specific supports like the Indigenous Student Success programs which funds universities to offer scholarships to Aboriginal and Torres Strait Islander people to undertake university studies.
- **Information sources:** the information sources used and reported on in this document are understood to be the most recent and relevant publications on the specific area at the time research was undertaken (with resources outlined in **Appendix B**). In some instances, data and statistics date back ten years as 2016 Census data was not available publicly at the time desktop research was undertaken. It is important to note that in other instances, statistics have been sourced from research publications that undertook analysis to address a specific research question and therefore the full dataset was not available (or the analysis was beyond the remit of this research exercise).

Structure

The remainder of this document is structured as follows:

- **Baseline research:** providing data to establish an environmental context of the Australian education system and current statistics;
- **Research findings and supporting evidence:** findings from the in-depth research exercise are presented in response to the four research questions along with the implications for the videos and broader communication strategy; and
- **Appendices:** supplementary information to the main body of this document, including:

- Appendix A: overview of the Australian education system, including outline of the Australian qualification framework and key existing supports for Indigenous students completing further education.
- Appendix B: list of references leveraged in the document
- Appendix C: data requested from the Department of Education and Training and PM&C
- Appendix D: approach to the engagement and the report
- Appendix E: list of academics engaged in the development of the report.

Background research

This section outlines the context in which this research report has been based.

What is 'further education'?

Australia has a three-tier education system comprising primary, secondary and tertiary/further education.⁶ 'Further education' includes education that is conducted upon the completion of secondary education such as:

- degrees or studies provided by universities, and
- vocational education and training, typically provided by Technical and Further Education (TAFE) institutes and Registered Training Organisations (RTOs).

Importantly, further education is not limited to high school graduates, but is open to direct entry by adults. Figure 1 below illustrates the Australian Qualification Framework (AQF), with Certificate 1 representing the minimal standard, through to a doctoral degree, as the most accomplished.

Figure 1: The Australian Qualifications Framework (AQF)



Source: AQF Second Edition, 2013.

⁶ Tertiary education and further education are considered to refer to post-secondary education, including adult education and vocational education and training. Post-secondary education is all education beyond secondary school level, including that delivered by universities, further education colleges and community providers. These definitions are formally defined by the National Centre for Vocational Education Research available at: www.voced.edu.au/content/glossary-term-further-education.

Importantly, as this framework is not based on a linear progression, students can re-enter at different levels throughout their life and as their professional needs require. For more information about the AQF, see **Appendix A – The Australian Education System**.

Education - a critical pathway to success

The Prime Minister's Report 2017 into Closing the Gap (the 'Closing the Gap Report') stated that *'Education sets the foundation for success and opens doors to opportunities later in life.'*⁷ This statement is supported internationally, with research conducted by the OECD finding that in most countries, employment rates and earnings increase as people's levels of education rise. This research further suggests that graduates of tertiary education have higher employment rates and earn more than people who completed only upper secondary education.

⁷ Australian Government, 2017, 'Closing the Gap Prime Ministers Report 2017', Department of the Prime Minister and Cabinet. Available at: <http://closingthegap.pmc.gov.au/>.

The OECD average employment rate is **82 per cent** for Bachelor's or equivalent (compared to **74 per cent** for adults with upper secondary and **79 per cent** post-secondary non-tertiary education as their highest level of education attainment).

82%



60%



Among adults with only lower secondary education, the employment rate is **60 per cent** across OECD countries.

Australia is above the OECD average, with an employment rate of **84 per cent** for adults holding a Bachelor's degree or equivalent and **83 per cent** for those with a post-secondary non-tertiary qualification.



In terms of earnings, across OECD countries those with a tertiary degree earn on average **56 per cent** more than those with only secondary education.

Higher educational attainment has also been found to be positively associated with social outcomes including health status, volunteering, interpersonal trust and civic engagement, accounting for age, earnings, and proficiency in literacy or numeracy.



While the **OECD report provides data** at country-level, other sources suggest similar outcomes for Indigenous Australians.

The employment rate for Indigenous graduates from a bachelor degree or above is **84 per cent**, compared to a 45 per cent employment rate for Indigenous graduates who have completed Year 10.



50%

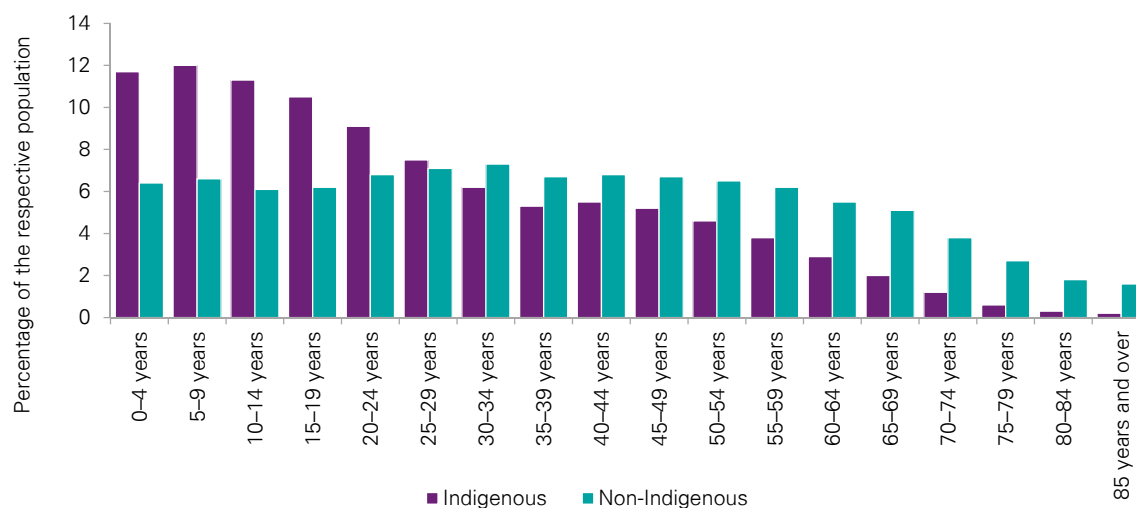


There is a close correlation between greater income and higher levels of education attainment, with the data showing that approximately **50 per cent** of Indigenous Australians who are earning more than \$1,000 a week have completed **Year 12**.

Demographics of Indigenous school leavers

At the 2016 ABS Census, Indigenous Australians represented 2.8 per cent of the total Australian population.⁸ Chart 5 shows that the Indigenous population is younger than the general population of Australia, with a median age of 23 compared to 38 for the non-Indigenous population.⁹

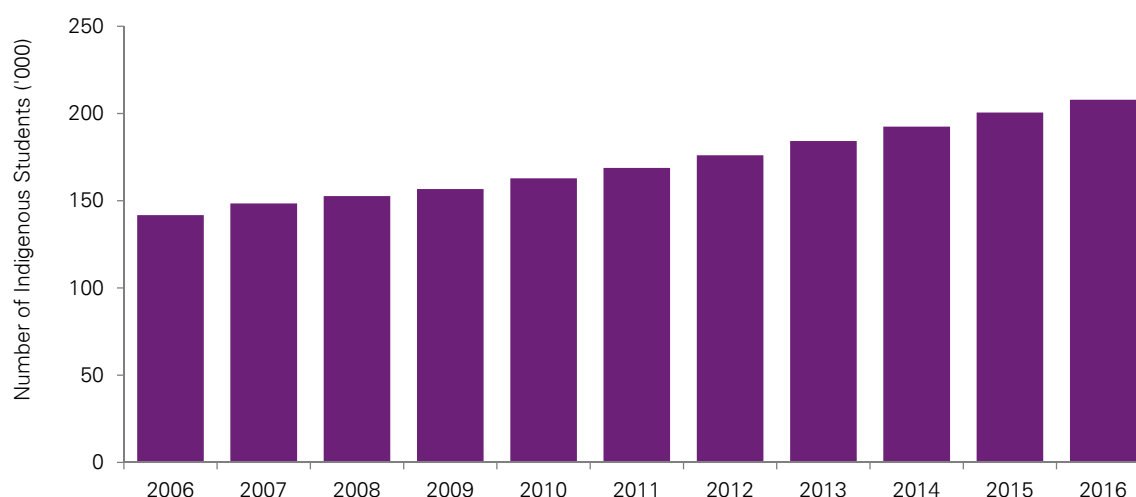
Chart 5: Population comparison between Indigenous and non-Indigenous Australians by age cohort, 2016



Source: ABS Census of Population and Housing: Reflecting Australia – Indigenous Population.

ABS data illustrates that there has been an increase in school students who identify as Indigenous over time. Chart 6 demonstrates the increase in numbers from 2006 to 2016.

Chart 6: Number of Indigenous students, 2006 - 2016



Source: ABS Schools, Australia 2016.

Chart 7 presents 2016 Census data on the location of Indigenous Australians. The greatest number of Indigenous Australians are the states of NSW and Queensland. The ACT and Tasmania have the smallest population of Indigenous Australians followed by South Australia and Victoria. The data

⁸ Australian Bureau of Statistics, 'Media Release: 2016 Census shows growing Indigenous population', 27 June 2017. Available at: <http://www.abs.gov.au/ausstats/abs@.nsf/MediaReleasesByCatalogue/02D50FAA9987D6B7CA25814800087E03?OpenDocument>.

⁹Ibid.

further illustrates that a significant proportion of Indigenous Australians are located outside greater capital cities.

Chart 7: Location of Indigenous Australians, by State and Territory, 2016



Source: ABS Census of Population and Housing – Aboriginal and Torres Strait Islander Population 2016.

As a proportion of the total state or territory population, the Northern Territory has the highest proportion of Indigenous Australians (25.5 per cent) followed by Tasmania (4.6 per cent). Victoria has the smallest proportion of Indigenous Australians relative to the state's total population (0.8 per cent) followed by the ACT (1.6 per cent).

In the 2016 Census, ten per cent of Indigenous Australians reported speaking an Australian Indigenous language at home. Of the 63,800 Indigenous Australians who spoke an Indigenous language at home, 85 per cent reported speaking English well or very well.¹⁰

While there has been progress in recent years towards improving outcomes for Indigenous Australian students, there are still a disparity between Indigenous and non-Indigenous students.¹¹ Positively, a larger number of Indigenous students are progressing through the school system, translating to an increase in the number pursuing further education.

In 2016, a total of 6,755 university applications were lodged by persons identifying as Indigenous applicants, an increase of 8.6 per cent from 2015. Moreover, offers to Indigenous applicants increased by 10.1 per cent. The offer rate to Indigenous applicants was 81.5 per cent which was two percentage points lower than the offer rate for persons who identified as non-Indigenous. The focus of this report is on the need to increase the uptake of further education by Indigenous school leavers between 15 to 19 years of age.¹²

¹⁰ Australian Bureau of Statistics, 2017, Cat 2071.0 Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016. Available at: <http://www.abs.gov.au/ausstats/abs@.nsf/PrimaryMainFeatures/2071.0?OpenDocument>

¹¹ Steering Committee for the Review of Government Service Provision, 2014, 'Overcoming Indigenous Disadvantage: Key Indicators 2014', Productivity Commission, Canberra. Available at: <http://www.pc.gov.au/research/ongoing/overcoming-indigenous-disadvantage/2014/key-indicators-2014-report.pdf>.

¹² Australian Bureau of Statistics, Cat 4221.0 Schools, Australia 2016; Australian Government, 2016, 'Undergraduate applications, offers and acceptances 2016', Department of Education and Training. Available at: https://docs.education.gov.au/system/files/doc/other/undergraduate_applications_offers_and_acceptances_2016_1.pdf. Australian Government, 2017, 'Closing the Gap Prime Ministers Report 2017', Department of the Prime Minister and Cabinet. Available at: <http://closingthegap.pmc.gov.au/>.

Benefits of Further Education





Benefits derived by Indigenous students who complete secondary (and subsequently) further education

The key benefits that research suggests that Indigenous students who complete secondary (and subsequently) further education derive are outlined below. It is important to note that these findings may be more applicable to Indigenous Communities in metropolitan and regional locations than those in remote locations.



Greater employment opportunities and improved earning potential

Indigenous Australians who have completed further education experience a higher employment rate than Indigenous Australians who have not. 2011 ABS data indicated the employment rate for Indigenous graduates with a bachelor degree or above was 84 per cent, compared to a 45 per cent employment rate for Indigenous graduates who have completed Year 10. There is a close correlation between higher education attainment and greater earning capacity, with ABS Census data showing that approximately 50 per cent of Indigenous Australians who are earning more than \$1,000 a week have completed Year 12.



Community benefits

Research suggests that the benefits of undertaking further education go beyond individual achievement and extend to the broader community. Increasing the number of Indigenous Australians who complete further education is likely to provide a larger and more diverse pool skilled individuals who can participate in the workforce and work in their communities; benefiting both Indigenous communities and the broader Australian economy. This idea is particularly important in an environment in which Australia is facing a skills shortage in specific sectors of the economy. The more Indigenous students who complete further education, the greater variety of role models to inspire future generations of Indigenous school leavers towards different career pathways.



Health and wellbeing

Research suggests higher levels of education for Indigenous Australians are associated with greater wellbeing. For example, the likelihood of engaging in risky health behaviours, such as tobacco use, decreases with higher levels of education. This was supported by the consultation process which suggested that education positively influences the mental wellbeing of Indigenous Australians. While it is hypothesised that education increase an individual's life expectancy, there is currently limited quantitative data which definitively demonstrate a link between education and reduced mortality.



Reduced interaction with the justice system

In 2015, the detention rate for Indigenous juveniles was 26 times higher than the rate for non-Indigenous juveniles. Evidence suggests that Indigenous youths who left school early or performed poorly at school are more likely to have been charged with, or have been imprisoned for an offence. There is a strong link between expulsion from school and incarceration, suggesting that the difference in educational attainment between Indigenous and non-Indigenous Australians is a powerful driver of the overrepresentation of Indigenous youth in the justice system.

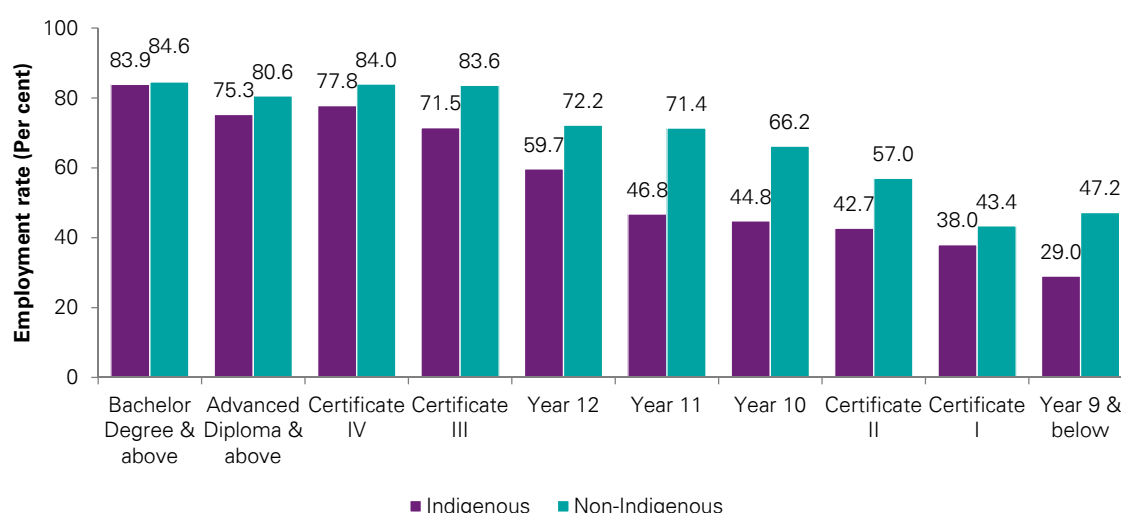
The remainder of this section explores the data and information underpinning the findings noted above.

Employment opportunities and earning potential

The completion of further education increases employment opportunities

The data indicates an increase in employment rates of Indigenous Australians as levels of education increase. As depicted in the chart below, 2011 data from the ABS shows a strong correlation in employment rates and levels of 'highest level of education attainment'. This trend applies to both Indigenous and non-Indigenous Australians.

Chart 8: Employment rate for persons aged 20 – 64 years, by level of highest education attainment, 2011



Source: ABS Census of Population and Housing 2011.

As illustrated in the chart above, in 2011, Indigenous Australians with a Bachelor Degree or above had an employment rate of 84 per cent. Indigenous Australians who obtained VET qualifications of either Certificate IV or III experienced an employment rate of 78 per cent and 72 per cent respectively. These statistics were supported through stakeholder consultation, which indicated a greater likelihood of employment with higher levels of VET qualifications (such as Certificate IV or III). The proportion of employed Indigenous Australians is 29 per cent for people who exited the education system at Year 9 or below.

The story is similar for vocational education, which is the preferred post-secondary learning pathway by Indigenous students.¹³ The National Centre for Vocational Education Research (NCVER), an independent body responsible for collecting, managing and communicating research and statistics about VET nationally, found that graduates with qualifications at Certificate IV level and higher are more likely to be employed after training, for both Indigenous and non-Indigenous Australians.¹⁴ NCVER research identified many associated outcomes such as advancing skills, satisfaction of achievement, gaining confidence and improving communication skills for Indigenous VET graduates.¹⁵

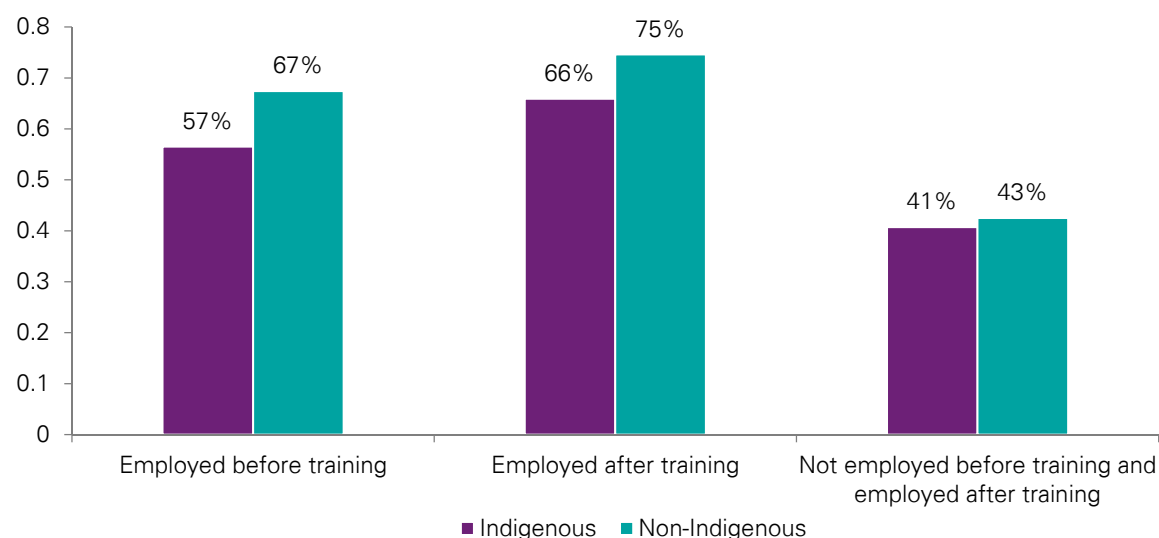
After training, the proportion of Indigenous graduates employed increases 8.5 percentage points, from 56.5 per cent to 65.9 per cent. Figure 1: The Australian Qualifications Framework (AQF) illustrates the proportion of Indigenous and non-Indigenous students and their associated employment outcomes in relation to stages of training.

¹³ NCVER, 2017, 'VET helping Indigenous students to 'close the gap''. Available at: <https://www.ncver.edu.au/about/news-and-events/media-releases/vet-helping-indigenous-students-to-close-the-gap>

¹⁴ Windley, G., 2017, 'Indigenous VET participation, completion and employment outcomes: change over the past decade', NCVER, Adelaide. Available at: <https://www.ncver.edu.au/publications/publications/all-publications/indigenous-vet-participation-completion-and-outcomes-change-over-the-past-decade>

¹⁵ Ibid.

Chart 9: Employment outcomes of training, by Indigenous status, 2015-16



Source: National Centre for Vocational Education Research, *Indigenous VET Participation Completion and Outcomes Report*, 2017.

According to a 2016 Productivity Commission's report, the proportion of Indigenous Australians aged between 17 and 24 years who participated in post-school education, training or employment increased by ten percentage points, from 32.4 per cent to 42.4 percent between 2002 and 2014-15.¹⁶

The Productivity Commission notes that the reported figures are an average of all locations. In 2014-15, the proportion of Indigenous Australians aged between 17-24 years who are fully engaged in work, study or training was 58.2 per cent in major cities, but decreased to 14.6 per cent in very remote areas.¹⁷

Indigenous Australians are strongly underrepresented in 'professional' jobs which require a Diploma or above.¹⁸ However, they are overrepresented in jobs commonly viewed as less skilled, such as machinery operators, drivers, and labourers.¹⁹

Importantly, the aspirations of Indigenous Australians living in remote areas differ to those who reside in major cities. The consultation indicated that there are numerous employment opportunities for Indigenous Australians in remote areas, however these positions may not be considered meaningful. Indigenous Australians living in remote areas want to be in roles that give back to the community and allow them to be connected to their culture and identity, such as park rangers or working in the tourism industry.

The completion of further education increases earning potential

Through greater employment opportunities, Indigenous Australians are likely to experience improved earning capacity. Data indicates that the current differences between the proportion of Indigenous and non-Indigenous high income earners closely correlates to the levels of educational attained. As illustrated in Chart 10, 2016 Census data indicates that Indigenous Australians were half as likely as non-Indigenous people to report an equivalised weekly household income of \$1,000 or more in 2016 (20 per cent for Indigenous Australians compared with 41 per cent for non-Indigenous Australians). While both these percentages have increased since the 2011 Census (13 per cent for Indigenous

¹⁶ Productivity Commission, 'Overcoming Indigenous Disadvantage: Key Indicators 2016' Chapter 7 Education and Training, November 2017.

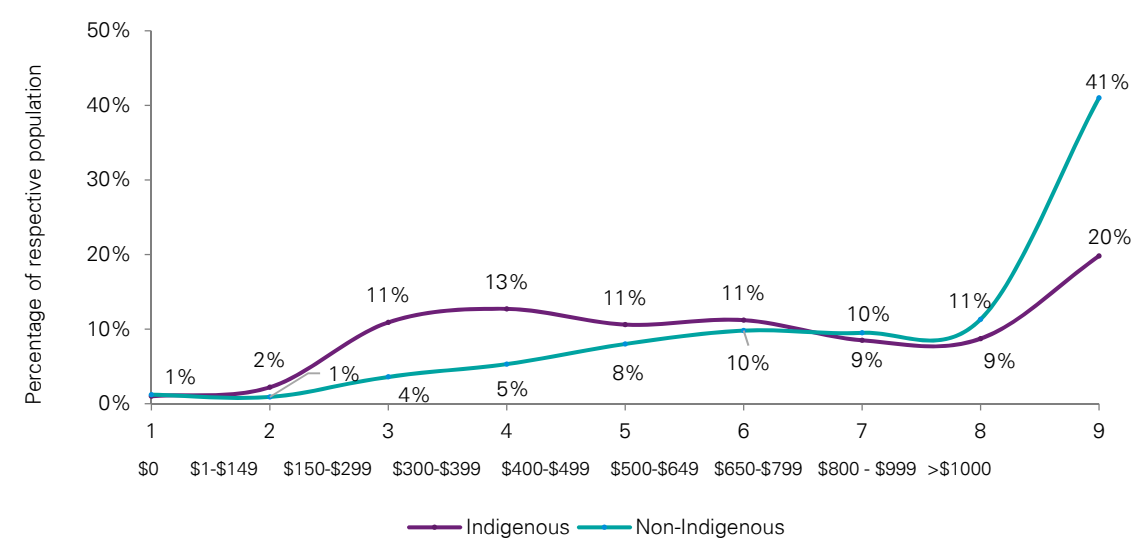
¹⁷ Ibid.

¹⁸ Australian Bureau of Statistics, 'Australian Standard Classification of Occupations, Second Edition' (Current edition), July 1997, page 9-10.

¹⁹ Department of Prime Minister and Cabinet, *unpublished*, 'What types of jobs do Indigenous people have?'

Australians and 33 per cent for non-Indigenous Australians) the difference between the two groups has remained the same.²⁰

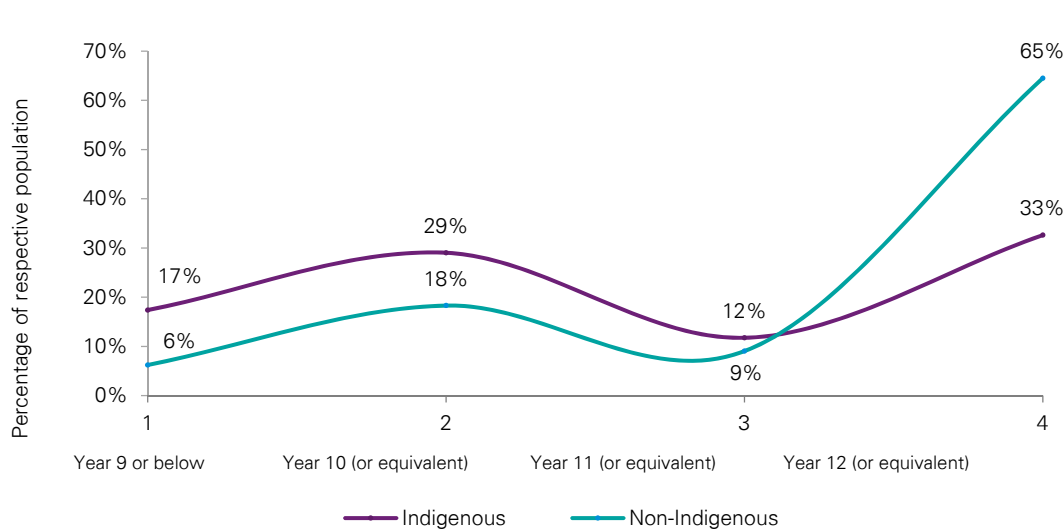
Chart 10: Equivalised weekly household income, by Indigenous status 2016



Source: Census of Population and Housing 2016.

2016 Census data indicated that approximately half the Indigenous Australians with a weekly income of more than \$1,000 have completed Year 12 or an equivalent qualification (Chart 11). While all levels of education were represented in different income brackets, the most significant percentage of Year 12 or equivalent school qualifications was found in the highest income bracket.

Chart 11: Highest year of school completed for 20 – 64 year olds, by Indigenous status 2016



Source: Census of Population and Housing 2016.

The Commonwealth Government’s Behrendt Review found that Indigenous professionals have a much higher personal income (\$943 per week for females and \$1,082 per week for males) than those employed in non-professional occupations (\$509 per week for females and \$682 per week for males).²¹

²⁰ ABS, 2071.0 - Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016.

²¹ Taylor et al., 2011, ‘Higher education and the growth of Indigenous participation in professional and Department of Education, ‘Behrendt Review’, July 2012, page 67, citing Taylor et al. 2011 ‘Higher education and the growth of Indigenous participation in professional and managerial occupations’, Centre for Aboriginal Economic Policy Research, Australian National University.

Community benefits

There are benefits for the broader community beyond individual achievement

Research indicates that increasing the number of Indigenous students who have completed further education is likely to benefit Indigenous communities and the broader population. For instance, through a larger and more diverse pool of individuals in a traditionally tight labour market.²² It is also likely to create a greater variety of role models to inspire future generations of Indigenous school leavers towards different career pathways.²³

A consistent theme in expert consultation was the intergenerational benefits of increasing the proportion of Indigenous students having completed further education. Anecdotally, through further education, Indigenous graduates tend to become leaders and change agents within their communities. They are not only motivated by personal benefits, but also by what could improve their communities. It was noted that acquiring a professional qualification often gives people increased standing in their community resulting in the benefits being passed down through generations. Experts indicated that Indigenous youths in remote locations particularly wish to work in positions which give back to the community, such as schools and clinics.

²² Department of Education, 2012, 'Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People'. Available at: <https://docs.education.gov.au/node/36825>

²³ CareerTrackers, 2017, 'Career Trackers and JP Morgan Social Impact Study'. Available at: <https://www.jpmorgan.com/jpmpdf/1320707423052.pdf>

Case Study – Multiplier Effect



CareerTrackers is a national not-for-profit company that creates internship opportunities for Indigenous university students. CareerTrackers offers programs which assist students to connect with private sector employers through paid multi-year internships. This process not only assists the students in the program, but also creates role models within Indigenous communities to act as a 'multiplier effect'.

In 2014, one CareerTrackers intern commenced university and subsequently obtained an internship at a multi-national property management company. His internship highlighted the employment and educational opportunities available to Indigenous Australians to members of his family.

In 2015, his father enrolled in university, and also entered the CareerTrackers program. This program supported his father in obtaining an internship at one of the world's largest investment banks.

This example, is one of the many case studies that evidences the intergenerational benefits derived by Indigenous students undergoing further education, reflecting how the opportunities made available to Indigenous university students empower them to become role models for others.

Health and wellbeing

Educational attainment is correlated with improved health and wellbeing

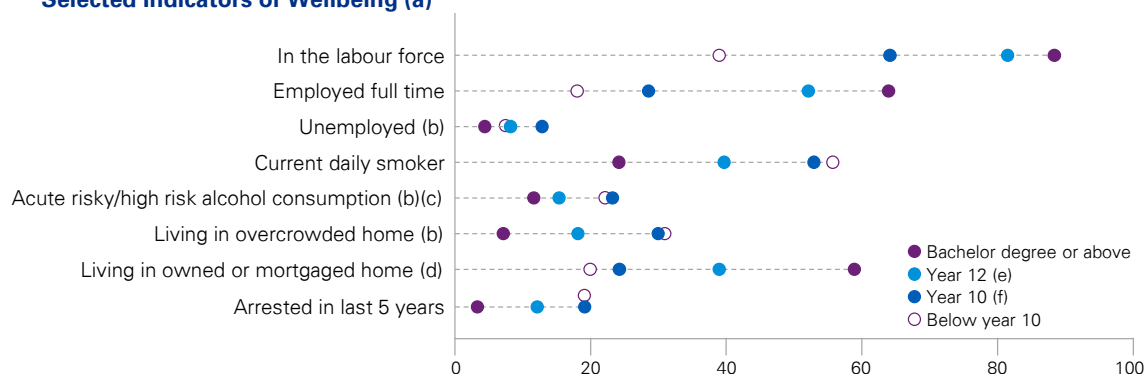
Education plays an important role in establishing healthy behaviours. For example, preventative oral health behaviours such as tooth brushing and flossing are developed mainly through education and modelling behaviours by adults in the home environment and/or education outside the home.²⁴

There are numerous wellbeing benefits associated with completing secondary education and undertaking further education, whether this is through VET, university or other avenues. These benefits are demonstrated in the Chart 15.

Chart 12: Highest education attainment achieved against selected indicators of wellbeing, 2008

Highest educational attainment achieved, Indigenous persons 18 years and over – 2008

Selected Indicators of Wellbeing (a)



(a) For definitions of 'in labour force', 'Employed full time', 'Unemployed', 'Current daily smoker', 'Living in overcrowded home', 'Living in owned or mortgaged home', and 'Arrested in last 5 years' see ABS **National Aboriginal and Torres Strait Islander Social Survey: Users 'Guide', 2008** (cat. No. 4720.0). For acute risky/high risk alcohol consumption see ABS **National Aboriginal and Torres Strait Islander Health Survey: Users 'Guide' 2004–05** (cat. No. 4715.0.55.004)

(b) Estimate for Bachelor degree has a relative standard error of 25% to 50% should be used with caution

(c) Acute risky/High risk alcohol consumption data is based on National Health and Medical Research Council guidelines for risk of harm in the short-term for 2004–05

(d) Includes persons living in homes that are owned with or without a mortgage, or via a rent/buy scheme, by someone in the household

(e) Includes year 12 and skilled vocational qualifications

(f) Includes year 10/11 and basic vocational qualifications

Sources: ABS 2008 National Aboriginal and Torres Strait Islander Social Survey and 2004–05 National Aboriginal and Torres Strait Islander Health Survey

Source: ABS Australian Social Trends March 2011, Education and Indigenous Wellbeing.

Amongst Indigenous Australians, tobacco use is the leading risk factor contributing to disease and death.²⁵ Studies have found that smoking tobacco increases the risk of developing numerous cancers, heart and vascular diseases, and depression. When compared to the broader population, Indigenous Australians who smoke generally commence at an earlier age and smoke for longer.²⁶ Education on harmful activities such as smoking through school can assist with the prevention of illnesses and have a positive impact on the promotion of better health and wellbeing.

²⁴ Ibid.

²⁵ Australian Institute of Health and Welfare, 2016, 'Australian Burden of Disease Study: impact and causes of illness and death in Aboriginal and Torres Strait Islander people 2011'. Available at: <https://www.aihw.gov.au/reports/burden-of-disease/australian-burden-of-disease-study-impact-and-causes-of-illness-and-death-in-aboriginal-and-torres-strait-islanders/contents/table-of-contents-1>

²⁶ Cancer Council, 2016, 'Tobacco in Australia: Facts and Issues' Chapter 8 Tobacco Use Among Aboriginal peoples and Torres Strait Islanders'.

ABS research demonstrates that the likelihood of engaging in selected health risk behaviours, including smoking and acute risky/high risk alcohol consumption, also decreases with higher levels of educational attainment. Indigenous Australians with a Bachelor degree or above were nearly half as likely to be current daily smokers compared to Indigenous Australians who have completed an education level of Year 9 or below, with the percentages being 24 per cent and 55 per cent respectively.²⁷

Furthermore, education can also have a positive influence on the mental wellbeing of Indigenous Australians. Consultations with researchers from NCVER, highlighted benefits beyond employment opportunities, for example, VET students have reported improvements in self-confidence and sense of identity.

Likelihood of increased life expectancy

Life expectancy is a broad indicator of the long-term health and wellbeing of a population. Social determinants such as education, and other benefits discussed above, including health behaviours such as smoking, income and employment impact life expectancy. Environmental factors such as overcrowding and inadequate sanitation also impact individual life expectancy.²⁸ However, as noted during stakeholder consultation, there is limited available data which demonstrates that further education directly leads to better life expectancy. The inference made in the literature is that education can result in improved health outcomes, positively impacting individuals. For example, the Australian Institute of Health and Welfare (AIHW) indicated that the relatively high mortality rates for Indigenous Australians reflect the higher prevalence of modifiable and behavioural risk factors. These include the disproportionate levels of educational, employment and social disadvantage faced by many Indigenous Australians compared with non-Indigenous Australians.²⁹

A United Nations report found that an Indigenous Australian child can expect to die 20 years earlier than a non-indigenous counterpart.³⁰ The research examined over 90 countries, and Indigenous Australians were found to be one of the worst groups in terms of Indigenous life expectancy. According to 2010-12 ABS numbers, the difference in life expectancy between Indigenous Australians and the broader population is approximately 10 years. The disparity in life expectancy gap is likely due to the use of different methodologies to calculate life expectancy.

The life expectancy of Indigenous males is lower than non-Indigenous males in every state and territory of Australia. This is particularly apparent in Western Australia and the Northern Territory where the difference in life expectancy between Indigenous and non-Indigenous males is up to 15 years. There are also differences in life expectancy between states and territories. Life expectancy for Indigenous males is lowest in the Northern Territory (63.4 years) and highest in NSW (70.5 years). This is demonstrated in Chart 16.

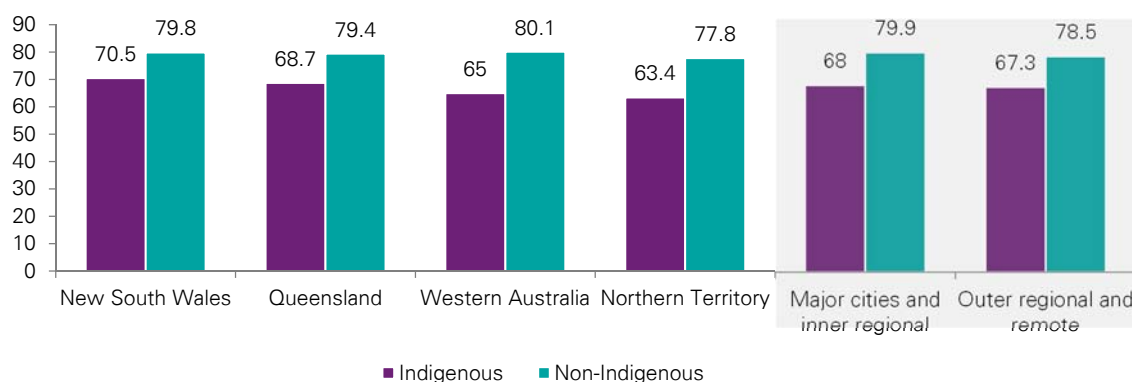
²⁷ Australian Bureau of Statistics, 2011, 'Australian Social Trends March 2011, Education and Indigenous Wellbeing'. Again, it is important to note that higher levels of education do not automatically guarantee a healthier life or better wellbeing as there are other factors that may cause individuals to engage in smoking or other risky behaviours, such as social influences.

²⁸ Australian Health Ministers' Advisory Council, 2012, 'Aboriginal and Torres Strait Islander Health Performance Framework 2012'. Canberra: AHMAC.

²⁹ Australian Institute of Health and Welfare, 2014, 'Mortality and life expectancy of Indigenous Australians, 2008 to 2012'. Available at: <https://www.aihw.gov.au/reports/indigenous-australians/mortality-life-expectancy-2008-2012/contents/table-of-contents>

³⁰ United Nations, 2012, 'State of the World's Indigenous Peoples 2010'. Available at: <http://www.un.org/apps/news/story.asp?NewsID=33484&Cr=indigenous&Cr1=#.Wa4tBLjFhE>

Chart 13: Life expectancy of males, by Indigenous status and location, 2010-2012



Source: ABS Life Tables for Aboriginal and Torres Strait Islander Australians, 2010-12.

The pattern is similar for Indigenous females. The life expectancy of Indigenous females is lower than non-Indigenous females in every state and territory of Australia. The disparity is particularly apparent in Western Australia and the Northern Territory where the difference in life expectancy between Indigenous and non-Indigenous females is nearly 15 years. There are also differences in life expectancy between states and territories. Life expectancy for Indigenous females is lowest in the Northern Territory (68.7 years) and highest in NSW (74.6 years).

Chart 14: Life expectancy of females, by Indigenous status and location, 2010-12



Source: ABS Life Tables for Aboriginal and Torres Strait Islander Australians, 2010-12.

Interaction with the justice system

Reduced interaction with the justice system

Currently, there is a significant overrepresentation of Indigenous youths in detention. In 2015, the detention rate for Indigenous juveniles was 34 per 10,000, which is 26 times higher than the rate for non-Indigenous juveniles (1.3 per 10,000).³¹ According to an AIHW report, 54 per cent of young people in detention on an average night in the June quarter of 2015 were Indigenous.

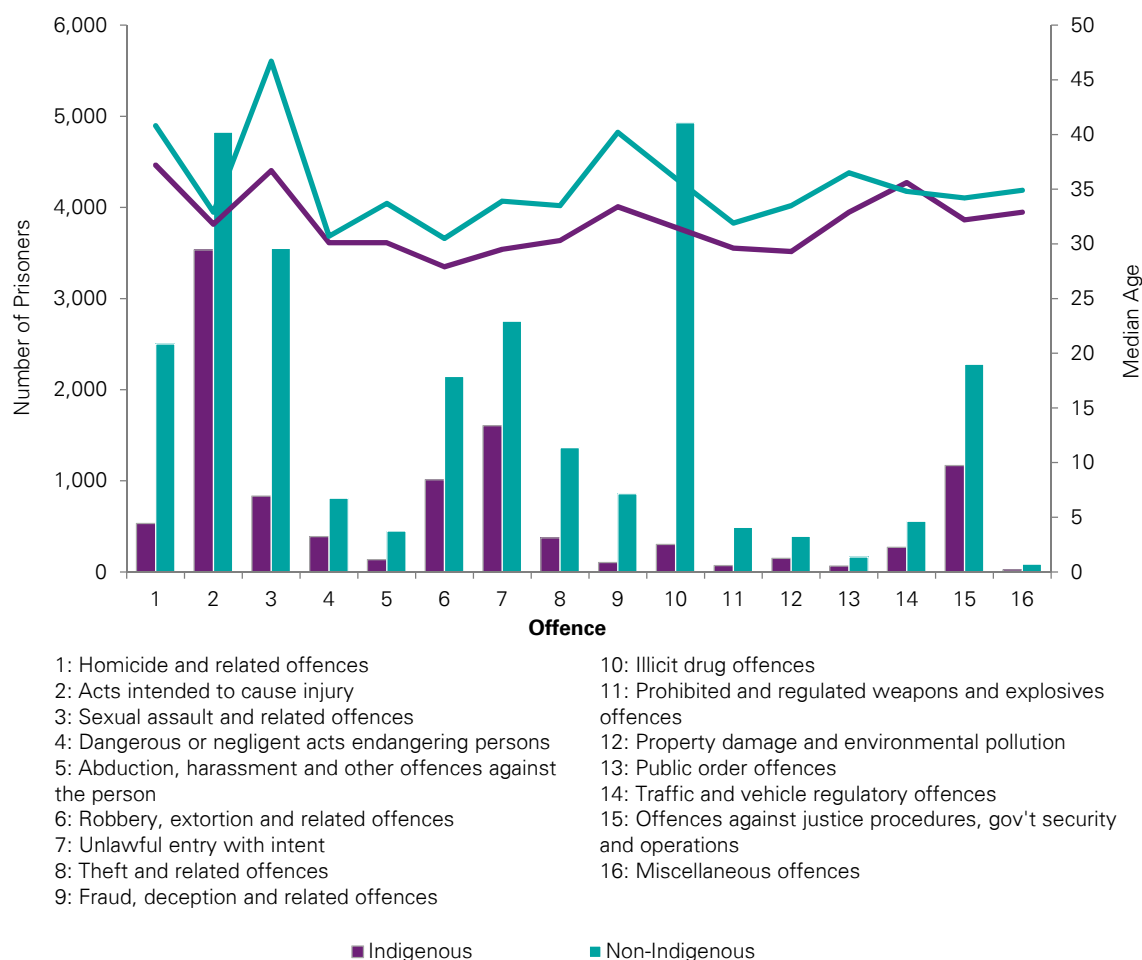
There is a strong link between the disproportionate rates of Indigenous juvenile detention and the disproportionate rates of Indigenous adult imprisonment. Indigenous Australians, although less than

³¹ Australian Institute of Health and Welfare, 2015, 'Youth Detention population in Australia' December 2015. Available at: <https://www.aihw.gov.au/reports/youth-justice/youth-detention-population-in-australia-2015/contents/table-of-contents>

three per cent of the population, represent 27 per cent of all prisoners in Australia.³² As can be seen in Chart 15, the proportion of Indigenous prisoners is far greater than three per cent for each of the crime categories. Furthermore, the median age for imprisonment is also younger for Indigenous Australians as demonstrated by the coloured lines on the graph.

³² Australian Bureau of Statistics, 2016, Cat 4517.0 Prisoners in Australia.

Chart 15: Prisoners in Australia, by Indigenous status and median age 2016



Source: ABS Prisoners in Australia 2016.

Children who have access to quality education and are supported and directed by their parents to attend school are more likely to develop the knowledge and skills needed for a better adult life. The difference in educational attainment between Indigenous and non-Indigenous Australians is a powerful determinant of the overrepresentation of Indigenous people in the justice system. Within the prison population in 2015, 40 per cent of Indigenous prison entrants had completed a level of schooling to Year 10 or below compared with 29 per cent of non-Indigenous prison entrants.³³

In 2011, an inquiry was conducted by the House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs into Indigenous youths in the criminal justice system. The report referred to an analysis of the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS). This analysis demonstrated that respondents to the national survey were far more likely to have been charged with, imprisoned for, an offence if they left school early or performed poorly at school, were unemployed, or abused drugs or alcohol.³⁴ The study found that the risk of Indigenous Australians being charged or imprisoned increased if the respondent was experiencing financial stress, lived in a crowded household, or had been taken away from their natural family. Many of these indicators have been discussed above and have the potential to be mitigated through the completion of education. In turn, the promotion of secondary education and undergoing further education is likely

³³ Australian Government, 2017, 'Aboriginal and Torres Strait Islander Health Performance Framework 2017 Report', Department of Prime Minister and Cabinet. Available at: https://www.pmc.gov.au/sites/default/files/publications/2017-health-performance-framework-report_0.pdf

³⁴ House Standing Committee on Aboriginal and Torres Strait Islander Affairs, 2011, 'Doing Time – Time For Doing: Indigenous youth in the criminal justice system' Chapter 2, June 2011, page 12, citing D Weatherburn, L Snowball & B Hunter, 'The economic and social factors underpinning Indigenous contact with the justice system: Results from the 2002 NATSISS survey'. Crime and Justice Bulletin, No. 24.

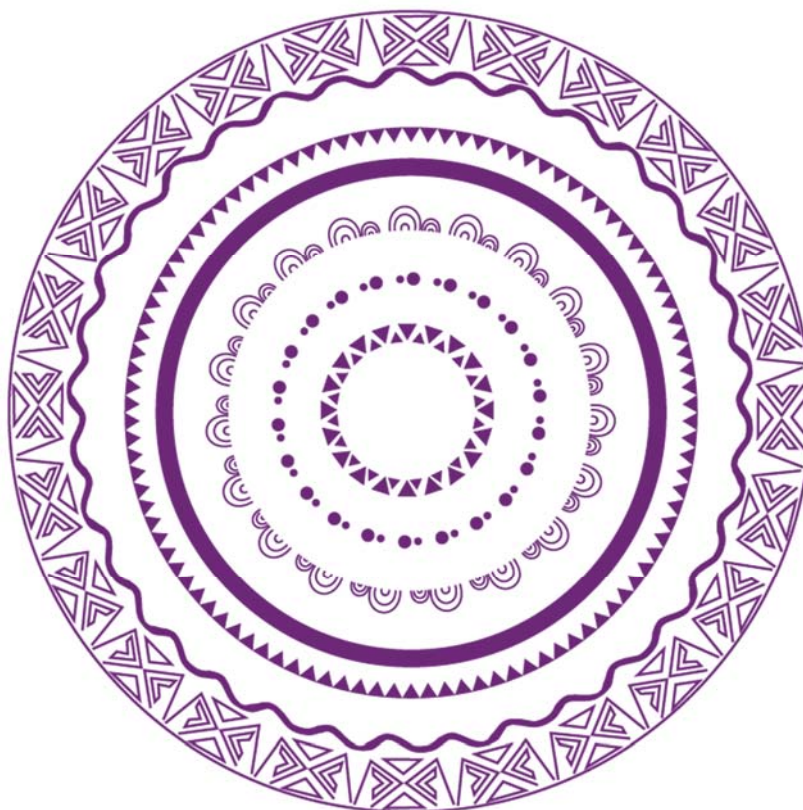
to reduce the risk of an Indigenous youth entering the criminal justice system. The report referred to a submission from the NSW Department of Education and Training, which also emphasised the link between poor education outcomes and contact with the justice system and a strong correlation between expulsion from school and incarceration.³⁵

³⁵ NSW Department of Education and Training submission to the Inquiry into the high level of involvement of Indigenous juveniles and young adults in the criminal justice system, Submission 43, January 2010.

Communicating the benefits of further education

The research above gives rise to several considerations that could frame the communication of the benefits of further education to Indigenous Australians:

- Communications may seek to highlight the range of inter-generational benefits that Indigenous school leavers are likely to accrue after completing post-secondary (i.e. further education). These include employability, increased earning capacity, health and increased life expectancy. Negative outcomes are also avoided, such as interaction with the justice system.
- Importantly, such benefits may be expressed not only in terms of their impact on the individual student, but their communities as a whole. The case studies of the flow-on affects from one Indigenous student to the rest of their family could be considered.
- Given the importance of school attendance and the role that parents and carers play in achieving it, communication should target not only students but their influencers (parents, guardians and elders). Consideration should be given to how these audiences will access the content, as distinct from the young people themselves.
- The breadth of benefits indicates an opportunity to use a mix of role models, from well-known community figures to 'everyday' Indigenous school leavers, who have experienced career success and are relatable to the audience. These role models could demonstrate that Indigenous Australians belong in higher education and professional roles as well as higher skilled roles, where traditionally they have been underrepresented.
- While the videos are primarily aimed at an urban Indigenous audience, future communication should be mindful of the differences in outcomes and circumstances experienced in remote communities. Specific materials may need to be produced, accounting for differences in infrastructure, community and employment pathways.





Barriers to Undertaking Further Education



Barriers encountered by Indigenous students in undertaking further education

The key barriers that research suggests impact Indigenous students undertaking further education are outlined below.



Socioeconomic disadvantage

Across Australia, the Indigenous population generally experiences higher levels of socio-economic disadvantage compared to their non-Indigenous counterparts. This corresponds to data indicating that students from low socio-economic backgrounds are under-represented in Australian higher education. Research suggests that once students from lower socio economic status' (SES) are admitted to university, they achieve success rates comparable to those of their higher SES peers. This suggests that access, rather than success after enrolment, is the driver. However, the situation seems to be different for Indigenous students and low SES status students from remote and regional areas. This indicates that admission is only a part of the issue.



Remoteness

While there is a general trend of greater advantage in capital city regions than remote areas, there can be considerable variation in socio-economic outcomes within regions. Remoteness can also limit access to further education. VET completion rates for the Indigenous population are considerably lower for very remote areas compared with other areas. An improved understanding of the benefits of further education as well as ensuring that these benefits are accessible to Indigenous students may help to overcome these barriers (i.e. where further education is directly linked to existing local opportunities and tangible work activities).



Financial cost

The real and perceived cost of attending university has been identified as a major barrier for Indigenous Australians from low socio-economic backgrounds, and for those located in regional or remote areas who live far away from metropolitan areas, where educational infrastructure like universities and TAFE's are available. Financial difficulty was cited as the most commonly reported reason (44 per cent) amongst Indigenous students who had seriously considered leaving university.



School completion

Completing Year 12 is the most typical pathway into higher education in Australia and completion of Year 10 is the required level to access many vocational courses. While school attendance for Indigenous students is improving, it has not yet achieved comparable rates to the broader Australian community. While the proportion of Indigenous students with Year 12 or equivalent attainment has increased from 2008 to 2014-15, nearly 40 per cent of Indigenous youth have not completed Year 12 across Australia (2014-15). Of particular concern is that the proportion of Indigenous students attending school 90 per cent or more of the time (Year 1 to 10) is under 50 per cent across Australia.

Applying a gender lens, research suggests that young Indigenous men lag behind Indigenous women in a number of factors from pre-school attendance through to school and higher education attainment. This is largely attributable to a greater degree of male school absenteeism, lower aspirations than non-Indigenous male peers, a lack of community role models, the type of school attended, and a greater likelihood of young men being in prison at the age when other young people are entering post-secondary education and training.

Mandatory years of schooling lay the foundation for subsequent further education and employment pathways and associated outcomes. The data suggests that strategies to promote further education amongst Indigenous communities should target school attendance throughout the schooling journey.



University application process

Students from lower socio-economic backgrounds often come from backgrounds where families have less experience and familiarity with higher education and the university application process. This means they are at a disadvantage when informed actions and decisions are required. Research suggests that disadvantaged students struggle more with the application process and respond less efficiently to new information in the application process. These factors are compounded if the young people are the first in their family or social circle to decide to attend university, as they would have a limited ability to rely on their networks to acquire the necessary knowledge.



Traditional caring roles

The research suggests that traditional gender roles and caring responsibilities can be significant barriers to education and training participation for young Indigenous women. However, because these caring responsibilities change over time, Indigenous women go on to complete post-school qualifications later in their lives.

The remainder of this section explores the data and information underpinning the findings noted above.

Socio-economic disadvantage

High levels of socio-economic disadvantage in the Indigenous Australian population

The Bradley Review of Australian Higher Education (2008) identified Indigenous Australians, students from regional and remote areas, and those from low socio-economic status backgrounds as the three most disadvantaged groups in Australian higher education. Given the high proportion of Indigenous Australians living in regional and remote areas and the high numbers of Indigenous Australians who are socio-economically disadvantaged, many Indigenous school leavers are likely to share the obstacles experienced by more than one of these groups.³⁶

Students from low socio-economic backgrounds are under-represented in Australian higher education.³⁷ As noted by Biddle (2013), “socio-economic status is considered to reflect a person’s access to economic resources both now and into the future, as well as their relative position within a society that values things like income, employment and education”.

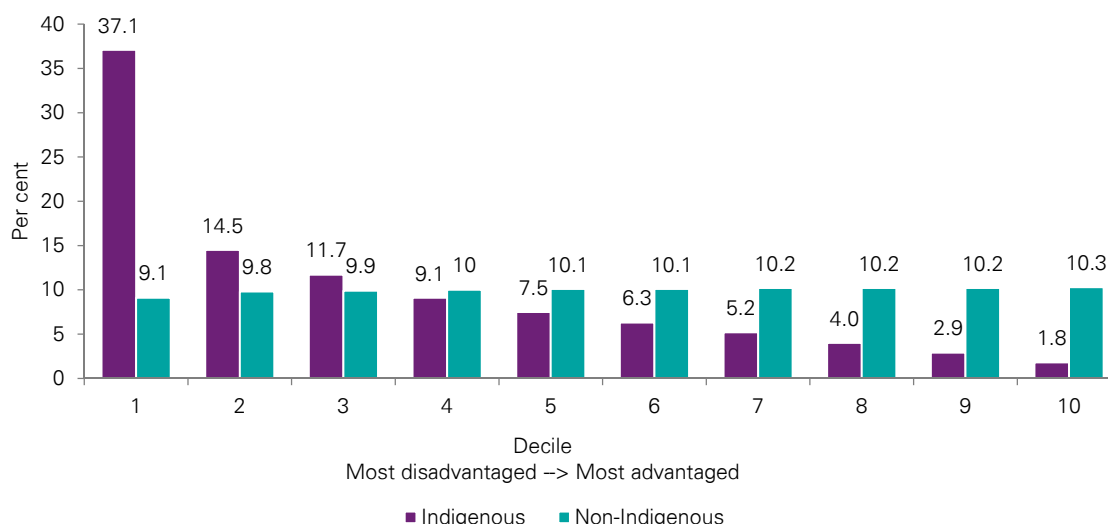
Analysis by the Centre for Aboriginal Economic Policy Research (CAEPR) at the Australian National University found that Indigenous Australians are more likely to live in neighbourhoods where the rest of the population is relatively disadvantaged. The analysis is based on the Socio-Economic Indexes for Areas (SEIFA) which ranks areas in Australia according to relative socio-economic disadvantage and advantage.

In March 2013, the ABS released the 2011 SEIFA based on a compilation of information from a number of census data items. Analysis of SEIFA found that Indigenous Australians were over-represented in the three most disadvantaged deciles. 37 per cent of Indigenous Australians lived in areas in the most disadvantaged decile (the bottom ten per cent), compared with nine per cent of the non-Indigenous population. Only 1.8 per cent of Indigenous Australians lived in areas in the most advantaged decile (the top ten per cent). This is depicted in Chart 19.

³⁶ Fleming, M., & Grace, D., 2015, ‘Aspiration, achievement and access: The ACT-Indigenous Success Pathway to University’. International Journal of Learning in Social Contexts – Special Issue on Indigenous Pathways and Transitions into Higher Education, October 2015. Available at: http://www.cdu.edu.au/sites/default/files/the-northern-institute/cdu_ni_learning_communities_journal_2015_17_read-online.pdf.

³⁷ Li, I., & Dockery, M., 2014, ‘Schools and university academic performance – implications for Australia’s higher education expansion’, National Centre for Student Equity in Higher Education, Curtin University. Available at: <https://www.ncsehe.edu.au/wp-content/uploads/2014/12/Li-and-Dockery-Schools-SES-Final.pdf>

Chart 16 Population distribution by SEIFA advantage/disadvantage decile, by Indigenous status, 2011

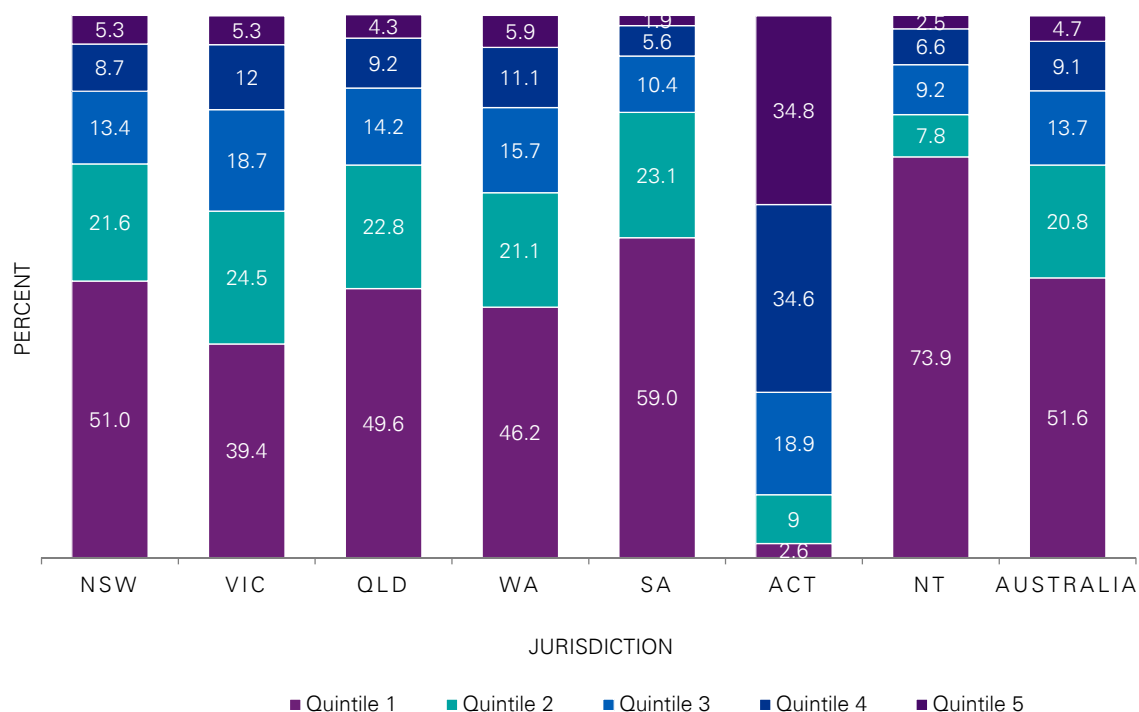


Source: CAEPR analysis of ABS 2011 Census.

The analysis by the CAEPR found that in every area analysed, the Indigenous population had higher levels of socio-economic disadvantage compared to the non-Indigenous population in the area. There was no single area in the analysis where the Indigenous population had better or even relatively equal outcomes compared with the non-Indigenous population.³⁸

Similarly, data analysis of the ABS 2011 Census by the Australian Institute of Health and Welfare found that the population distribution of SEIFA relative socio-economic disadvantage and advantage differed across jurisdictions. This is illustrated in Chart 20.

Chart 17: Population distribution by SEIFA advantage/disadvantage quintiles, Indigenous population by state/territory and total population, 2011



³⁸ Biddle, N., 2013, 'CAEPR Indigenous Population Project 2011 Census Papers – Paper 13 socioeconomic outcomes', Australian National University. Available at: http://caepr.anu.edu.au/sites/default/files/cck_indigenous_outcomes/2013/10/2011CensusPaper_13_Socioeconomic%20Outcomes.pdf

Source: AIHW analysis of 2011 Census.

The Northern Territory (NT) has the highest proportion of the Indigenous population living in the most disadvantaged quintile (74 per cent) and the Australian Capital Territory (ACT) has the lowest. The ACT also has the highest proportion of Indigenous Australians living in the most advantaged quintile areas (35 per cent).³⁹

Research suggests that while students from low-SES backgrounds are under-represented in Australian higher education, once they are admitted to university, they demonstrate success rates comparable to those of their higher SES peers. This suggests that the effects of 'privilege' do not extend into university study suggesting that students from lower SES seem to face equal opportunity in terms of academic performance. However, it should be noted that this research focuses on SES more broadly and not the Indigenous Australian population specifically.⁴⁰ Other research suggests that the situation seems to be different for Indigenous students and low SES status students from remote and regional areas. The findings indicate that approaches to address this issue should focus on both Indigenous enrolments and completions. The research literature recognises the role for an institutional response that facilitates adequate tertiary preparation for Indigenous students.⁴¹

Remoteness

Trend of socio-economic disadvantage by remoteness

Analysis by the CAEPR found that for Indigenous Australians there is a clear gradient of disadvantage by remoteness. Typically, city areas have the most advantaged outcomes and Indigenous towns and remote dispersed settlements have the most disadvantaged outcomes. While modern Indigenous Australia is a highly urban population living in major cities or regional areas (i.e. non-remote Australia), it is still less well off than the non-Indigenous population. However there are many benefits that tie a large minority of Indigenous Australians to non-urban parts of the country. For example, research has suggested that Indigenous Australians in remote Australia were more likely to report that they had been a happy person all or most of the time compared to those who lived in non-remote Australia. This higher level of subjective emotional wellbeing by those Indigenous Australians living in remote Australia has been in part attributed to greater access to language, culture and Indigenous homelands.⁴² This quantitative research finding has been supported by stakeholder consultations. A common theme was ensuring that education is culturally appropriate to Indigenous students.

³⁹ Australian Institute of Health and Welfare, 2015, 'Aboriginal and Torres Strait Islander Health Performance Framework 2014 Report: 2.09 Index of disadvantage', December 2015. Available at: <https://www.pmc.gov.au/sites/default/files/publications/indigenous/Health-Performance-Framework-2014/tier-2-determinants-health/209-index-disadvantage.html>.

⁴⁰ O'Shea, H., Onsmann, A., McKay, J., 2011, 'Students from low socio-economic status backgrounds in higher education: An annotated bibliography 2000-2011', Deakin University Australia. Available at: <http://www.lowses.edu.au/assets/LSES-Annotated-Bibliography.pdf>; Li, I., & Dockery, M., 2014), 'Schools and university academic performance – implications for Australia's higher education expansion', National Centre for Student Equity in Higher Education, Curtin University. Available at: <https://www.ncsehe.edu.au/wp-content/uploads/2014/12/Li-and-Dockery-Schools-SES-Final.pdf>

⁴¹ Pechenkina, E. & Anderson, I., 2011, 'Background paper on Indigenous Australian Higher Education: trends, initiatives and policy implications'. Prepared for the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People. September, 2011. Available at: http://sydney.edu.au/documents/about/higher_education/2011/20110930%20IndigenousHigherEducationReview-ResearchPaper.pdf

⁴² Biddle, N., 2011, 'Measures of Indigenous Wellbeing and Their Determinants Across the Lifecourse – 2011 CAEPR Lecture Series, Australian National University'. Available at: <http://caepr.anu.edu.au/sites/default/files/page/2011/01/Lecture09Paper.pdf>

Considerable internal variation in socioeconomic outcomes within regions

Research by Biddle using data from the 2006 Census suggests that while there is a general trend that capital city regions are more advantaged than remote regions, there can be variation in socio-economic outcomes within regions. For example, using a classification of Indigenous Regions and Areas, Biddle found that the Indigenous Region of Sydney showed considerable diversity. Sydney has six of the seven most advantaged Indigenous Areas across all of Australia and ten areas in the lowest two quartiles. Socio-economic outcomes in those Indigenous Areas in the bottom two quartiles are concentrated around Blacktown in the west of Sydney and Campbelltown in the south-west where socio-economic outcomes in these areas were closer to those found in remote Australia. Similar variation was found in remote Indigenous areas, suggesting that any geographic strategy for addressing Indigenous disadvantage should be targeted below the regional level.⁴³ Stakeholder consultations highlighted that even within cities such as Sydney, further education providers are often located close to the Central Business District area (CBD) of the city. This distance from areas such as Blacktown and Campbelltown is a barrier to accessing further education. When there are local further education providers, program choices are often limited compared to those located near the CBD.

Remoteness limits access to further education providers

The Closing the Gap Report notes that the majority of remote Indigenous students live long distances from the nearest secondary school, with many leaving their communities to complete secondary education.⁴⁴ Regional and remote Indigenous students are under-represented in both higher education and VET.⁴⁵ For many young people in remote locations, further education attendance is often synonymous with long-distance relocation.

This may be particularly difficult for Indigenous school leavers, with family and other communal obligations making relocation even less attractive. A report by the NCVET on Indigenous participation in VET notes that the disadvantage of people living in remote areas of Australia in access to education and training disproportionately affects Indigenous Australians who display a stronger attachment to their traditional culture.⁴⁶

Indigenous Australians living in urban areas typically have better access to mainstream employment and training programs. VET completion rates for the Indigenous population are considerably lower for very remote areas compared with other areas, especially at low-level AQF qualifications certificates I and II which remain the dominant qualification level for Indigenous Australians in these areas. AQF VET certificates I and II are intended to be pathways into higher-level qualifications. The impact of attrition affects employment outcomes as well as on education and training systems.

An improved understanding of the benefits of further education as well as ensuring that these benefits are accessible to Indigenous students may help to overcome the challenges related to high rates of attrition. Completion of training is also more likely in circumstances where the training is directly linked to existing local opportunities and tangible work activities. Indigenous Australians in remote communities need access to training that meets local employment needs. Relocation to urban areas to pursue better educational or employment options does not necessarily translate to better prospects for Indigenous Australians. The cultural and social isolation experienced by Indigenous

⁴³ Australian Institute of Health and Welfare, 2015, 'Aboriginal and Torres Strait Islander Health Performance Framework 2014 Report: 2.09 Index of disadvantage', December 2015. Available at: <https://www.pmc.gov.au/sites/default/files/publications/indigenous/Health-Performance-Framework-2014/tier-2-determinants-health/209-index-disadvantage.html>. The Northern Territory (NT) has the highest proportion of the Indigenous population living in the most disadvantaged quintile (74 per cent) and the Australian Capital Territory (ACT) has the lowest. The ACT also has the highest proportion of Indigenous Australians living in the most advantaged quintile areas (35 per cent); Biddle, N., 2011, 'Measures of Indigenous Wellbeing and Their Determinants Across the Lifecourse – 2011 CAEPR Lecture Series, Australian National University'. Available at: <http://caepr.anu.edu.au/sites/default/files/page/2011/01/Lecture09Paper.pdf>

⁴⁴ Australian Institute of Health and Welfare, 2015, 'Aboriginal and Torres Strait Islander Health Performance Framework 2014 Report: 2.09 Index of disadvantage', December 2015. Available at: <https://www.pmc.gov.au/sites/default/files/publications/indigenous/Health-Performance-Framework-2014/tier-2-determinants-health/209-index-disadvantage.html>.

⁴⁵ NCSEHE, 2015, 'Informing policy and practice, 2014 student equity in higher education research grants program projects', Curtin University. Available at: https://www.ncsehe.edu.au/wp-content/uploads/2015/12/NCSEHE_Informing_Policy_and_Practice-Final-web.pdf.

⁴⁶ Ibid.

Australians who relocate may have negative effects on their employment outcomes, as it can lead to the loss of job networks and human capital.⁴⁷

Furthermore, the quality of schools is generally lower in non-metropolitan than metropolitan areas within Australia, which flows on to poorer student retention rates past Year 12.⁴⁸

Financial cost

Financial pressures inhibit pursuing education

As outlined in the 2017 Closing the Gap Report, achieving Year 12 or equivalent qualifications establishes the foundation for progressing to university or starting a career. For many students, the financial burden of finishing school and progressing to post-secondary education can be difficult to meet.

The real and perceived cost of attending university has been identified as a major barrier for young people from low socio-economic backgrounds, and for those located in regional or remote areas who live far away from metropolitan areas. Financial difficulty was cited as the most commonly reported reason (44 per cent) amongst Indigenous students who had seriously considered leaving university. Interestingly, this contrasts with the broader cohort with larger proportions citing health or stress (32 per cent), workload difficulties (30 per cent) or study/life balance (30 per cent) than financial difficulties (29 per cent).⁴⁹

Low school attendance

Low school attendance is a barrier to adequate preparation for further education

While school attendance for Indigenous students is improving, it has not yet achieved comparable rates to the broader Australian community. Lower pre-school attendance and school readiness culminates in lower levels of achievement at 15 years of age, followed by lower intentions of completing Year 12 and undertaking post-secondary education.⁵⁰ Findings outlined in the Closing the Gap Report 2017 affirm that Indigenous and non-Indigenous children with the same levels of academic achievement at the age of 15 go on to complete Year 12 and higher education at the same rates.⁵¹

Completing Year 12 is the most typical pathway into higher education in Australia. Students who do not complete Year 12 usually require extra steps to enter university at a future point. Completion of Year 10 is required to access many vocational courses. Chart 21 shows the proportion of Indigenous 20-24 year olds with Year 12 or equivalent attainment by Australian State and Territory.

Chart 18: Proportion of Indigenous 20-24 year olds with Year 12 or equivalent attainment, by state and territory, 2008 and 2014-15 (per cent)

⁴⁷ Guenther, J, Bat, M, Stephens, A, Skewes, J, Boughton, B, Williamson, F, Dwyer, A, Wooltorton, S & Marshall, M, 2017, 'Enhancing training advantage for remote Aboriginal and Torres Strait Islander learners', NCVER. Available at: https://www.ncver.edu.au/_data/assets/pdf_file/0037/497368/Enhancing-training-advantage-for-remote-ATSI-learners.pdf; McRae-Williams, E, Guenther, J, Jacobsen, D & Lovell, J 2016, 'What are the enablers of economic participation in remote and very remote Australia, and how can we identify them?', Learning Communities: International Journal of Learning in Social Contexts, no.19, pp.6—25. Available at: <http://dx.doi.org/10.18793/LCJ2016.19.02>

⁴⁸ Tomaszewski, Wojtek, Perales, Francisco, & Xiang, Ning., 2017, 'School Experiences, Career Guidance, and the University Participation of Young People from Three Equity Groups in Australia'. National Centre for Student Equity in Higher Education (NCSEHE), Perth: Curtin University. Available at: <https://www.ncsehe.edu.au/wp-content/uploads/2017/03/TomaszewskiUQ.pdf>

⁴⁹ Australian Government, 2017, 'Closing the Gap Prime Ministers Report 2017', Department of the Prime Minister and Cabinet. Available at: <http://closingthegap.pmc.gov.au/>.

⁵⁰ Crawford, H & Biddle, N, 2015, 'Education part 3: tertiary education', CAEPR Indigenous Population Project, 2011 Census papers no.17/2015, Centre for Aboriginal Economic Policy Research, Canberra. Available at: <http://caepr.anu.edu.au/Publications/census-papers/2015CP17.php>; Mahuteau, S, Karmel, T, Mavromaras, K & Zhu, R 2015, Educational outcomes of young Indigenous Australians, National Centre for Student Equity in Higher Education, Curtin University, Bentley. Available at: <https://www.ncsehe.edu.au/educational-outcomes-of-young-indigenous-australians>.

⁵¹ Australian Government, 2017, 'Closing the Gap Prime Ministers Report 2017', Department of the Prime Minister and Cabinet. Available at: <http://closingthegap.pmc.gov.au/>.

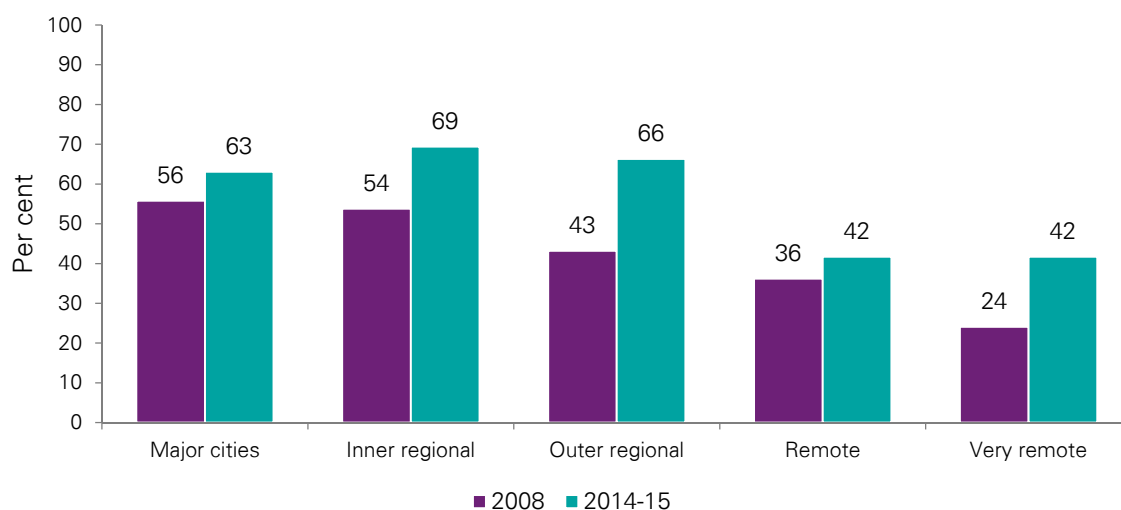


Source: ABS National Aboriginal and Torres Strait Islander Social Survey, 2008 and 2014-15.

As depicted above, while the proportion of Indigenous students with Year 12 or equivalent attainment has increased between 2008 to 2014-15, nearly 40 per cent of Indigenous youth have not completed Year 12 across Australia (2014-15). The proportion of Indigenous students with Year 12 or equivalent attainment is lowest in the NT (29.7 per cent as of 2014-15) and highest in the ACT (82.7 per cent as of 2014-15).

As demonstrated below, the proportion of Indigenous 20-24 year olds with Year 12 or equivalent attainment differs significantly by level of remoteness as illustrated in Chart 22.

Chart 19: ABS National Aboriginal and Torres Strait Islander Social Survey, 2008 and 2014-15

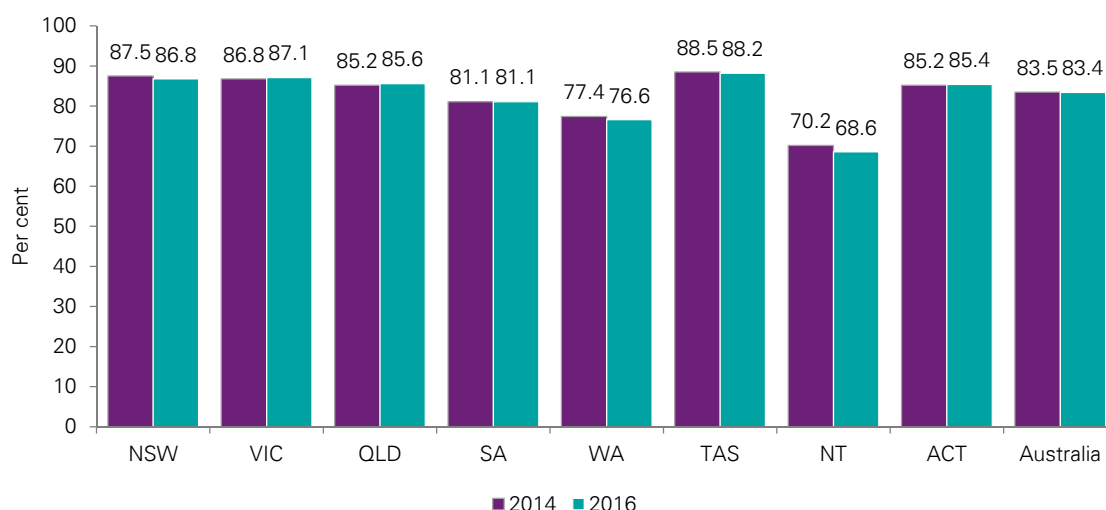


Source: National Aboriginal and Torres Strait Islander Social Survey.

While the proportion of Indigenous 20-24 year olds with Year 12 or equivalent attainment has increased over time from 2008 to 2014-15, under half (41.7 per cent) of the students in very remote areas are obtaining Year 12 or equivalent compared to those living in major cities (63.1 per cent).

Attendance rates for earlier years of schooling (Years 1 to 10) are just over 80 per cent across Australia, as illustrated by Chart 23.

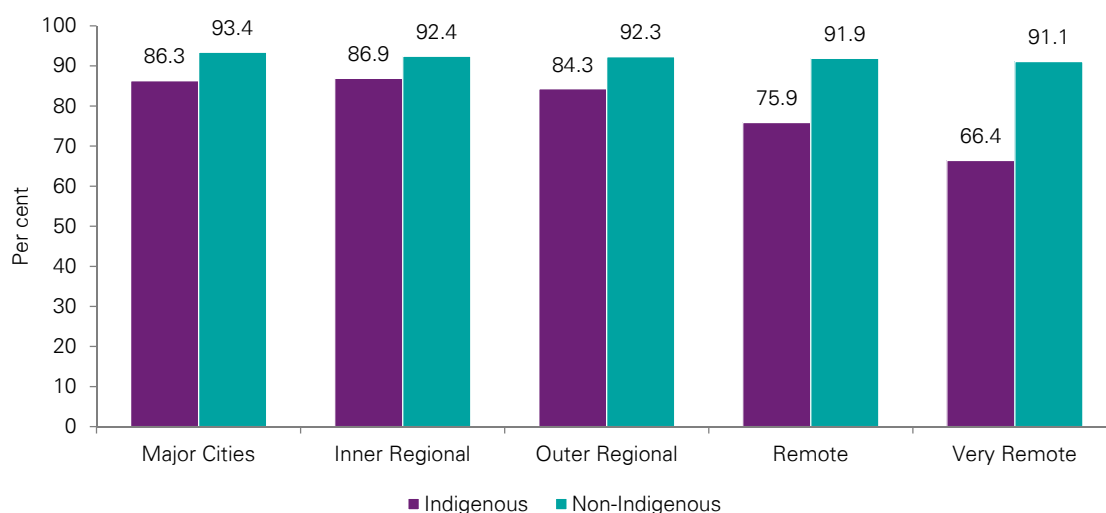
Chart 20: Indigenous student attendance rates (per cent) Year 1 to 10 combined, by jurisdiction, Semester 1, 2014 and 2016



Source: Australian Curriculum, Assessment and Reporting Authority.

Geographic analysis by level of remoteness shows a general trend that Indigenous student attendance rates decrease in more remote areas as seen in Chart 24.

Chart 21: Student attendance rates (per cent) Year 1 to 10 combined, by Indigenous status and remoteness, Semester 1, 2016

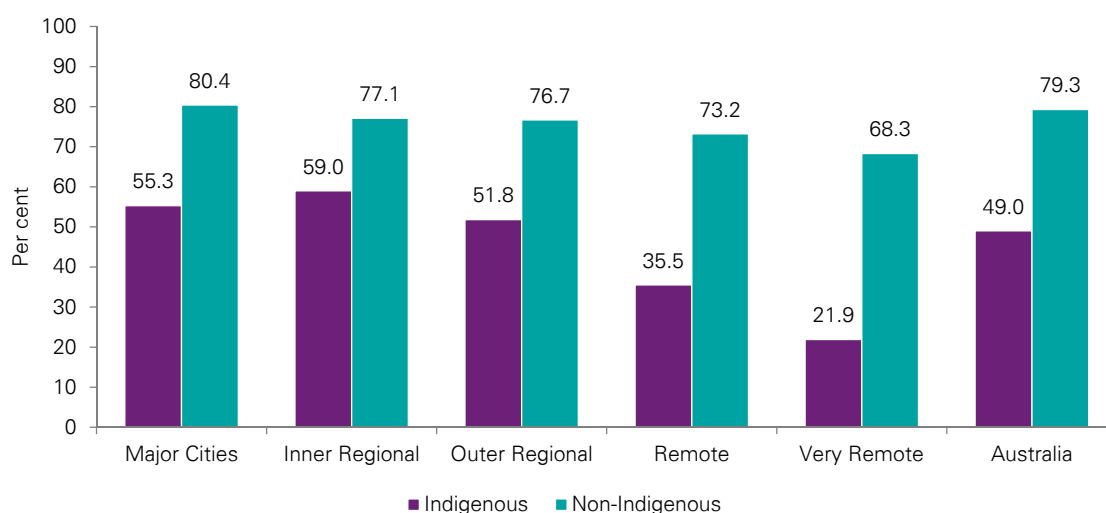


Source: Australian Curriculum, Assessment and Reporting Authority.

Attendance rates for Indigenous students are higher in major cities (86.3 per cent) and inner regional areas (86.9 per cent) compared to remote (75.9 per cent) and very remote (66.4 per cent) areas.

Of particular concern is that the proportion of Indigenous students attending school 90 per cent or more of the time (Year 1 to 10) is under 50 per cent across Australia, as illustrated by Chart 25.

Chart 22: Proportion of students attending school 90 per cent or more of the time (per cent), Year 1 to 10 combined, by Indigenous status and remoteness, Semester 1, 2016



Source: Australian Curriculum, Assessment and Reporting Authority.

Major cities have the highest proportion (55.3 per cent) of Indigenous students attending school 90 per cent or more of the time (Year 1 to 10). In contrast, just only over one-fifth (21.9 per cent) of Indigenous students attend school 90 per cent or more of the time (Year 1 to 10) in very remote areas. Mandatory years of schooling lay the foundation for subsequent further education and employment pathways and associated outcomes. The findings illustrate that any strategies to promote further education amongst Indigenous communities should target school attendance throughout the schooling journey.

Applying a gender lens, research suggests that young Indigenous men lag behind Indigenous women in a number of factors from pre-school attendance through to school and higher education attainment. This is largely attributable to a greater degree of male school absenteeism, lower aspirations than non-Indigenous male peers, a lack of community role models, the type of school attended, and a greater likelihood of young men being in prison at the age when other young people are entering post-secondary education and training.⁵²

University application process

Indigenous students struggle more with the application process compared to advantaged students

Research exploring whether low socio-economic status students are disadvantaged in the university application process compared student application portfolios between students before and after they receive their Australian Tertiary Admission Rank (ATAR).

The study found that compared to low SES students, those from high SES backgrounds are more attentive to the application process and more likely to change their strategies in the window immediately after receiving their ATAR. The findings suggest that high SES students have strong advantages in their understanding of the university application process and how they respond to new information in that process. In contrast, low SES students often come from backgrounds where families have less experience and familiarity with higher education and the university application process, leaving them at a disadvantage when informed actions and decisions are required.

⁵² Biddle, N & Meehl, A 2016, 'The gendered nature of Indigenous education participation and attainment, CAEPR working paper no.106/2016', Australian National University, Centre for Aboriginal Economic Policy Research, Canberra. Available at: <http://caepr.anu.edu.au/Publications/WP/2016WP106.php>.

An important implication of the findings is the timing of any intervention and support for low SES students, who seem to respond poorly in the window between discovering their ATAR and finalising their application portfolio. These findings are supported by other research that attributes part of the decision to pursue higher education to socio-cultural capital whereby young people from disadvantaged backgrounds are less able to use their cultural capital and social networks in decision-making about their post-school destinations. For example, they may simply lack awareness on the location of different universities, the requirements to enroll in different university programs, or how to overcome the complexities of the enrolment process.

Other research demonstrates that disadvantaged students struggle more with the application process and respond less efficiently to new information in that process. These factors are compounded if these young people are the first in their family or social circle to decide to attend university, as they have a limited ability to rely on their networks to acquire the necessary knowledge. Indigenous students are often the first in their family to complete high school and similar to other first in family students, do not have ready access to information about pathways or a familial and cultural connection to higher education. Universities often value work experience such as internships and other extra-curricular activities as part of the application process. The lack of access to these opportunities may act as a further barrier to Indigenous student applicants.

This suggests that communications should provide low SES students with better guidance to help them understand post-secondary school options and support with the university application process. The researchers also note however, that this should be complimentary to long-term efforts to improve high school achievement as a pre-requisite for eligibility to university. Increases in the number of students eligible for university and thereby potentially seeking higher education opportunities heightens the on-going need for information on the university application process especially for low SES students.⁵³

Traditional caring roles

Traditional gender roles and caring responsibilities can be significant barriers to education and training participation for young Indigenous women

While young Indigenous women are more likely to complete Year 12 than young Indigenous men, they are also less likely to attain any type of post-school qualification. The research suggests that traditional gender roles and caring responsibilities can be significant barriers to education and training participation for young Indigenous women. However, because caring responsibilities change over time, Indigenous women go on to complete post-school qualifications later in their lives. Indigenous women are more likely to be enrolled in higher-level qualifications such as Certificate IV and Diploma or higher whereas Indigenous men are more likely to be enrolled in Certificates I and II.⁵⁴

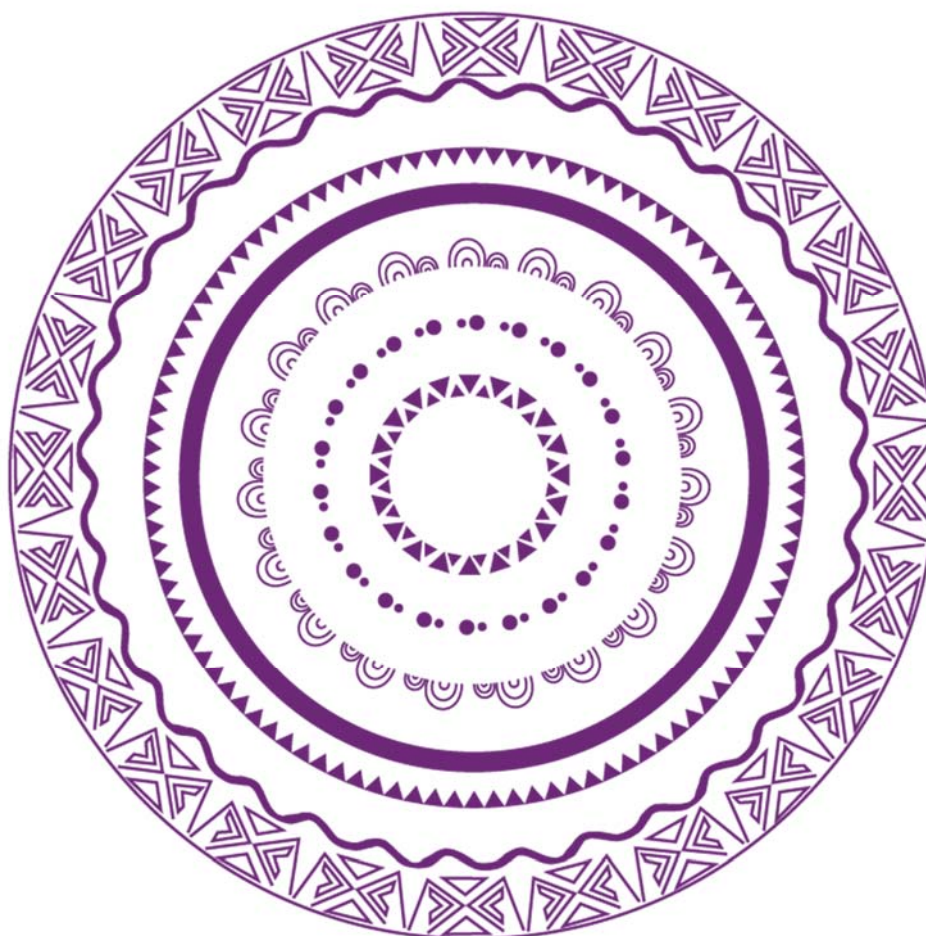
⁵³ Cardak, B., Bowden, M. & Bahtsevanoglou, J., 2015, 'Are Low SES Students Disadvantaged in the University Application Process?' Report submitted to the National Centre for Student Equity in Higher Education (NCSEHE), Perth: Curtin University.

⁵⁴ Cuervo, H, Barakat, N & Turnbull, M, 2015, 'Youth, belonging and transitions: identifying opportunities and barriers for Indigenous young people in remote communities', Research Report no.44, Youth Research Centre, Melbourne. Available at: http://education.unimelb.edu.au/__data/assets/pdf_file/0006/1429359/2015_RR_44_final_May_2015_web.pdf; Ackehurst, M., Polvere, R.A. & Windley, G., 2017, 'Indigenous Participation in VET', NCVET. Available at: https://www.ncver.edu.au/__data/assets/pdf_file/0029/484463/Indigenous-participation-in-VET.pdf

Communicating the barriers to undertaking further education

The research above, gives rise to considerations that may frame the communication of the barriers experienced by Indigenous students undertaking further education:

- There are a number of financial and other further education supports available to Indigenous students. This includes Indigenous specific support programs, as well as the general assistance available to all Australian students. These supports are provided by government and non-government sources.
- “Pathways’ reflect the various journeys to some destination or outcome. Given the diverse educational and life experiences of Indigenous Australians, it needs to be recognised that there are different paths that suit different people”.⁵⁵ Communication with Indigenous Australians may seek to communicate the various flexible learning options available to Indigenous school leavers. Communication could also demonstrate pathways available that balance family and other obligations with pursuing further study and provide role models exemplifying the full variety of career pathways available.
- Communication may seek to illustrate the variety of successful career pathways, including higher and vocational education that are available to Indigenous students. Moreover, by highlighting the opportunities that exist, communication may dispel perceptions that higher education is unobtainable.



55 Australian Government, 2010, 'Closing the Gap Clearinghouse', June 2010. Available at: <http://www.aihw.gov.au/uploadedFiles/ClosingTheGap/Content/Publications/2010/ctgc-rs02.pdf>



Drivers of Enrolment in Further Education



Drivers underpinning Indigenous students enrolling in further education

The research indicates that a number of key drivers underpin enrolment of Indigenous students in further education. These are described below.



Quality of school experience

Positive school experience, coupled with career advice and guidance (particularly the provision of advice and information about avenues towards university participation) are key factors influencing university enrolment amongst equity groups (including Indigenous Australians). Research suggests that the strongest positive effects were talks by a TAFE or university representative and schools' career advisors.



Supporting Indigenous aspirations

Information and guidance on locally available education and employment opportunities, and an understanding of how to navigate these are key factors supporting the development of aspirations in young people. A survey found that 89.3 per cent of Indigenous respondents who felt local opportunities were available indicated an aspiration to complete Year 12. Research suggests that the aspirations of Indigenous students go beyond individual-level aspirations and are linked to their community. The NCVET suggests that the provision of early outreach, mentoring, and information for Indigenous students and their families might help to raise the educational aspirations of Indigenous students.



Positive community attitudes and strong role models

The presence of role models in the community is a key driver to enrolment in further education. Many Indigenous students are the first in their families to reach education milestones so they often have access to less support and advice than the broader community.



Strong cultural identity

Research suggests that stronger cultural identity appears to promote greater participation and achievement in education and training. Some students may experience social and cultural alienation that because of clashes between Indigenous and non-Indigenous socio-cultural values. These clashes may be reflected in teaching styles and pedagogies, course content and levels of available support and represent a barrier to the retention of Indigenous students in education.



Promote early engagement in education

Key enablers which are likely to promote early engagement in the education of Indigenous students include supporting school-readiness and literacy and numeracy acquisition by focusing on the earlier years of schooling. This could include involving parents and communities in schooling; the development of aspirations; and providing appropriate education and employment options and career advice.



Indigenous students are more likely to participate in vocational education than higher education, with research suggesting that this may be largely due to the accessibility of VET. The study methods of VET and the work-based and workplace learning approaches may provide an attractive option for Indigenous students. The ability to 'earn as you learn' during VET training, the curricular content, or the career options implied by a VET qualification are also attractive features. The popularity of VET study may also partly relate to its geographical availability. VET providers are more widespread (from a geographic perspective) than higher education institutions.

The remainder of this section explores the data and evidence underpinning the findings above.

Quality of school experience

Career advice and positive school experience are key drivers to enrolment in further education

Two key factors which are strongly linked to university enrolment are:

- the availability and access to career advice and guidance (particularly the provision of advice); and
- information about avenues towards university participation) and school experiences.

Career guidance refers to the support and advice students receive at school in planning their post-school educational professional pathways. School experiences capture a broad set of processes defining students' interactions with the education system such as their emotional attachment to their schools and relationships with teachers. These manifest through students' engagement with school and the process of learning. These factors have been shown to have a substantial influence on post-school outcomes, including their university participation.⁵⁶

Factors such as receipt of career advice and positive school experiences increase the likelihood of university participation amongst youth from equity groups. Students who held positive attitudes towards school and reported having a positive relationship with their teachers, and who received certain forms of career guidance, were more likely to enrol at university, and did so at earlier ages. Conversely, students whose interactions with the school system result in negative feelings about going to school, are more likely to be disengaged from education at the secondary school level, and unlikely to consider attendance to university as a desirable post-school pathway.⁵⁷

However, not all forms of career guidance were found to be equally associated with university enrolment. The strongest positive effects were found for talks by a TAFE or university representative and schools' career advisors, while less positive effects were found for employer representative talks and group discussion about careers.⁵⁸ A study exploring the pathways and barriers of Indigenous schooling and VET participation in the Goulburn Valley region found that the majority (83 per cent) of students regarded specialist career advice and information an important factor in deciding on a future.⁵⁹

Early engagement in education

Early engagement in education helps to ensure preparation for further education

A study by the NCVER on Indigenous participation in VET includes the following enablers to promote early engagement in the education of Indigenous students:

⁵⁶ Tomaszewski, Wojtek, Perales, Francisco, & Xiang, Ning, 2017, 'School Experiences, Career Guidance, and the University Participation of Young People from Three Equity Groups in Australia'. National Centre for Student Equity in Higher Education (NCSEHE), Perth: Curtin University. Available at: <https://www.ncsehe.edu.au/wp-content/uploads/2017/03/TomaszewskiUQ.pdf>

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ Alford, K. & James, R., 2007, 'Pathways and barriers: Indigenous schooling and vocational education and training participation in the Goulburn Valley Region', Centre for the Study of Higher Education, University of Melbourne.

- supporting school-readiness and literacy and numeracy acquisition by focusing on the earlier years of schooling;
- involving parents and communities in schooling;
- developing aspirations to improve the long-term educational outcomes of Indigenous Australians; and
- providing appropriate information about education and employment options and career advice.

The study emphasises that while not all Indigenous Australians (as with non-Indigenous Australians) may want to undertake tertiary education, equal access and the opportunity to make informed choices to suit their needs and aspirations are vital to reducing educational disadvantage.⁶⁰

While some of these factors relate to broader structural issues (and therefore carry policy implications), the research highlights important stakeholders that need to be considered as part of the communications strategy. This includes not only students themselves, but also parents, the community, teachers and career advisors as key target audiences.

Supporting Indigenous aspirations from a young age

The development of aspirations from a young age plays a key role in promoting further education and these should be linked to the community as well as local opportunities

The development of aspirations is a highly significant process, particularly for youth. Aspirations have been found to encourage greater engagement when transitioning from school to work and study. Youth who are exposed to opportunities and pathways that lead into further education or employment and who are encouraged to believe that these opportunities are available to them regardless of their background are well placed to discover and achieve their imagined futures.⁶¹

The development of aspirations begins early and is strongly influenced by a young person's family, community and the area in which a young person grows and develops. Information and guidance on locally available education and employment opportunities, and an understanding of how to navigate them supports the development of aspirations in young people.

A survey of Indigenous students about employment and educational opportunities found that the aspirations of Indigenous youth were far lower where they perceived a lack of local opportunities for education, training and employment. Indigenous youth who did feel there were local opportunities had aspirations far closer to those of non-Indigenous respondents. The study found that 89.3 per cent of Indigenous respondents who felt local opportunities were available indicated an aspiration to complete Year 12. Conversely, only 60.8 per cent of young Indigenous Australians who did not see local opportunities as available planned to complete Year 12.⁶²

A study by the NCVER on Indigenous participation in VET suggests that the aspirations of Indigenous Australians particularly in remote areas do not always coincide with mainstream ideas of educational attainment and can be more strongly focused on the contributions to families and communities.

The NCVER suggest that factors that might help to raise the educational aspirations of Indigenous students are:

- the provision of outreach as early as possible;
- greater mentoring; and
- better information for Indigenous students and their families.

⁶⁰ Ackehurst, M., Polvere, R.A. & Windley, G., 2017, 'Indigenous Participation in VET', NCVER. Available at: https://www.ncver.edu.au/__data/assets/pdf_file/0029/484463/Indigenous-participation-in-VET.pdf

⁶¹ Mission Australia, 2013, 'Employment and educational aspirations of Aboriginal and Torres Strait Islander young people'. Available at: <https://www.missionaustralia.com.au/publications>

⁶² Ibid.

Case Study – The Aspiration Initiative



The Aspiration Initiative (TAI) is the name for a collective of Indigenous education projects that work to advance and strengthen the academic skills, build resilience and raise aspirations of Indigenous students. The vision of TAI is “*Indigenous Australians realising their full academic potential*”. There are currently four key projects being delivered under the initiative:

- High School Academic Enrichment Program
- Indigenous Scholarships
- International Scholarship Opportunities
- Aurora Indigenous Scholars International Tour

Evaluation data of the Academic Enrichment Program found that:

- 74 per cent of high school students in the program in NSW and Victoria completed Year 12;
- 81 per cent received ATARs – more than twice the national average;
- 72 per cent transitioned to university at the beginning of 2016;
- 96 per cent of students in Western Australia remain on an education pathway (school or TAFE);
- 75 per cent of Western Australian students are attending high school; and
- The large majority of high school students aspire to go on to university and view tertiary study as the next step towards a successful career.

In addition, students were inspired by TAI Staff to have pride in their culture and were more excited about their future.

Case Study – Wirringka Student Services



Wirringka Student Services at the University of South Australia (UniSA) provides specialised services for Indigenous students. It offers a friendly and supportive space for students to study with Aboriginal Student Engagement Officers available to assist students with any queries. Indigenous students are also present for peer support and to help foster a positive community environment. Staff and facilities are made available to all UniSA campuses including regional locations, with staff accessible via phone, email and Skype for external and UniSA Online Students. Wirringka Student Services delivers a number of initiatives to support Indigenous students in their study including:

- Aboriginal Tutoring Program: provides Indigenous students with free of cost access to qualified tutors in metropolitan and regional locations with skills and experience in a wide range of study areas.
- AIME mentoring: UniSA runs two programs in Adelaide as part of the Australian Indigenous Mentoring Experience education program.

The research signifies the importance of developing the aspirations of young Indigenous students as a driver of enrolment in further education, and that this is linked to students having an understanding of the opportunities and pathways to further education or employment that are locally available to them. In addition, the aspirations of Indigenous students go beyond individual-level aspirations and are linked to their community. Therefore, any communications strategy should consider building awareness of the opportunities for post-secondary school pathways that engage students and the broader community.

Positive community attitudes towards education and strong role models in the community

Having role models in the community is a key driver to enrolment in further education and may also play a role in promoting retention

A role model is an individual “perceived as exemplary, or worthy of imitation to the inspirer”. Role models can be perceived by young people to include celebrities and other famous people, family members, adult community members, teachers and peers.⁶³ Research suggests that having role models in the community is a key driver to enrolment in further education. Many Indigenous students being the first in their families to reach education milestones so they often have access to less support and advice than the broader community.⁶⁴

Relatedly, the research literature recognises that there is low Indigenous representation amongst university staff. This points to a strong need to encourage more Indigenous students to, for example, enrol in post-graduate degrees so they can act as role models. They should also be encouraged to act as research supervisors and participate in university governance, management and develop Indigenous agendas in research, teaching and support. Indigenous staff play an important role in boosting the confidence of Indigenous students by providing mentoring and acting as positive role models.⁶⁵ Research has found that having Indigenous teachers as role models to mentor Indigenous students is an important contributor to student retention.⁶⁶

A study by the NCVET on Indigenous participation in VET notes that when there is a strong link between individual and community aspirations, the benefits of education and training become more visible and higher levels of engagement occur.⁶⁷

Stronger cultural identity

Cultural identity is an important driver of participation in education

Stronger cultural identity appears to promote greater participation and achievement in education and training. Research considered four separate dimensions of cultural engagement including participation in cultural events; cultural identity; language; and participation in traditional economic activities. Participation in education and training is found to be higher for those without English language difficulties. Lower income and employment outcomes are observed for those who primarily speak an

⁶³ MacCallum, J. & Beltman, S., 2002, ‘Role models for young people – what makes an effective role model program?’ Available at: <http://researchrepository.murdoch.edu.au/id/eprint/9492/>

⁶⁴ Cardak, B., Bowden, M. & Bahtsevanoglou, J., 2015, ‘Are Low SES Students Disadvantaged in the University Application Process?’ Report submitted to the National Centre for Student Equity in Higher Education (NCSEHE), Perth: Curtin University. Available at: <https://www.ncsehe.edu.au/publications/are-low-ses-students-disadvantaged-in-the-university-application-process/>

⁶⁵ Andersen, C., Bunda, T., & Walter, M., 2008, ‘Indigenous Higher Education: The Role of Universities in Releasing the Potential’. The Australian Journal of Indigenous Education, 37(1), 1-8; Pechenkina, E. & Anderson, I., 2011, ‘Background paper on Indigenous Australian Higher Education: trends, initiatives and policy implications’. Prepared for the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People. September, 2011. Available at: http://sydney.edu.au/documents/about/higher_education/2011/20110930%20IndigenousHigherEducationReview-ResearchPaper.pdf

⁶⁶ Alford, K. & James, R., 2007, ‘Pathways and barriers: Indigenous schooling and vocational education and training participation in the Goulburn Valley Region’. Centre for the Study of Higher Education, University of Melbourne.

⁶⁷ Windley, G., 2017, ‘Indigenous VET participation, completion and employment outcomes: change over the past decade’, NCVET, Adelaide. Available at: <https://www.ncver.edu.au/publications/publications/all-publications/indigenous-vet-participation-completion-and-outcomes-change-over-the-past-decade>

Indigenous language compared with those who do not, irrespective of gender or remoteness. This is likely a reflection of the Australian education system which demands the use of English.⁶⁸

Some students may experience social and cultural alienation because of clashes between Indigenous and non-Indigenous socio-cultural values. These conflicts may be reflected in teaching styles and pedagogies and are a barrier to the retention of Indigenous students in education.⁶⁹

The implications for research suggest that where it is viable for curricula and models of delivery of education and training to incorporate elements that affirm and accommodate the culture of Indigenous Australians outcomes for Indigenous Australians are likely to improve.

Viability of VET

VET is considered a viable option for a variety of reasons

Indigenous students are more likely to participate in vocational education than higher education. Research by the NCVER has found that at 15 years of age, young Indigenous students indicated a preference for VET over university. The pathway into VET often starts quite young, with Indigenous students participating in VET in Schools at a higher rate than non-Indigenous students. In 2006, there were around 5,500 Indigenous students in VET in Schools programs (representing 3.2 per cent of the total) and this had increased to around 15,500 in 2015 (representing 6.0 per cent of the total and a change of almost 180 per cent in terms of absolute numbers from 2006 to 2015).

The Behrendt Review suggests a number of factors that may explain the high appeal of VET amongst Indigenous Australians. These include the work-based and workplace learning approaches utilised by VET, the ability to 'earn as you learn' during VET training, curricular content, and the career options implied by a VET qualification. The popularity of VET study may also partly relate to its geographical availability as VET providers are more widespread than higher education institutions.⁷⁰

⁶⁸ Li, I., & Dockery, M., 2014, 'Schools and university academic performance – implications for Australia's higher education expansion', National Centre for Student Equity in Higher Education, Curtin University. Available at: <https://www.ncsehe.edu.au/wp-content/uploads/2014/12/Li-and-Dockery-Schools-SES-Final.pdf>

⁶⁹ Pechenkina, E. & Anderson, I., 2011, 'Background paper on Indigenous Australian Higher Education: trends, initiatives and policy implications'. Prepared for the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People. September, 2011. Available at: http://sydney.edu.au/documents/about/higher_education/2011/20110930%20IndigenousHigherEducationReview-ResearchPaper.pdf

⁷⁰ Ackehurst, M., Polvere, R.A. & Windley, G., 2017, 'Indigenous Participation in VET', NCVER. Available at: https://www.ncver.edu.au/__data/assets/pdf_file/0029/484463/Indigenous-participation-in-VET.pdf.

Communicating the underlying drivers of enrolment

The research above gives rise to considerations that may frame the communication of the underlying drivers of enrolment into further education by Indigenous students:

- Ensure that messages are targeted at staying in school and doing well throughout it, so that students are in a position to pursue further education when they are old enough. Target key influencers of students (parents, teachers and career counsellors) to promote the value of education (both for staying at school and beyond/ further education).
- Promote sources of mentoring and advice on the university application process and available vocational pathways.
- Promote the importance of school attendance and completion of Year 12 as a pre-requisite of pursuing higher education (and Year 10 as a pre-requisite for vocational education).



Performance of Indigenous Students





Performance of Indigenous students, in completing further education

The key factors related to the performance of Indigenous students compared to non-Indigenous students in completing further education are outlined below.



Primary and secondary education

Through assessing performance indicators, research shows that some Indigenous students are facing challenges and are underperforming from as early as primary school. NAPLAN results show the proportion of Indigenous students reaching the national minimum standards in 2016 is around 70-80 per cent, while the proportion of non-Indigenous students reaching this standard is around 95 per cent. The findings suggest that this may be linked to lower attendance rates. Data from the Australian Curriculum, Assessment and Reporting Authority (ACARA) shows that the proportion of Indigenous students who have an attendance rate of 90 per cent or more is far less than their non-Indigenous counterparts. This lower attendance rate is believed to subsequently impact performance levels during assessments such as the NAPLAN. Notably, however, research shows that with the right environmental factors, differences between Indigenous and non-Indigenous students can be overcome.



Further education

Completion rates for further education are low amongst Indigenous Australians. While Indigenous Australians are receiving offers from universities at similar levels to non-Indigenous Australians, university completion rates for Indigenous students (46.7 per cent) are much lower than for non-Indigenous students (73.6 per cent). VET is typically the preferred secondary learning pathway by Indigenous students. Total Indigenous completion rates in VET have risen in line with enrolments rates, but proportional completion rates remain low. Completion rates in remote communities are lower than the broader Indigenous cohort.



Employment

Indigenous students who complete further education are likely to experience employment opportunities and outcomes similar to non-Indigenous Australians. Performance in employment is a difficult metric to measure as there are countless pathways that an Indigenous student or graduate might take. Consultation suggested that the employment opportunities and outcomes of Indigenous students who have completed further education are equal to those of non-Indigenous Australians. Research indicates that the proportion of Indigenous Australians working as community and personal service works, machinery operators and drivers, and labourers exceed their non-Indigenous counterparts.

The remainder of this section explores the evidence underpinning the findings noted above.

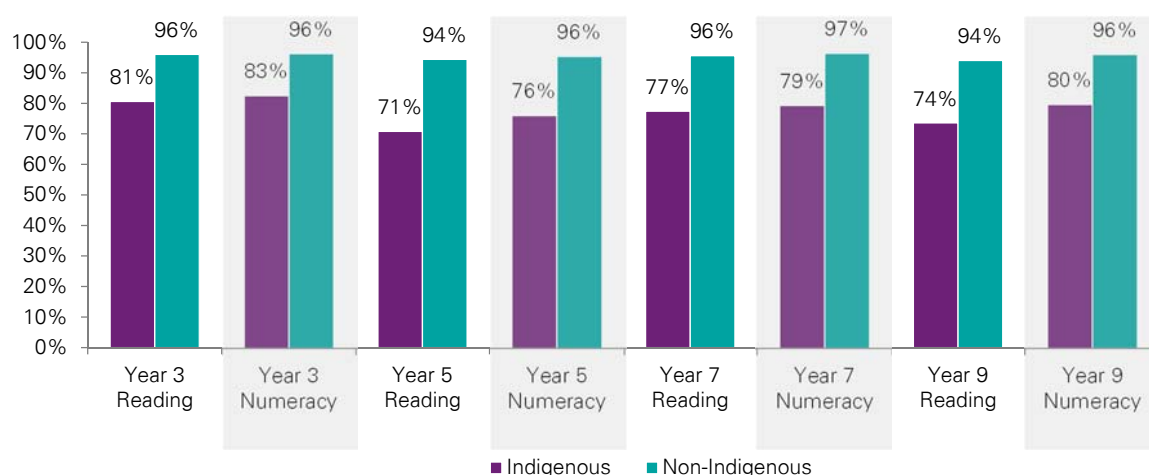
Primary and Secondary Education

Some Indigenous students face challenges and are underperforming from as early as primary school

To pursue further education, students are required to complete primary education and up to Year 10 of secondary education. The NAPLAN – Literacy and Numeracy is an annual assessment for all students in Years 3, 5, 7 and 9. The test covers essential skills for children to progress through school and life, including reading, writing, spelling, grammar and punctuation and numeracy.⁷¹ These fundamental skills are believed to be effective high-level indicators of how students are performing at school. This research report has focused on the published results for reading and numeracy as the two representative categories. The 2016 NAPLAN results for reading and numeracy show that fewer Indigenous students are achieving at or above national minimum standard when compared to their non-Indigenous counterparts. The ‘national minimum standard’ encompasses one band at each year level and represents a wide range of the typical skills demonstrated by students at this level.⁷² Therefore, students who are below the national minimum standard have not achieved the learning outcomes expected for their year level.⁷³

The difference in performance between Indigenous and non-Indigenous groups of students appears to continue throughout primary education and secondary education, for reading and numeracy. This is illustrated in Chart 23 below.

Chart 23: Proportion of students reaching national minimum standards across education levels, 2016



Source: National Assessment Program, NAPLAN National Report 2016.

The proportion of Indigenous students reaching the national minimum standards in both reading and numeracy remains around 70-80 per cent throughout primary and secondary education. This means approximately 20-30 per cent of Indigenous students are not achieving the learning outcomes expected for their level at school long before arriving at the stage of electing whether to pursue further education. For comparison, over 90 per cent of non-Indigenous students are achieving the national minimum standards for both reading and numeracy from Year 3.

Similar to the findings in the previous research questions, the data shows that remoteness of location has an impact on the performance of Indigenous students. Chart 24 below shows the proportion of students who have achieved the national minimum standards for reading. The percentage of Indigenous students reaching the national minimum standards decreases with an increase in

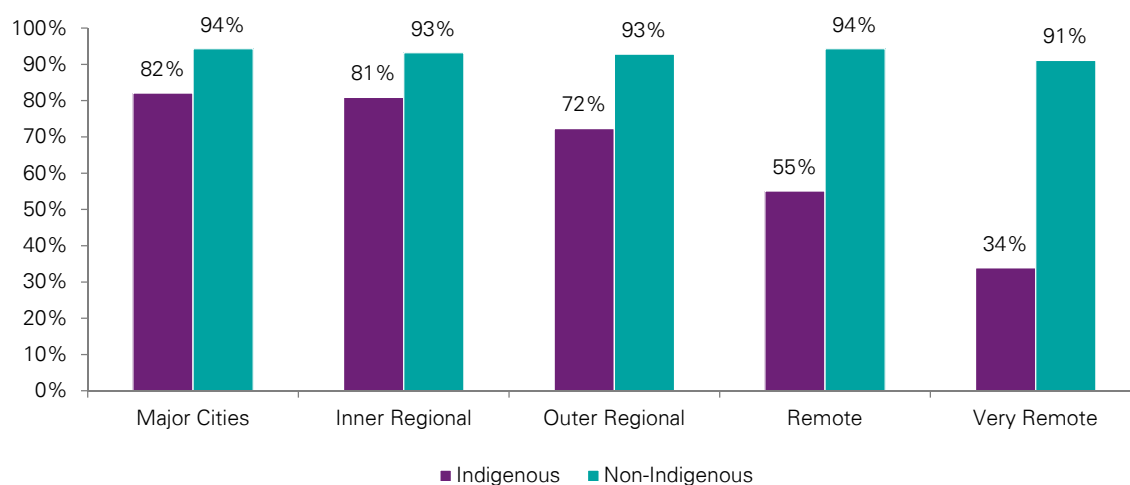
⁷¹ National Assessment Program, *date unknown*, ‘About’, accessed 01 August 2017. Available at: <https://www.nap.edu.au/about>.

⁷² National Assessment Program, *date unknown*, ‘Standards’ accessed 01 August 2017. Available at: <http://www.nap.edu.au/results-and-reports/how-to-interpret/standards>.

⁷³ Ibid.

remoteness, whilst the performance for non-Indigenous students remain at a consistent level around 90 per cent.

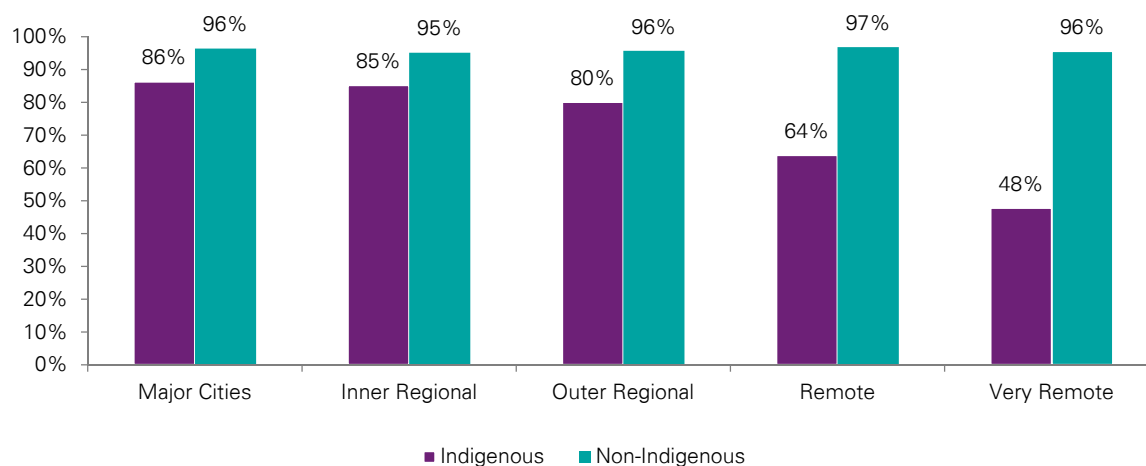
Chart 24: Proportion of students reaching national minimum standards for Year 9 reading, by Indigenous status and remoteness 2016



Source: National Assessment Program, NAPLAN National Report 2016.

As seen from Chart 24 above, the proportion of Indigenous students who are achieving national minimum standards for reading in major cities is 82 per cent compared to 34 per cent for very remote regions. However the proportion of non-Indigenous students who are achieving national minimum standards remain around 90 percent. This is repeated in the results for numeracy, as shown in Chart 25.

Chart 25: Proportion of students reaching National Minimum Standards for Year 9 Numeracy, by Indigenous status and remoteness 2016



Source: National Assessment Program, NAPLAN National Report 2016.

Studies have shown that performance at school is strongly correlated with attendance. National and international research have identified that regular school attendance is important in achieving core skills such as literacy and numeracy.⁷⁴ The Western Australian Aboriginal Child Health Survey 2000-

⁷⁴ Productivity Commission, 'Overcoming Indigenous Disadvantage: Key Indicators 2016' Chapter 4 COAG Targets and Headline Indicators, November 2017, page 37. Citing the following research: Balfanz, R. and Byrnes, V., 'Chronic Absenteeism: Summarizing What We Know From Nationally Available Data', 2012, The Johns Hopkins University Center for Social Organization of Schools, Baltimore; Purdie, N. and Buckley, S., 'Closing the Gap Clearinghouse (Australia)', Australian Institute of Health and Welfare, Australian Institute of Family Studies 2010, School attendance and retention of Indigenous Australian

2002 found a direct relationship between the number of days absent from school and the child's academic performance.⁷⁵ Data from the ACARA shows that the proportion of Indigenous students who have an attendance rate of 90 per cent or more is far less than their non-Indigenous counterparts. This lower attendance rate appears to subsequently impact performance levels during assessments such as the NAPLAN. As demonstrated in Chart 26, the percentage of Indigenous students with an attendance rate of 90 per cent remains significantly lower than those of non-Indigenous students, with a further drop in percentage in secondary education.

Chart 26: Percentage of students with an attendance rate of 90 per cent or more, by Indigenous status and year level 2016



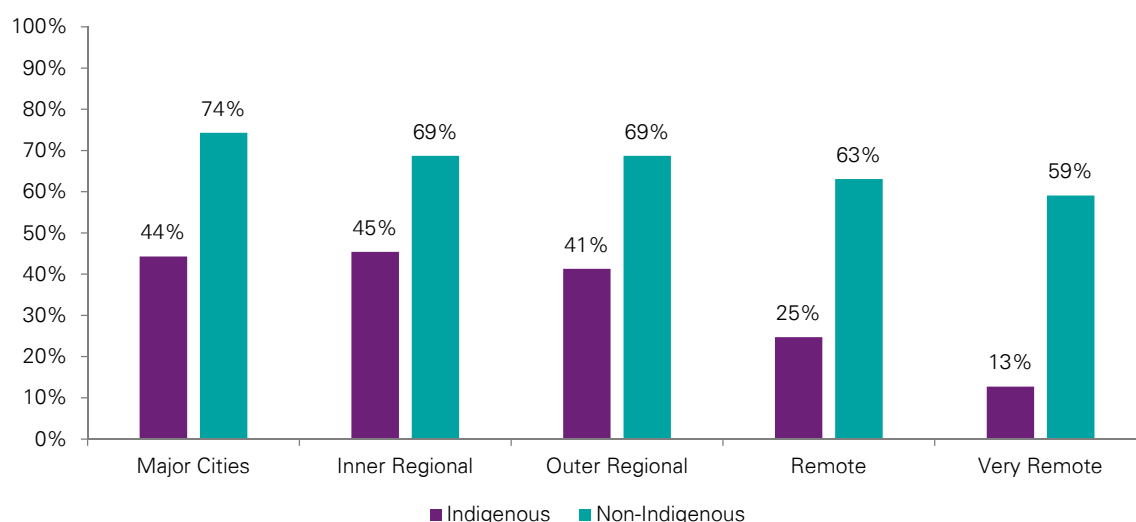
Source: ACARA, National Student Attendance Data Collection.

When attendance data is stratified by remoteness, similar trends emerge. Chart 27 shows the percentage of students with an attendance rate of 90 per cent or more in Year 9. The data indicates that only 44 per cent of Indigenous students in major cities have an attendance rate of 90 per cent or more, and an even lower proportion in very remote areas (13 per cent). The decrease in participation with remoteness directly correlates with the performance results produced by the NAPLAN. For comparison, a greater proportion of non-Indigenous students have an attendance rate of 90 per cent or more. This is the case for all regions, irrespective of remoteness.

students, Closing the Gap Clearinghouse], Canberra, A.C.T., http://www.aihw.gov.au/closingthegap/documents/issues_papers/; UNICEF Innocenti Research Centre 2004, 'Ensuring the rights of indigenous children', Innocenti Digest, vol. 11, <http://www.unicef-irc.org/publications/pdf/digest11e.pdf>

⁷⁵ Zubrick, S.R., et al., 2006, 'The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People', Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

Chart 27: Percentage of students with an attendance rate of 90 per cent or more in Year 9, by Indigenous status and remoteness, 2016



Source: ACARA, National Student Attendance Data Collection.

The Productivity Commission, in the 2016 research paper 'Indigenous Primary School Achievement', found that both Indigenous and non-Indigenous students tend to perform better in school reading assessments where school attendance rates are higher, irrespective of the geographic location of the school.⁷⁶ This is an important observation, as it indicates that the difference in performance is often not due to any specific characteristic of a child or solely a function of remoteness, but rather fundamental factors such as not being able to attend school. This is a critical consideration and should be taken into account during the creation of the video.

The remoteness of location for a child is an obstacle to attendance at school, rather than an inherent indicator of low performance. Consultations highlighted that Indigenous youth in remote locations often choose to not attend school. This is due their desire to stay connected to their family and community instead of spending hours away from home each day. Other reasons discussed include a lack of awareness of what education involves within Indigenous families and an absence of role models who have completed secondary education.

Further Education

Completion rates for further education is low amongst Indigenous Australians

To understand performance between Indigenous students and non-Indigenous students, there are a number of high-level indicators such as offer, acceptance and completion rates depending on the education pathway. It should be noted that performance in further education is more difficult to compare than primary and secondary education as it is not compulsory and there is no standardised assessment. Furthermore, there are multiple pathways for further education and each individual may face different barriers and challenges which may impact their performance.

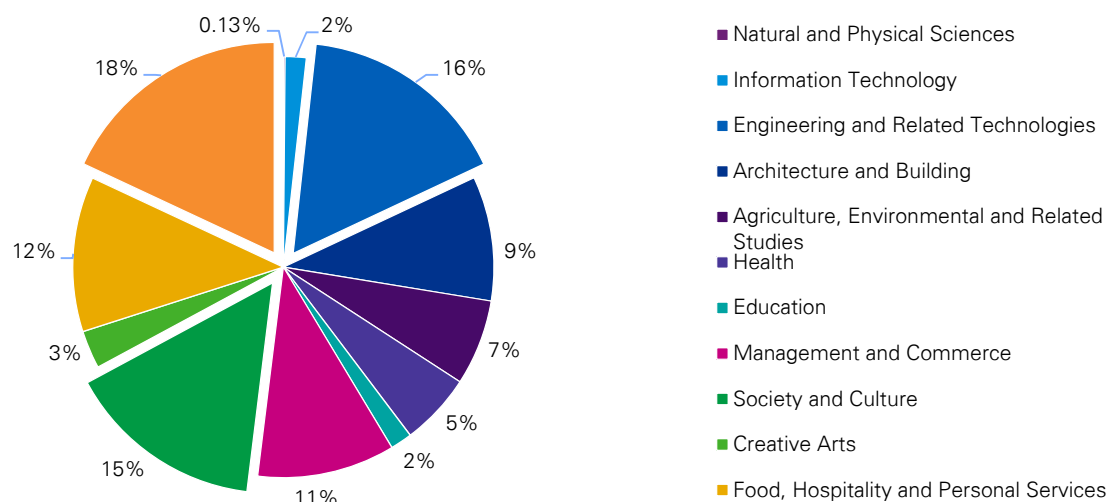
Research by NCVER has found that VET is the preferred post-secondary learning pathway for Indigenous students.⁷⁷ In 2015, NCVER recorded a total of 165,485 Indigenous students participating in vocational education and training nationally through a range of mediums, including TAFE, community education providers and universities. Of this, 47,745 (29 per cent) were between 15 and 19 years of age. There was a total of 50,645 Indigenous students who enrolled at TAFE for either a Certificate I, II, III or IV. From this, 19,195 (38 per cent) enrolments were Indigenous students aged between 15 and 19 years of age. As the primary target audience is school leavers, we have depicted

⁷⁶ Productivity Commission, 2016, 'Indigenous Primary School Achievement, Commission Research Paper'. Available at: <http://www.pc.gov.au/research/completed/indigenous-primary-school-achievement/indigenous-primary-school-achievement.pdf>

⁷⁷ NCVER, 2017, 'VET helping Indigenous students to 'close the gap'', May 2017. Available at: <https://www.ncver.edu.au/about/news-and-events/media-releases/vet-helping-indigenous-students-to-close-the-gap>.

the chosen field of education for the 15 to 19 year olds in Chart 31 below. For VET, the most preferred fields of education are programmes which contain mixed fields. This is followed by Engineering and Related Technologies and Society and Culture.

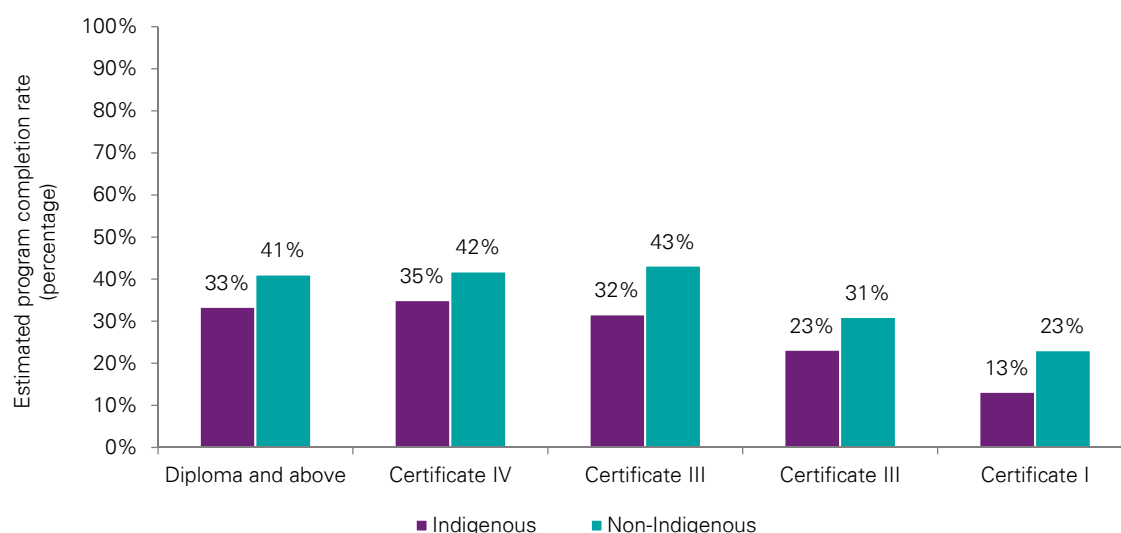
Chart 28: Field of Education of Indigenous TAFE applicants, 2015



Source: National Centre for Vocational Education Research, Australian vocational education and training statistics 2015.

The total Indigenous completion rate has risen in line with the rise in total Indigenous enrolments in VET over the last 10 years. But despite these increases in raw completion numbers, the proportional Indigenous completion rates remain low. The completion rate for Certificate I is reported to be only 13 per cent, and Certificate IV, which has the highest completion rate for Indigenous students is at 35 per cent. For comparison, the completion rate for non-Indigenous students for Certificate I is higher, but remains fairly low at 23 per cent, and 42 per cent for Certificate IV.

Chart 29: Estimated program completion rate, by Indigenous status 2014



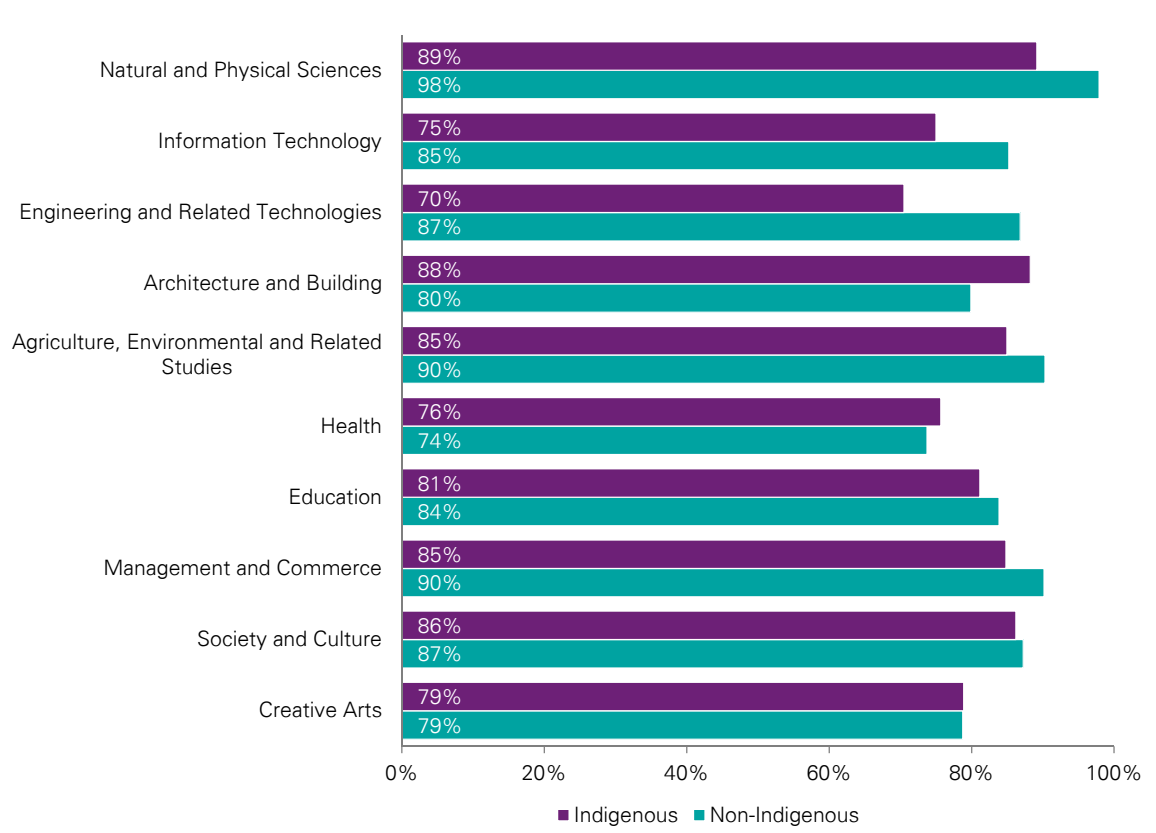
Source: National Centre for Vocational Education Research, Indigenous VET Participation Completion and Outcomes Report, 2017.

From consultations with NCVER, it was noted that the completion rate for younger VET students and also for students within remote communities were lower than the broader Indigenous cohort. It was also found that Indigenous women were more likely to complete VET qualifications than Indigenous men, with the completion rates being 27 per cent and 23 per cent respectively.

Furthermore, there is often insufficient support offered to Indigenous students enrolled in education, particularly for remote areas. Consultations suggested that many providers, both universities and VET providers, have support to assist Indigenous students to enrol in further education. However, the level of support required is often underestimated and providers are struggling to keep Indigenous students. The challenge of providing sufficient support has also been visible within primary and secondary educational institutions.

It is commonly perceived that university entry requirements are more strenuous and difficult to meet than VET programs. Consequently, offer and acceptance rates for university applicants are used as indicators of performance in addition to completion rates. In 2016, the Department of Education reported a total of 6,906 Indigenous applicants to a total of 40 universities across Australia. This is a much lower number of enrolments compared to the VET figures referred to above. From these, 5,630 students received an offer which equates to an offer rate of 81.5 per cent. A total of 4,438 Indigenous students accepted their offers, equating to an acceptance rate of 78.8 per cent. For comparison, the offer rate and acceptance rate non-Indigenous students are very similar at 83.9 per cent and 76.7 per cent respectively.

Chart 30: Offer rate for university applicants, by Indigenous status and field of education 2016

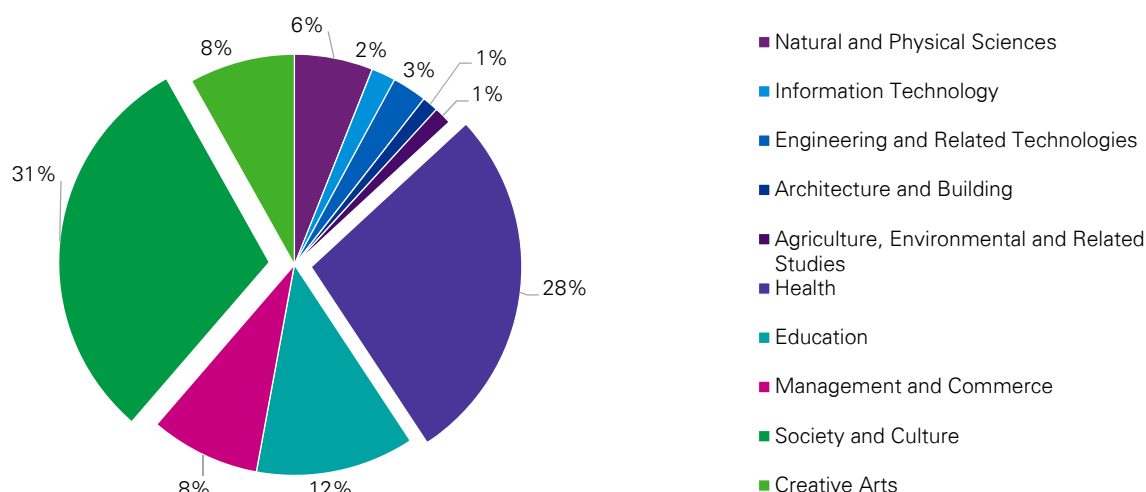


Source: Department of Education, Undergraduate Applications, Offers and Acceptances 2016.

As seen in Chart 30 above, the offer rate for most fields of education is similar for Indigenous and non-Indigenous students. The biggest difference is for Engineering and Related Technologies, with an offer rate of 86.8 per cent for non-Indigenous students and 70.5 per cent for Indigenous students. For Architecture and Building and Creative Arts, Indigenous students have a higher offer rate (88 per cent) than their non-Indigenous counterparts (80 per cent).

The most popular fields of education at university for Indigenous applicants in 2016 were Society and Culture (2,103 applications) and Health (1,899 applications). Interestingly, these were also the top two fields of education for non-Indigenous applicants. As for VET, we have graphed the chosen field of study for Indigenous students below.

Chart 31: Field of Education of Indigenous university applicants, 2016



Source: Department of Education, *Undergraduate Applications, Offers and Acceptances 2016*.

The Australian Council for Educational Research (ACER) is an independent not-for-profit research organisation that seeks to create and promote research-based knowledge that can be used to improve learning. ACER tracks students through tertiary education. In 2016, ACER published a short paper on Indigenous education which reported university completion rate of Indigenous students was 46.7 per cent, compared to 73.6 per cent for the broader student population.⁷⁸ The study also showed that more than one in five Indigenous students in the 2005 cohort dropped out of university before their second year. The barriers and challenges faced by these Indigenous students were discussed in detail above.

A submission made to the Behrendt Review by Universities Australia, the peak body representing the university sector, defined success for Indigenous students within universities as when Indigenous Australians are 'just as likely to be found in any school or faculty, postgraduate as well as undergraduate...as their non-Indigenous peers.'⁷⁹

There are existing support mechanisms which aim to assist Indigenous university students. Currently, Australian universities have a dedicated Indigenous Education Unit, but the structure, function, status and size vary across the sector.⁸⁰ For some universities, the support provided by this unit to students focuses on assisting and encouraging Indigenous Australians to complete their degrees. The case-studies included below provide examples of the mechanisms available.

⁷⁸ Australian Council for Educational Research, 2016, 'Indigenous Education Update', Issue 5, October 2016. Available at: <http://research.acer.edu.au/cgi/viewcontent.cgi?article=1004&context=indigupd>

⁷⁹ Universities Australia submission to the Behrendt Review, November 2011, cited in the Behrendt Review on page 59.

⁸⁰ Department of Education, 2012, 'Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People'. Available at: <https://docs.education.gov.au/node/36825>.

Case Study – GUMURRII Student Support Unit



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

Case Study – Wirltu Yarlur Aboriginal Education



The University of Adelaide runs Wirltu Yarlur Aboriginal Education, which is responsible for recruiting Indigenous students to the University's foundation and degree programs. As part of the strategy Wirltu Yarlur Student Success Strategy, the University offers the Wirltu Yarlur Tutorial Program which is a tailored program that provides opportunities for mentoring and extra tuition at no cost for Indigenous students. Students in their first year of tertiary study are especially encouraged to use the service. University of Adelaide also offers the Karnkanthi Indigenous Education Program, which targets high-achieving Indigenous students in Years 11 and 12/13. The programs offers a high expectations, high-support approach to help students succeed and is individually tailored to build on each student's personal and cultural strengths.

Case Study – Nura Gili



Nura Gili is the Indigenous Programs Unit at the University of NSW. It provides pathways to learning opportunities that embrace Indigenous knowledge, culture and histories. It provides personal and academic support to existing students to ensure their best chances of success.

The Indigenous Studies programs, plans and courses at UNSW are designed to prepare students to constructively navigate a range of debates around ethics and Indigenous knowledge that they are likely to encounter in their future professional engagements with Indigenous matters.

In addition, both staff and students at Nura Gili support community outreach programs to promote Indigenous Australian's aspirations to study at university. Through a range of activities, staff and students work to promote the centrality of arts, culture and heritage for Indigenous Australians - across UNSW and the wider community. For example, Nura Gili organises a number of popular pathways programs such as the UNSW Indigenous Winter School for students in Years 10, 11 and 12.

As these support units are delivered on an integrated basis, the outcomes of students who have received the support are difficult to track.

External to universities, there are also a range of programs available to support Indigenous students including with their transition into employment from further education. CareerTrackers is a national non-profit organisation which creates internship opportunities for Indigenous university students during their studies. The program help students connect with private sector employers through paid multi-year internships. CareerTrackers recognises that these internships achieve more than just transition into employment, but also improve university completion rates for Indigenous students.⁸¹ Data published by CareerTrackers show that only 40 per cent of Indigenous Australians who commence university will graduate from their Bachelor degrees. Among CareerTrackers participants, 94 per cent have completed their tertiary education which is higher than the graduation rate of the broader university student cohort at 63 per cent.

Chart 32: Proportion of individuals graduating from Bachelor-level studies



Source: The CareerTrackers and J.P. Morgan Social Impact Study 2016.

This demonstrates that Indigenous students are able to perform at an equivalent rate to the broader student body when they are connected with the relevant networks and support systems. As at 2016, there are 299 CareerTrackers alumni with a target of a further 186 graduates in 2017.

Employment

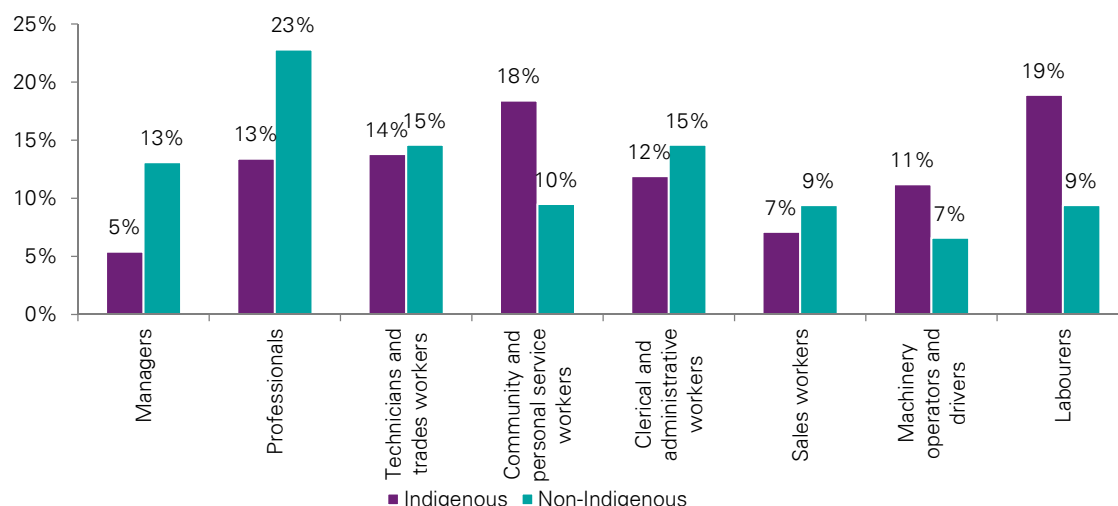
Indigenous students who complete further education are likely to experience employment opportunities and outcomes similar to non-Indigenous Australians

The performance between Indigenous and non-Indigenous cohorts in terms of employment is an even more difficult metric to compare, as there are countless employment pathways that an Indigenous student or graduate might take. However, consultations with subject matter experts indicate that if Indigenous students complete further education, then the employment outcomes and opportunities available to them are equal, if not greater than, their non-Indigenous counterparts. A finding that emerged on multiple occasions was that Indigenous students who can draw from both their Indigenous identity and mainstream cultures tend to be more successful. This was referred to as “walking in both worlds”. In the words of one of the academics consulted “*it is not just about Indigenous students joining the mainstream – they have to be recognised for their contribution, strengths and the value they bring. The most successful students are those that can draw from both their Indigenous identity and mainstream cultures.*”

In data provided by PM&C, Indigenous employment figures have been broken down by occupation. In 2012-13, the proportion of employed Indigenous Australians aged 15-64 years who were working in positions categorised as managers or professionals was five per cent and 13 per cent respectively. For comparison, non-Indigenous managers and professionals represent 13 per cent and 23 per cent of the respective working cohort.

⁸¹ CareerTrackers, 2017, ‘Shared Opportunities – The CareerTrackers and J.P. Morgan Social Impact Study’, *month unknown*, 2017. Available at: <https://www.jpmmorgan.com/jpmpdf/1320707423052.pdf>

Chart 33: Proportion of employed people aged 15-64 years, by occupation and Indigenous status, 2012-13



Source: Prime Minister and Cabinet; ABS (unpublished) Australian Aboriginal and Torres Strait Islander Health Survey 2012-13.

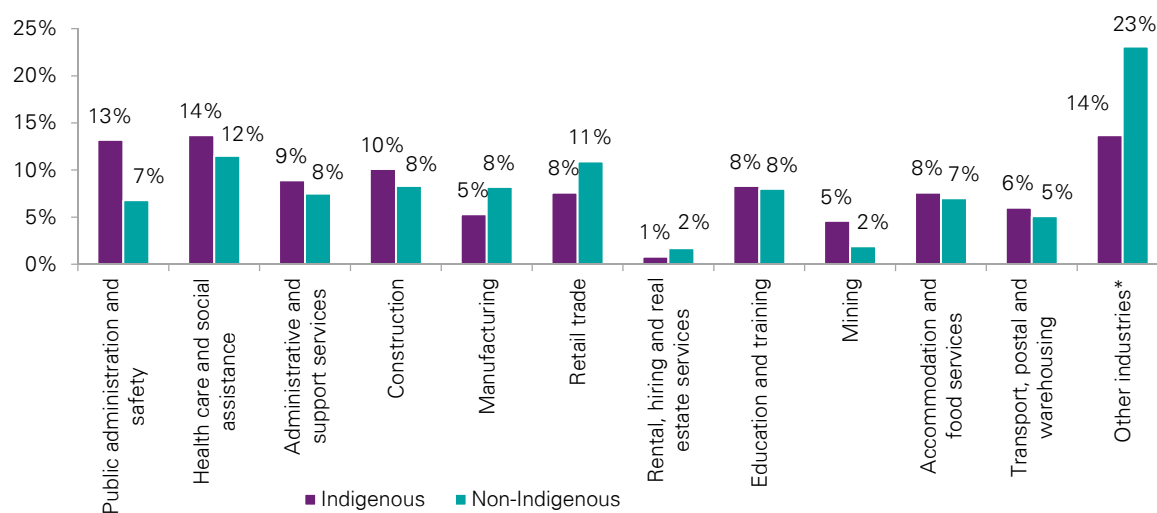
As illustrated in Chart 33 above, the proportion of Indigenous Australians working as community and personal service workers, machinery operators and drivers, and labourers exceed their non-Indigenous counterparts.⁸²

The report from PM&C found that nearly 26 per cent of all employed Indigenous Australians were working in the public sector. For comparison, less than 16 per cent of all non-Indigenous employed people were working in the public sector. As a proportion of all people of workforce age (15-64 years old), including those who do not have a job, this is 12.1 per cent for the Indigenous population and 12.0 per cent for the non-Indigenous population. There is, therefore, no difference in performance between Indigenous Australians and the broader community within the public sector. The PM&C report concluded that the employment gap between Indigenous and non-Indigenous Australians is within the private sector. This should be taken into consideration for when framing the messaging for GO Foundation communications.

Apart from the public sector, Indigenous Australians also have a stronger presence in a number of other sectors including health care and social assistance, construction and mining. Chart 34 illustrates the proportion of Indigenous Australians within different sectors of employment.

Chart 34: Proportion of employed people aged 15-64 years, by industry of employment and Indigenous status 2012-13

⁸² The occupations listed here relate to the Australian and New Zealand Standard Classification of Occupations (ANZSCO); Community and Personal Service Workers are defined by the ABS to assist Health Professionals in the provision of patient care, provide information and support on a range of social welfare matters, and provide other services in the areas of aged care and childcare, education support, hospitality, defence, policing and emergency services, security, travel and tourism, fitness, sports and personal services. Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/7F30DF0C9B18D129CA2575DF002DA5AF?opendocument>



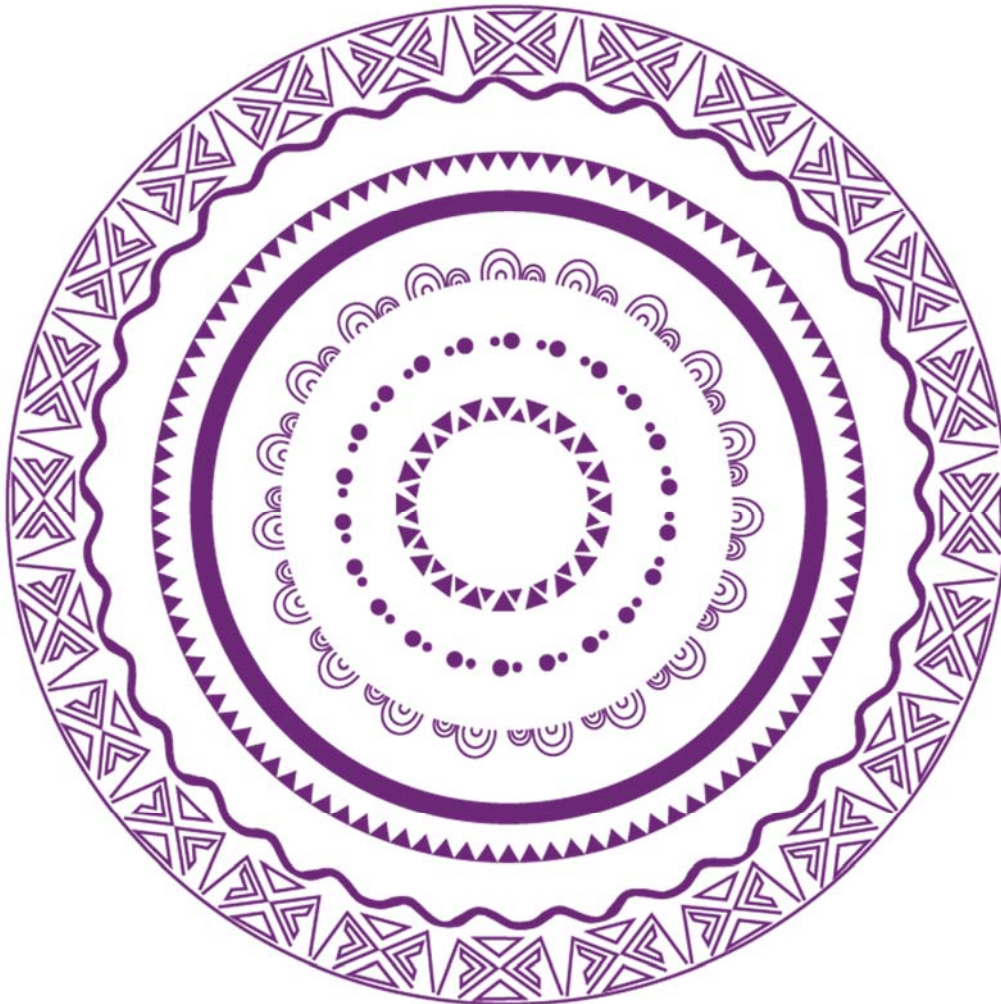
* Other industries include agriculture, forestry and fishing; electricity, gas, water and waste services; wholesale trade; information media and telecommunications; finance and insurance services; professional, scientific and technical services; and arts and recreation services.

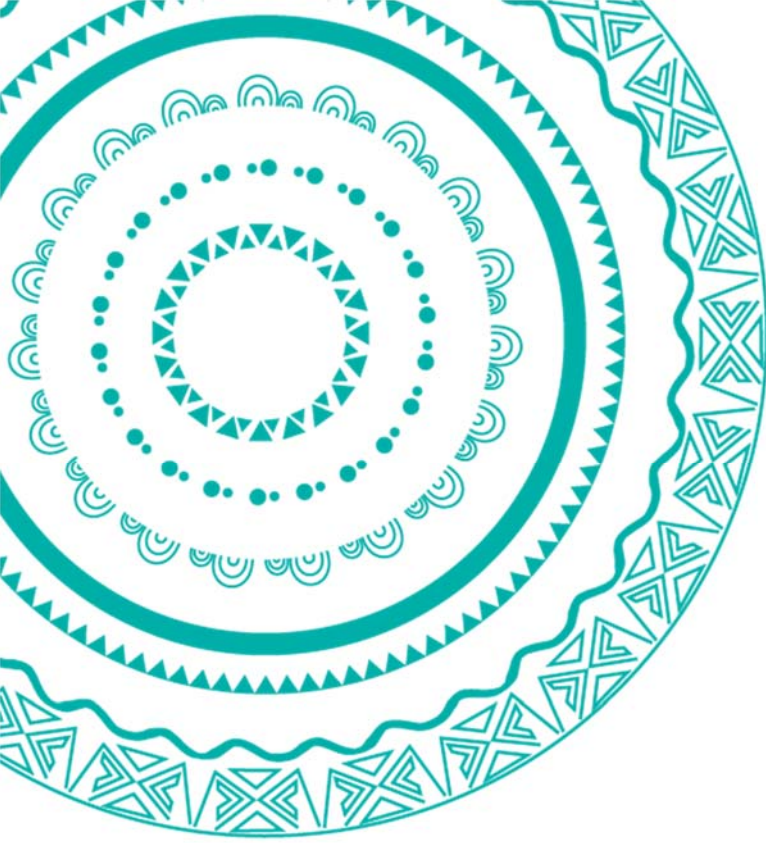
Source: Prime Minister and Cabinet; ABS (unpublished) Australian Aboriginal and Torres Strait Islander Health Survey 2012-13.

Communicating Indigenous performance in further education

The research above gives rise to considerations that may frame the communication of the performance of Indigenous students in the completion of further education:

- In light of the linkages between school attendance and school performance, communication with Indigenous Australians may seek to target attendance. Irrespective of remoteness, students who attend school will generally perform better than those who do not attend school. This is not specific to Indigenous students.
- The evidence shows that Indigenous students and employees can perform just as well as any other Australians, when they are given the opportunity. This message should be made clear to instil confidence in Indigenous school leavers. Additionally, this should be connected with messages relating to accessing the right support to put them in this position.





Conclusion

The literature is clear - higher levels of education are linked to increased empowerment of the individual. This empowerment takes many forms – offering social, cultural and economic benefits through promoting the uptake of further education in Indigenous communities.

In a landscape in which Australia currently faces skills gaps across specific segments of the economy; challenges in terms of future of workforces; and the emergence of technologies that continue to disrupt society - igniting a society where Indigenous Australians are empowered to pursue a pathway of their choice is likely to unlock benefits that will be realised by Australians broadly. Considering further education in this landscape, provides the imperative to ensure that all Australian's have equal opportunity to participate socially, culturally and economically.

The completion of further education by Indigenous Australians is likely to lead to increased earning capacity, greater employment opportunities, improved health and wellbeing outcomes, and reduced interaction with the justice system. Of course, such implications must be considered in light of individual circumstance, with a recognition of the diversity that exists across Indigenous communities.

If realised, it is likely that the benefits of a greater percentage of Indigenous Australians completing further education will be experienced beyond Indigenous communities, by communities across Australia. The literature suggests however, that there remains complex barriers that impact the enrolment into, and completion of further education by Indigenous students. These barriers differ based on individual circumstance, and are underpinned by a variety of factors. For example, socio-economic disadvantage, location, the cost of education itself as well as the support network surrounding the student all have the potential to shape a person's identity, and desire to pursue further education.

There are enablers that are likely to increase participation in further education by Indigenous Australians. These include enhancing the quality of school experience for Indigenous students to ensure that culture is recognised, such that the aspirations of the individual are developed. Additionally, providing access to career advice and guidance, and information on the various choices and pathways available for Indigenous Students is linked to increasing the quality of the school experience for Indigenous Australians. The work of the public sector in engaging with Indigenous communities is important in ensuring that Indigenous Australians are supported to make choices that suit their individual circumstances. So too is the role played by the private sector through companies, and NGOs like the GO Foundation. These supports may take many forms - mentoring programs, scholarships, grants, information, and career guidance.

While this report has been developed to support the GO Foundation in promoting the uptake of further education in Indigenous communities, it is clear from the literature that a concerted effort must be maintained to ensure that Indigenous Australians have the same choices as non-Indigenous Australians in entering and completing further education if they so wish.

It is in this context that there remains an imperative to act now, to continue the discussion and enact change that will collaboratively shape Australia's future.



Appendices

Appendix A: The Australian Education System

Overview of the Australian education system

Australia provides a three-tiered education system comprising primary, secondary and tertiary education. School education (primary and secondary) is compulsory between the ages of six and 16.⁸³

- Primary school: starting at Kindergarten/ Preparatory through to Year 6 or 7;
- Secondary school: from Year 7 or 8 through to Year 10;
- Senior secondary school: Years 11 and 12; and
- Further/tertiary education: Formal education beyond secondary education, including higher education, vocational education and training, or other specialist post-secondary education or training.⁸⁴

Further education in Australia

Further education refers to post-secondary education, including adult education and vocational education and training. This includes all education beyond secondary school level, including that delivered by universities, further education colleges and community providers.⁸⁵

Higher education and VET offer the two main avenues to further education in Australia.

Higher education in Australia

Higher education is considered fundamental to driving economic, social, intellectual and cultural development in Australia.⁸⁶ While traditionally provided by universities, higher education is increasingly provided by other higher education institutions as well as TAFE institutes or private colleges.⁸⁷

VET

VET is designed to deliver workplace-specific skills and knowledge through nationally recognised training. It enables students to attain qualifications within an industry-developed training package or an accredited course. VET is typically provided by TAFE institutes and RTOs. Courses are often shorter than university degrees, and closely linked to workplace capabilities. The achievement of a VET qualification signifies that a student has demonstrated competency against the skills and knowledge required to perform effectively in the workplace.⁸⁸

⁸³ Australian Government, *publication date unknown*, 'Australian education system', accessed 21 July 2019. Available at: <https://www.studyinaustralia.gov.au/english/australian-education/education-system>

⁸⁴ This report values the contribution of other post-secondary education options such as on-the-job training, entrepreneurship training, etc.

⁸⁵ NCVER, 2017, 'Glossary of VET', May 2017. Available at: <http://www.voced.edu.au/glossary-vet>

⁸⁶ Australian Government, *publication date unknown*, 'Higher education programs', accessed 21 July 2017. Available at: <https://www.education.gov.au/higher-education-0>

⁸⁷ Australian Government, *publication date unknown*, 'Higher education', accessed 21 July 2017. Available at: <http://www.australia.gov.au/information-and-services/education-and-training/higher-education>

⁸⁸ Australian Government, Department of Education and Training, *publication date unknown*, 'Vocational pathways', accessed 21 July 2017. Available at: <https://www.education.gov.au/vocational-pathways>

Key supports for Indigenous students undertaking further education

It is important to note that supports at various points of the education lifecycle will provide important assistance to Indigenous students (as noted in the research). There are however key government programs that exist to support students in further education. These are described below.

- **Indigenous Student Success Program (ISSP)** - This program commenced on 1 January 2017 delivered by the DPM&C funds universities to offer scholarships, tutorial assistance and other support. These supports (e.g. scholarships) vary as they are often provided through Indigenous Higher Education Units (IHEUs) at relevant universities.

IHEUs are located in universities all around Australia. These units provide support to Aboriginal and Torres Strait Islander students, create a network of Aboriginal and Torres Strait Islander students/academics and provide an Indigenous presence on all Australian university campuses. NSW IHEUs are listed below:

- Australian Catholic University - Indigenous Higher Education Unit
 - Charles Sturt University - Indigenous Student Centres
 - Macquarie University – Walanga Muru - Department of Indigenous Studies
 - Southern Cross University – Indigenous Australian Student Support Services
 - University of Newcastle - The Wollotuka Institute
 - University of New England - Oorala Centre
 - University of New South Wales - Nura Gili
 - University of Sydney - Koori Centre
 - University of Technology, Sydney - Jumbunna Indigenous House of Learning
 - University of Wollongong - Woolyungah Indigenous Centre
 - Western Sydney University - Badanami Centre for Indigenous Education.
- TAFE NSW provides assistance to support both to Indigenous and non-Indigenous Students via:
 - Financial support
 - Career planning
 - Counselling and career advice
 - Study support.

The Australian Qualification Framework

The AQF was designed by the Australian Government to ensure that qualification titles across the country are consistent and represent the same high standards of education. As such, the AQF is the national policy for regulated qualifications in Australian education and training. It underpins the **national system of qualifications in Australia, encompassing higher education, VET and schools**. The AQF incorporates the qualifications from each education and training sector into a single comprehensive national qualifications framework. The design of a nationally standardised system **ensures that there is a clear pathway for students to follow** and also makes it easier to transfer between different education providers, as there is no confusion caused by differing qualification titles and education levels.⁸⁹

Qualifications are differentiated according to the knowledge and skills required for their successful completion. **The AQF qualifications are ranked from levels 1 to 10. Generally, certificates I to IV**

⁸⁹ Australian Qualifications Framework, *publication date unknown*, accessed 21 July 2017. Available at: www.aqf.edu.au/ ; Good Education Group, *date unknown*, 'The Australian Qualifications Group', accessed 16 October 2017. Available at: <https://www.studiesinaustralia.com/studying-in-australia/why-study-in-australia/the-australian-qualifications-framework>

(levels 1 to 4) are classified as vocational, while associate degrees through doctoral degrees (levels 6 to 10) are classified as higher education. Table 1 below outlines the AQF Framework.

The AQF encourages pathways between the qualifications, including full credit towards bachelor degrees for time spent acquiring diplomas, advanced diplomas, and associate degrees. The framework is designed to encourage continuous capability development throughout a career. Students can enter and re-enter the system at different levels, depending on their needs.

Table 1: Australian Qualifications Framework

Level	Qualification type	General Classification
Level 1	Certificate I	Vocational
Level 2	Certificate II	Vocational
Level 3	Certificate III	Vocational
Level 4	Certificate IV	Vocational
Level 5	Diploma	Vocational or higher education
Level 6	Advanced Diploma; Associate Degree	Vocational or higher education
Level 7	Bachelor Degree	Higher education
Level 8	Bachelor Honours Degree; Graduate Certificate; Graduate Diploma	Higher education
Level 9	Masters Degree	Higher education
Level 10	Doctoral Degree	Higher education

Source: AQF, 2013.

As there is a continuum of knowledge and skills, the distinctions between the AQF vocational and higher education levels should be considered a matter of convention. A review by the Grattan Institute of Australian higher education suggests that VET should not be taken to imply that it is only concerned with vocational training (implying that higher education is not), since most higher education students are seeking vocational outcomes. In addition, there is overlap between vocational and higher education providers further blurring the distinction.⁹⁰

In higher education, the Tertiary Education Quality Standards Agency (TEQSA) is the national accrediting body of AQF qualification. Self-accrediting higher education providers, such as universities, are authorised by TEQSA to accredit their own AQF qualifications.⁹¹

While all governments have a shared role in national policy leadership for VET, State and Territory Governments have responsibility for determining arrangements for delivery within their jurisdictions. In the VET sector, there are three bodies authorised to accredit AQF qualifications. These include the Australian Skills Quality Authority (ASQA), Victorian Registration and Qualifications Authority, and The Western Australian Training Accreditation Council. Quality delivery of VET is considered an important component of Australia's national skills development and competitiveness.⁹²

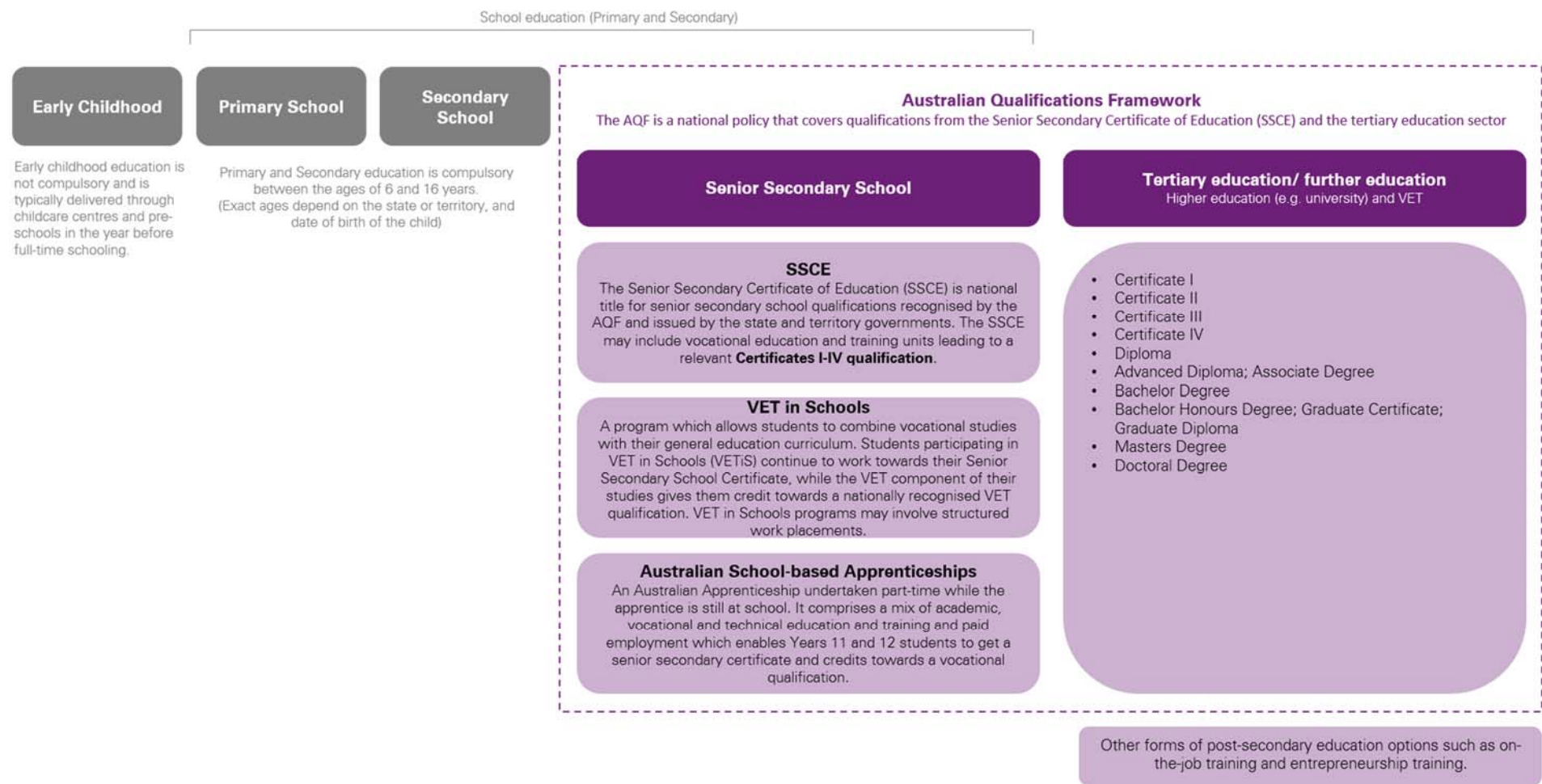
Figure 2 below provides an overview of the Australian education system.

⁹⁰ Grattan Institute, 2014, 'Mapping Australian higher education 2014-2015', October 2014. Available at: <https://grattan.edu.au/wp-content/uploads/2014/10/816-mapping-higher-education-2014.pdf>

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Figure 2 overview of the Australian education system



Appendix B: Reference List

The references used in this research report are found in the table below.

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54 Windley, G., 2017, 'Indigenous VET participation, completion and employment outcomes: change over the past decade', NCVER, Adelaide. Available at: <https://www.ncver.edu.au/publications/publications/all-publications/indigenous-vet-participation-completion-and-outcomes-change-over-the-past-decade>.

55 Zubrick, S.R., et al., 2006, 'The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People', Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

Appendix C: Data Request

The following data request was made to the Department of Education and Training on 25 July 2017. The purpose of the request was to understand the data available, including that which was understood to be held by the Department of Prime Minister & Cabinet and used to inform the Closing the Gap reports to date.

Data was received from the Department of Education and Training on 24 August 2017 (outlined below). It was noted that the 2016 Census results for certain data would be available from the ABS table builder from November 2017.

Table 2: Request for data

Datasets requested

- Indigenous and non-Indigenous enrolment data, stratified by location (major cities, inner regional, outer regional, remote and very remote) and gender
- Indigenous (and non-indigenous) enrolment data by subject / area, stratified by location (major cities, inner regional, outer regional, remote and very remote) and gender (if applicable)
- Indigenous (and non-indigenous) attendance rates stratified by location (major cities, inner regional, outer regional, remote and very remote); and gender (if applicable)
- Indigenous (and non-indigenous) graduation rates, stratified by exit point (Year 6, Year 10, Year 12); location (major cities, inner regional, outer regional, remote and very remote) and gender (if applicable);
- Number, value and uptake of annual supports (grants, scholarships and programs available to communities), stratified by location (as per above); and by gender (if applicable)
- Indigenous (and non-indigenous) employment rates, stratified by location (major cities, inner regional, outer regional, remote and very remote)
- Average / median salaries for entry level jobs across industries
- Indigenous employment rates across industries and occupations (potentially stratified by ANZSIC and/or ANZSCO categories)
- NAPLAN results of Indigenous students by location (as defined above or as applicable) and across subject area (as provided by NAPLAN) and across cohort

Datasets received

- Excel spreadsheet pertaining to education and employment data underpinning the PM&C Closing the Gap Report. Specifically, the following aggregated datasets were received:
 - Enrolment in early childhood education in the year before full time school, by Indigenous status and state/territory, 2015 (per cent);
 - Proportion of children enrolled in early childhood education in the year before full time schooling who had attended by Indigenous status and State/Territory, 2015 (per cent);
 - Proportion of children enrolled in early childhood education in the year before full time schooling who had attended^[1] by Indigenous status and Remoteness Area, 2015 (per cent);
 - Indigenous student attendance rates (per cent) Year 1 to 10 combined, by jurisdiction, Semester 1, 2014 and 2016;
 - Student attendance rates (per cent) Year 1 to 10 combined, by Indigenous status and remoteness, Semester 1, 2016;
 - Proportion of students attending school 90 per cent or more of the time (per cent), Year 1 to 10 combined, by Indigenous status and remoteness, Semester 1, 2016;

Datasets received

- Proportion of students reaching National Minimum Standards for Year 5 numeracy by Indigenous status and remoteness, 2016;
 - Proportion of Indigenous students reaching National Minimum Standards for Year 3 reading State/Territory, 2008 and 2016;
 - Proportion of Indigenous 20-24 year olds with Year 12 or equivalent attainment, by State/Territory, 2008 and 2014-15;
 - Proportion of Indigenous 20-24 year olds with Year 12 or equivalent attainment, by remoteness, 2008 and 2014-15;
 - Indigenous working age (15-64), employment rates 1994 to 2014-15 (per cent);
 - Indigenous working age (15-64) employment rates, by State/Territory, 2008 and 2014-15 (per cent);
 - Indigenous working age (15-64) employment rates, by sex, 1994 – 2014-15 (per cent);
 - Employment rate for persons aged 20 to 64 years by level of highest educational attainment, by Indigenous status, 2011;
 - Indigenous working age (15-64) unemployment rates, by Indigenous status and remoteness – 2014-15 (per cent);
 - Indigenous working age (15-64) labour force participation rates, by sex and Indigenous status, 2014-15 (per cent);
 - School attainment of Indigenous adults (18 years and over), by disability status, 2014-15 (per cent); and
 - Indigenous working age (15-64) employment rates by disability status, 2014-15, (per cent).
- Short research paper providing an overview on the different types of jobs that Indigenous and non-Indigenous people hold.
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Appendix D: Methodology

Overview

The development of the research report was based on four key phases:

01 Phase 1: Scoping study



Desktop research and hypothesis development, resulting in the confirmation of the scope and parameters for research, via the conduct of a preceding scoping study. The scoping study was delivered on 29 August 2017 to the GO Foundation.

02 Phase 2: Detailed research and analysis



A second tranche of desktop research was undertaken, focusing on publicly available research and information provided by the Department of Education and Training and PM&C. This research was analysed to identify key trends and formulate a set of initial findings of the Research Report.

03 Phase 3: Stakeholder consultations



Testing of initial findings with up to five academics, in the field of Indigenous Education. This consultation process sought to validate the initial findings of the report and identify any gaps in the research.

04 Phase 4: Finalisation and reporting



Reporting and finalisation of the research report, incorporating feedback from Phase 3, and relevant stakeholders.

These phases are outlined below.

Phase 1: Scoping study

The purpose of the scoping study was to set out the framework for a further research exercise to provide an evidence base to explore the correlation between post-secondary education and better outcomes for Indigenous students. The key tasks for this phase included:

- **Outlining the scope of the research exercise, including key limitations and assumptions:** this was achieved by considering the Terms of Reference for the Engagement and meeting with the GO Foundation and their key partners to clearly understand the purpose of the project and key deliverables. The scope of the research exercise was also informed by an initial desktop scan of research to assess the availability of open access data sources.

- **Identifying potential data sources and performing high-level analysis of research:** an initial desktop review of research on Indigenous further education was undertaken to develop a broad understanding of the issue and to determine the data available in the public domain. Building on this, four themes emerged relating to the *benefits* of further education, key *barriers*, *enablers* and *performance of Indigenous students* (including relative to non-Indigenous students) in the Australian education system. Key publications and data sources that were consulted included:
 - The PM&C Closing the Gap Prime Ministers Report 2017;
 - ABS data including the Census of Population and Housing;
 - scan of data and publications available on the NCVER; and
 - other relevant government websites and reports, open access journal articles and research papers identified through google search.
- **Establishing research questions and indicators to be addressed:** based on the high-level analysis of research carried out, four hypotheses were developed that would be tested during the next phase of research (Phase 2: detailed research and analysis).
- **Issuing a data request:** a request for data on specific indicators (based on the high-level analysis of research) was issued to the Department for Education and Training and PM&C to be shared with the GO Foundation and KPMG Arrilla Indigenous Services for the purposes of this Engagement (see **Appendix C – Data Request**).
- **Outlining the timeline, key milestones, and next steps:** establish a clear pathway forward, an indicative timeline, together with key milestones, deliverables and next steps for the delivery of the research report to the GO Foundation for consideration prior to undertaking the subsequent phase of work.

Phase 2: Detailed research and analysis

The purpose of the detailed research and analysis phase was to build on the findings of the initial desktop scan of research carried out during Phase 1. This was achieved by carrying out a more comprehensive study of the literature and data available on Indigenous further education. The key tasks for this phase were as follows:

- **Hypotheses testing:** the approach to research was guided by the four research hypotheses (developed in Phase 1) which were tested by examining the evidence base through analysis of publicly available information and data shared by the Department of Education and Training and PM&C.
- **Analysis of quantitative and qualitative secondary data sources:** a variety of data sources were considered to supplement the findings from Phase 1: Scoping Study. Relevant quantitative and qualitative information available through secondary data sources were analysed. A full list of sources consulted during the research exercise is available in **Appendix B – Reference List**. Broadly, these included:
 - aggregated data received by the Department of Education and Training pertaining to Indigenous education indicators such as school enrolment, attendance, performance (NAPLAN), year 12 attainment, and employment rates by education level;
 - published research reports available online identified through google search and google scholar, open-access journal articles, and the publication portal of the NCVER;
 - data published by the ABS including the Census of Population and Housing; and
 - information shared by academics during the stakeholder consultation phase of this research exercise i.e. draft paper on the intergenerational effects of education on Indigenous child outcomes.

Phase 3: Stakeholder consultations

Stakeholder consultations were conducted with a select sample of academics to test and validate the research findings from earlier phases (Phase 1: Scoping Study and Phase 2: Detailed research and analysis) and to support the finalisation of the research report. See **Appendix E - Engaged Stakeholders**.

The key tasks for this phase were as follows:

- **Identification of key stakeholders:** academics were identified through the desktop review exercise, based on their published research on Indigenous further education and invited by email to participate on a voluntary basis in a 45-minute consultation via teleconference.
- **Semi-structured interviews:** the discussions took place as semi-structured interviews with five academics on an individual basis. Each consultation was guided by the four research questions below. This approach was selected so as to allow the academic to provide insights based on their research and experience and allow a free-flowing discussion while serving the purpose of testing the research hypotheses and validating the research findings from the desktop review. Participants were also provided the opportunity to share any additional insights or comments.
 - What benefits are derived by Indigenous students who complete secondary (and subsequently further education)?
 - What barriers are encountered by Indigenous students in undertaking further education?
 - What drivers underpin Indigenous students enrolling in further education?
 - In light of the above, is there an impact on the performance of Indigenous students compared to non-indigenous students in completing further education?
- **Thematic analysis:** the insights from academics were analysed based on key themes and reflected in the research report findings. The notes taken during the consultations were shared with the GO Foundation in a separate document.

Phase 4: Finalisation and reporting

Having tested and validated the initial findings of the research report, Phase 4 centred upon reporting and finalisation. The key tasks for this phase were as follows:

- **Triangulation of data:** the research findings elicited from phases 1 to 3 were triangulated to verify findings (increase their credibility and validity).
- **Draft report:** the report was drafted based on the key findings and analysis from phases 1 to 3. A consideration was to deliver insights for the GO Foundation's broader strategic communications project.
- **Final report:** a draft report was shared with the GO Foundation to provide feedback before finalisation.

Appendix E: Engaged Stakeholders

Leading academics with significant experience in Indigenous affairs, particularly in the context of conducting research on Indigenous participation in further education were selected to test the research hypotheses and provide any further insights from their experience working in the field.

The following table provides a list of the academics that were invited to participate as part of the stakeholder consultation process as well as their experience and relevance to the research report.

The insights from the stakeholder consultation were provided to the GO Foundation as a separate document. This included an overview of the consultation approach and key findings.

Name	Role & Organisation	Relevance	Consultation Date
Susan Poetsch	Lecturer – Indigenous Education, University of Sydney	Susan Poetsch is undertaking a PhD thesis as part of the Aboriginal Child Language Acquisition Project. Susan teaches units of study in Indigenous education, Indigenous languages education in the School of Education and Social Work, and units of study in the Indigenous Australian Studies major in the Faculty of Arts and Social Sciences at the University of Sydney. Prior to this, Susan was a curriculum officer in the Aboriginal Curriculum Unit of the Board of Studies NSW. Susan was identified as a key stakeholder based on her experience as a lecturer in Indigenous Education and research focus on Aboriginal children.	Consultation held 19/09/2017
Georgina Windley	Research Officer, National Centre for Vocational Education Research	Georgina Windley has published a number of reports on Indigenous participation in further education with a focus on VET. Recent publications include the research report '<i>Indigenous VET participation, completion and outcomes: change over the past decade</i>'. Georgina has also facilitated webinar panel discussions with other leading researchers to discuss the gap that has emerged from her research in the Indigenous VET space. Georgina was identified as a key stakeholder based on her extensive research on Indigenous participation in further education, particularly in VET.	Consultation held 20/09/2017
John Guenther	Research Leader, Education and Training, Batchelor Institute of Indigenous Tertiary Education	Over the last 10 years, John Guenther has conducted research and evaluation projects which have focused on remote contexts, particularly in the Northern Territory of Australia. A recurring theme in John's work is the importance of learning, whether it be for adults, young people or children. John is also interested in education systems and their impact on learning. In recent work on remote education systems a focus has been on the importance of Indigenous knowledge systems and	Consultation held 22/09/2017

Name	Role & Organisation	Relevance	Consultation Date
		their accompanying epistemologies, ontologies, axiologies and cosmologies. John was identified as a key stakeholder based on his deep understanding of Indigenous education in remote areas of Australia.	
Nicholas Biddle	Senior Fellow, Centre for Aboriginal Economic Policy Research at the Australian National University	Nicholas Biddle is a quantitative social scientist and holds a PhD in Public Policy from the ANU where he wrote his thesis on the benefits of and participation in education of Indigenous Australians. Nicholas is currently working on the Indigenous Population project, funded by the Commonwealth and State/Territory Governments. Nicholas has recently completed a Research Fellowship for the National Centre for Vocational Education Research (NCVER) and previously held a Senior Research Officer and Assistant Director position in the Methodology Division of the Australian Bureau of Statistics. Nicholas was identified as a key stakeholder based on his role as a Senior Fellow and extensive quantitative research experience in Indigenous affairs.	Consultation held 27/09/2017

