



More Aboriginal and Torres Strait
Islander Teachers Initiative

Report into the Retention and Graduation of Aboriginal and Torres Strait Islander Students Enrolled in Initial Teacher Education

Queensland University of Technology

December 2012

ACDE

AUSTRALIAN COUNCIL OF
DEANS OF EDUCATION INC.

Education, the Foundation of a Nation

Report into the Retention and Graduation of Aboriginal and Torres Strait Islander Students Enrolled in Initial Teacher Education

Authors

Professor Wendy Patton:	Executive Dean, Faculty of Education Queensland University of Technology
Professor Anita Lee Hong:	Director, Oodgeroo Unit Queensland University of Technology
Dr Jo Lampert:	Senior Lecturer, Faculty of Education Queensland University of Technology
Dr Bruce Burnett:	Senior Lecturer, Faculty of Education Queensland University of Technology
Joel Anderson:	Widening Participation Program Coordinator, Oodgeroo Unit, Queensland University of Technology

This report may be cited as:

Patton, W., Lee Hong, A., Lampert, J., Burnett, B., & Anderson, J., 2012, *Report into the Retention and Graduation of Aboriginal and Torres Strait Islander Students Enrolled in Initial Teacher Education*. More Aboriginal and Torres Strait Islander Teachers Initiative, University of South Australia

Web reference: www.matsiti.edu.au/acde-2012-report

ISBN 978-0-646-59374-6 (PDF)



With the exception of logos and any other material where copyright is owned by a third party, all material presented in this document is provided under a Creative Commons Attribution 3.0 Australia <http://creativecommons.org/licenses/by/3.0/au>.

Published by More Aboriginal and Torres Strait Islander Teachers Initiative, University of South Australia. E info@matsiti.edu.au W www.matsiti.edu.au

Project Sponsor

This project is funded by the Australian Government Department of Education, Employment and Workplace Relations (DEEWR) through the *More Aboriginal and Torres Strait Islander Teachers Initiative (MATSITI)*.

Contents

Acknowledgements.....	4
Foreword	5
Abbreviations and glossary.....	6
1 Executive Summary	7
2 Project background.....	8
3 Literature review	9
3.1 Introduction	9
3.2 Issues in Aboriginal and Torres Strait Islander higher education	9
3.3 Aboriginal and Torres Strait Islander teacher education: an historical perspective.....	13
3.4 More Aboriginal and Torres Strait Islander teachers: Why it matters	14
3.5 Aboriginal and Torres Strait Islander teacher education	15
3.6 Aboriginal and Torres Strait Islander perspectives and knowledges	16
3.7 Models of teacher education for Aboriginal and Torres Strait Islander peoples.....	17
4 Findings: Initial teacher education data scan	21
4.1 Analysis of scan data	23
5 Findings: Students' retention and graduation factors	30
5.1 Institutional structures and procedures	30
5.2 Support of Aboriginal and Torres Strait Islander students.....	32
5.3 Coursework.....	35
5.4 Course-specific issues	37
7 Findings: Student journeys	38
8 Recommendations for further exploration	44
9 References	46
10 Appendices.....	52
10.1 MATSITI–ACDE Steering and Reference Groups	52
10.2 Table of interviews conducted.....	53
10.3 Documents used during action planning process.....	54
10.4 Guide questions used in action planning process.....	56
10.5 Blank template used in action planning process	57
10.6 Participating universities	58

Figures

Figure 1: Indigenous ways of knowing (<i>Yunkaporta & McGinty, 2009</i>)	16
Figure 2: The project research process	21
Figure 3: Percentage of student ITE enrolments	24
Figure 4: State and Territory percentages of students studying ITE.....	24
Figure 5: Student course completions	25
Figure 6: Numbers of enrolled in 4-year degree programs.....	27
Figure 7: Numbers enrolled in graduate entry programs.....	27

Tables

Table 1: Final ITE scan data.....	22
Table 2: Course enrolments in education	23
Table 3: Student course commencement/completions 2007–2012	24
Table 4: Comparison of commencing versus course completions.....	26
Table 5: Number of students enrolled in 4-year degree courses	26
Table 5: Gender distribution of ITE student enrolments	28
Table 6: Age groupings	28
Table 7: Study mode	29
Table 8: Basis of entry.....	29

Acknowledgements

This research project would not have been possible without the support and dedication of a number of individuals and organisations.

Firstly, thanks to the many pre-service teachers who shared their views, opinions and journeys with us. Thanks also to the university staff, both in the Indigenous Higher Education Centres and in Schools and Faculties of Education, for their openness and willingness to support this research.

The research would not have been possible without the expert guidance of Professor Peter Buckskin, Professor Paul Hughes and Dr Kaye Price. We also thank Mark Tranthim-Fryer and Brian Marshall for regular and ongoing conversations.

We would like to thank the Australian Council of Deans of Education for guiding the course of this research project from the beginning and providing valuable resources, advice and support.

Thanks especially to Professor Anita Lee Hong, Director, Oodgeroo Unit, Queensland University of Technology, and Joel Anderson, Widening Participation Program Coordinator, Oodgeroo Unit, Queensland University of Technology. We are so grateful to have had such expert advice and feel privileged to have been part of such a productive team.

Finally we would like to thank Professor Lynette Henderson-Yates (Deputy Vice Chancellor, University of Notre Dame) for her inspirational keynote speech at the final MATSITI forum in Sydney in September.

Foreword

The More Aboriginal and Torres Strait Islander Teachers Initiative (MATSTI) has provided a unique opportunity for the Australian Council of Deans of Education (ACDE) and Aboriginal and Torres Strait Islander Higher Education Centres to focus action aimed at significant increases in the retention, success and graduation rates of Aboriginal and Torres Strait Islander teacher education students.

With the introduction of the Australian National Curriculum and the National Standards for Australian Teachers and Principals, there is no more important time than the present to increase the numbers of Aboriginal and Torres Strait Islander teachers in our schools and provide opportunities for postgraduate professional development for those currently employed in the teaching workforce and aspiring to leadership positions.

Increasing the numbers of Aboriginal and Torres Strait Islander teachers in the workforce will strengthen the capacity of Australian teachers to engage in a more culturally responsive pedagogy of Aboriginal and Torres Strait Islander children and the teaching of Aboriginal and Torres Strait Islander content across the new National Curriculum.

The faculties and schools of education, in collaboration with Aboriginal and Torres Strait Islander Education Centres within the universities, have committed themselves to do more to proactively promote teaching as a preferred option for tertiary studies and a future professional career.

Our work to date has identified the importance of stemming the attrition rate and increasing completion rates of Aboriginal and Torres Strait Islander students in preservice education courses. This requires urgent action and attention from the Deans and Heads of Schools of Education and Aboriginal and Torres Strait Islander Higher Education Centres.

The findings presented in this report have highlighted that strategically working together to provide more focused support within the education faculties and schools of education provides capacity to improve the learning experience of Aboriginal and Torres Strait Islander teacher education students.

We thank the Australian Government for supporting the MATSTI project, as it has provided the opportunity for the ACDE and Aboriginal and Torres Strait Islander Higher Education Centres to come together on common ground to complete this important work of self-reflection and critique. We believe we have developed a relationship that will be sustained into the future, thereby creating a culture of change that is built upon continued respectful and meaningful dialogue.



Professor Peter Buckskin PSM FACE
MATSTI Project Director



Professor Toni Downes
ACDE President 2009 - 2012

December 2012

Abbreviations and glossary

ACDE	Australian Council of Deans of Education
ABS	Australian Bureau of Statistics
ABSTUDY	Aboriginal Study Assistance Scheme
AEW	Aboriginal Education Worker
AIEW	Aboriginal and Torres Strait Islander Education Worker
FTE	Full-time Equivalent
HECS	Higher Education Contribution Scheme
IESIP	Indigenous Education Strategic Initiatives Program
IHEAC	Indigenous Higher Education Advisory Council
ITAS-TT	Indigenous Tutorial Assistance Scheme–Tertiary Tuition
ITE	Initial Teacher Education
MATSITI	More Aboriginal and Torres Strait Islander Teachers Initiative
Professional Experience	Traditionally called Practicum or ‘Prac’. Also known as Field Experience or Work Integrated Learning (WIL)
RATEP	Remote Area Teacher Education Program
TAFE	Technical and Further Education

The term Aboriginal and Torres Strait Islander is used in this report to represent diversity, except in cases where the term Indigenous is used in the original term or literature (e.g. Indigenous Higher Education Centres).

1 Executive Summary

This project, as part of the More Aboriginal and Torres Strait Islander Teachers Initiative (MATSI), focused on improving the retention, success and graduation rates of Aboriginal and Torres Strait Islander teacher education students. This subset of the broader MATSI Initiative was led by the Australian Council of Deans of Education (ACDE) and managed by the Faculty of Education, Queensland University of Technology (QUT).

The 2012 project underpins a series of national strategies to increase the recruitment, retention and leadership capability of Aboriginal and/or Torres Strait Islander peoples working as teachers in Australian schools. Research conducted was largely exploratory – primarily consisting of analysis of enrolment and programmatic data, identification of data gaps and small focus groups and interviews at a range of Australian universities that have initial teacher education programs.

While a significant body of literature exists around the experiences of Aboriginal and Torres Strait Islander students in higher education, there has been somewhat less focus on the experience of students in initial teacher education (ITE). Though the call for more Aboriginal and Torres Strait Islander teachers has a long history, this research suggests that Australian teacher education programs nationwide are struggling to retain and graduate education students from these backgrounds.

While programs and outcomes vary, depending on the type of course and context (urban, rural, remote/cohort, mainstream, block, away-from-base), clear similarities are evident with respect to both barriers to success and successful strategies for retaining and graduating Aboriginal and Torres Strait Islander teachers.

Some crucial factors that contribute to success are well known. These include supporting students through enrolment; providing smooth transition into university life; supporting students culturally, social, academically and with financial assistance when required. This study confirmed that these factors still need to be addressed. When support structures are in place, students know how and where to access support.

More specific factors contributing to success include flexibility in course progression and the need for professional development and awareness-raising of non-Indigenous staff and faculty. This research also identified what we came to understand as potential 'walking points' – the critical times when Aboriginal and Torres Strait Islander students were more likely to drop out. These include the first year of study, around exams and assessment, and after professional experience.

The following areas emerged as deserving of future exploration: the experiences of Aboriginal and Torres Strait Islander students on professional experience; the positive and negative aspects of online learning; and the need for students to feel culturally safe in their Aboriginal and Torres Strait Islander education subjects. These, as well as other specific areas of concern identified through the data, are new areas for exploration.

Indigenous Higher Education Centres play important roles in supporting Aboriginal and Torres Strait Islander teacher education students. These centres provide significant support for those students who 'link up' with them early in their enrolment. Indigenous Higher Education Centres are often places of cultural safety, as well as advocates and providers of information, counselling and academic support.

This research suggests that schools and faculties of education vary in their own delivery of support for Aboriginal and Torres Strait Islander ITE students. Stronger partnerships between ITE programs and centres would enable both the tracking of students and the provision of support along the way. Such partnerships would offer course-specific guidance because it is only through institutionally based partnerships that lasting and productive strategies can be developed.

This research culminated in a one-day forum at which deans of schools and faculties of education met alongside heads of Indigenous Higher Education Centres to develop institutional action plans. These plans, many of which include memorandums of agreement, formalise internal institutional strategies that target the retention, success and graduation rates of Aboriginal and Torres Strait Islander teacher education students and, as such, constitute a tangible and demonstrable way in which the More Aboriginal and Torres Strait Islander Teachers Initiative is making a difference.

2 Project background

The More Aboriginal and Torres Strait Islander Teacher Initiative (MATSITI) is a four-year (2011–2015) program that aims to increase the number of Aboriginal and Torres Strait Islander people who both enter and remain within professional teaching positions in Australian schools. MATSITI is aligned with the Council of Australian Governments (COAG) *National Indigenous Reform Agreement* and associated *Closing the Gap* targets to address Aboriginal and Torres Strait Islander disadvantage, and constitutes a \$7.5 million initiative announced by the Commonwealth Minister for Schools, Early Childhood and Youth, the Hon. Peter Garrett MP, in July 2011. MATSITI is funded by the Department of Education, Employment and Workplace Relations and is led by Professor Peter Buckskin (Project Director), Emeritus Professor Paul Hughes (Research Lead) and Dr Kaye Price (Research Lead), with secretariat and research support provided by the David Unaipon College of Indigenous Education and Research located within the University of South Australia.

In 2011, the Australian Council of Deans of Education (ACDE) formed a partnership with the MATSITI Project Team to build institutional leadership and capacity throughout Australian schools and faculties of education in order to improve the retention and graduation of Aboriginal and Torres Strait Islander students studying initial teacher education (ITE) programs. The ACDE subsequently invited their schools and faculties of education to tender for research that collected a range of data connected to Aboriginal and Torres Strait Islander students enrolled within courses that lead to a preliminary teaching qualification (i.e., the initial qualification that enables teacher registration and thus qualifies a person to be employed in an unsupervised full-time teaching position). The Faculty of Education at Queensland University of Technology (QUT) was subsequently selected to lead the MATSITI–ACDE partnership and the process began with close consultation between QUT’s Faculty of Education Dean, Professor Wendy Patton, and QUT’s Oodgeroo Unit Director, Professor Anita Lee Hong, prior to submitting the MATSITI–ACDE Research Plan.

On 16 March 2012 the first MATSITI–ACDE meeting of deans of education was held in Sydney. At this meeting a research and consultative process was agreed on, as well as the shape in which an Australia-wide institutional scan of Aboriginal and Torres Strait Islander ITE students would be conducted. A key aim of the research/process was the goal of all schools and faculties of education returning to Sydney in September 2012 to work on action plans addressing retention and graduation rates of Aboriginal and Torres Strait Islander ITE students specific to their own institutions. This current report outlines the key findings from the research, while at the same time documenting significant outcomes from the MATSITI–ACDE partnership.

MATSITI–ACDE also contracted an evaluation of this research with academic staff from Deakin University’s School of Education and Deakin University’s Institute of Koorie Education jointly undertaking an evaluation on behalf of the MATSITI Managing and Project Reference Committee. This evaluation specifically focused on project processes and the sustainability of the project at the national and institutional levels as it moves into the next phases (2013–2015).

Financial statements related to the research process will be reported separately to MATSITI by the ACDE.

This report begins with an overview of the literature. This overview contains analysis of over 20 policy documents and government reports, as well as web-based descriptions of historical and current models of Aboriginal and Torres Strait Islander teacher education, including mainstream education programs, cohort-based models and community models. This discussion is followed by the findings from the research beginning with an overview of Aboriginal and Torres Strait Islander Initial Teacher Education student data provided by 34 institutions across Australia (an incomplete dataset from one of these universities was not included). The next section examines quantitative data and insights gained from over 70 interviews with current Aboriginal and Torres Strait Islander students studying an initial teacher education course in institutions across Australian states and territories. The report in this section focuses on factors affecting the retention and graduation of Aboriginal and Torres Strait Islander Initial Teacher Education students. These issues and themes are further contextualised in the final section of the findings chapter, where the ‘journeys’ or ‘stories’ of several Aboriginal and Torres Strait Islander Initial Teacher Education students are told. The report concludes with a discussion of areas that would benefit from more research and exploration.

3 Literature review

3.1 Introduction

Aboriginal and Torres Strait Islander teachers are significantly underrepresented in Australia, making up less than 1% of teachers in schools. Although the need to increase the numbers of Aboriginal and Torres Strait Islander teachers has been highlighted for many years, little has changed nationally since the 1980s when Hughes and Willmot (1982) called for 1000 Indigenous teachers by 1990.

This section of the report focuses on an initial literature review of the preparation of Aboriginal and Torres Strait Islander teachers that was conducted as part of the MATSITI-ACDE project. Alongside the scholarly literature, the review includes analysis of over 20 policy documents and government reports, as well as web-based descriptions of historical and current models of Aboriginal and Torres Strait Islander teacher education, including mainstream education programs and cohort-based and community models. This review was presented to a series of state-based meetings with deans of education and leaders from Aboriginal and Torres Strait Islander Higher Education Centres. It not only provided the meetings with an overview of previous literature in the area, but also served as a fertile platform to discuss issues specifically relevant to the context of that state. Although the literature provides examples of successful models of Aboriginal and Torres Strait Islander teacher education, it also sheds light on longstanding and interrelated factors that continue to have an impact on the level of success of teacher education for Aboriginal and Torres Strait Islander peoples.

3.2 Issues in Aboriginal and Torres Strait Islander higher education

This first section of the literature review summarises identified issues and reports on perceptions of key stakeholders on matters related to the participation of Aboriginal and Torres Strait Islander higher degree students in general. The remainder of the review focuses on teacher education more specifically. A common theme across both sections is a focus on the retention and graduation of Aboriginal and Torres Strait Islander students and how these issues might inform a more nationally directed and collaborative approach.

Historically, participation in higher degree research in the Australian academy, and the knowledge created by and disseminated within same, has drawn on a White, Western tradition that has come under increasing scrutiny in recent years. Central to this critique is the degree to which higher education institutions represent a complex system of power relations within modern Australian society to which not all people have equitable access. According to the extensive corpus of literature on this point, Aboriginal Australians are significantly and chronically underrepresented in both student and staff numbers within Australian universities (DiGregorio, Farrington, & Page, 2000; Nakata, 2004; Trudgett, 2011). Furthermore, there is little recognition given to Aboriginal and Torres Strait Islander Studies and a lack of visibility of Aboriginal and Torres Strait Islander culture and knowledge on university campuses (Herbert, 2010). Ironically, however, Aboriginal and Torres Strait Islanders are themselves the most researched people in Australia, with most of this research conducted by non-Indigenous researchers (Aboriginal Research Institute, 1993).

Nonetheless, awareness of these issues has grown through, for example, the concerns highlighted in the Bradley Review's 10-year plan to reform higher education (Bradley, Noonan, Nugent, & Scales, 2008). Recommendation 30 states that 'the Australian Government [should] regularly review the effectiveness of measures to improve higher education access and outcomes for Aboriginal and Torres Strait Islander people in consultation with the Indigenous Higher Education Advisory Council'. It is important to stress that this recommendation sits within a broader discourse driven by a national agenda directed towards social inclusion.

Concerns over participation, retention and support of Aboriginal and Torres Strait Islanders within higher education institutions in general are well documented. The recent Federal Government-commissioned report, *Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People* (Behrendt, Larkin, Griew, & Kelly, 2012), chaired by Professor Larissa Behrendt, builds on the hard work universities have undertaken to address higher education inequalities between Aboriginal and Torres Strait Islanders

and the general population. Key recommendations of this report include more than doubling the proportion of Aboriginal and Torres Strait Islander students at universities. The report identifies the need for social, financial and academic support, suggesting a fundamental shift from often-marginalised Indigenous Higher Education Centres bearing the full brunt of responsibility to a whole-of-university effort. The report calls for an increased commitment from universities to raise enrolment, retention and completion rates for Aboriginal and Torres Strait Islander students.

Michelle Trudgett (2009) claimed that the disparity between Indigenous and non-Indigenous students participating in higher education programs has progressively broadened and that it is therefore essential to find out what is impeding Aboriginal and Torres Strait Islanders from pursuing and completing degrees at Australian universities. Numerous barriers are regularly identified in the scholarly literature on this point, including financial hardship and the lack of institutional support (Asmar, Page, & Radloff, 2011). Underrepresentation in postgraduate study is clearly related to issues of social class. Social class is an underlying theme within the recent federal Higher Education Participation and Partnerships Program agenda that highlights issues such as finances and debt; being the first person in the family to enter higher education; and the perception that postgraduate study is inaccessible and entry into universities exclusive, alienating and remote. Any discussion of Aboriginal and Torres Strait Islander participation in higher education must therefore take into account disadvantage and the broader issues of social class. Critically, such barriers to Aboriginal and Torres Strait Islander participation in higher degree research may be related to the historical effects of colonisation and social disadvantage as much as they are they are related to cultural difference.

Higher education is widely understood to be important to Indigenous Australians in order to better prepare educated people for leadership roles (MCEETYA, 2006; Pechenkina & Anderson, 2011) and future workforce needs (Indigenous Higher Education Advisory Council, 2010), to change university culture in general, to build capacity, to become more inclusive and to provide equitable access to opportunity. Canada provides a successful example where, in many institutions, the Aboriginal student population is now proportional to the Aboriginal share of overall population (Levin, 2009).

Recruitment, application and entry process

For many Aboriginal and Torres Strait Islanders, universities represent Western knowledge that is governed by dominant Western knowledge paradigms (Nolan, Frawley, & White, 2009). As such, indigenous knowledge systems, pedagogy and forms of governance and leadership have historically found no acknowledged place within the Australian university system. For many Aboriginal and Torres Strait Islander students, university attendance is therefore a cross-cultural experience (DiGregorio, Farrington, & Page, 2000). Thus, taking steps to participate in this unaccommodating system is potentially daunting (Day & Davison, 2005), especially if there are few members of the student's family or community who have themselves pursued higher education and who can provide support or act as role models (White, 2009). The *Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People* (Behrendt et al., 2012) identified low levels of aspiration to participate in higher education among Aboriginal and Torres Strait Islander students (p. 46).

Trudgett (2009) observes that many potential higher degree candidates have little knowledge of scholarship opportunities suggesting that with more and better-targeted publicity, the barriers apparent to candidates at the point of application and entry into teacher education programs may be lessened. Beyond the need for targeted recruitment activity and information-giving, there are other strategies to attract Aboriginal and Torres Strait Islander students into universities and into teaching. For instance, giving prospective students the opportunity to listen to high-achieving Aboriginal and Torres Strait Islander teachers as role models is seen as a key strategy for recruitment (Drysdale, Faulkner, & Chesters, 2006). Several government reports emphasise the need to expand partnerships between secondary schools, higher education institutions and Aboriginal and Torres Strait Islander communities to develop strategies to attract, retain and successfully graduate students (Indigenous Higher Education Advisory Council, 2010; MCEETYA, 2006). In a few significant cases, institutions such as Charles Sturt University have already begun entering into memorandums of agreement with Aboriginal and Torres Strait Islander communities to boost education links. While it is encouraging to note the individual excellence in teacher education initiatives, *The Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People* (Behrendt et al., 2012) recommends sustainability, and the need for institutions to build Aboriginal and Torres Strait Islander education into their strategic plans, in line with a whole-of-university approach.

Matters of support: academic, social, financial and personal

Some of the main concerns for Aboriginal and Torres Strait Islander students in higher education relate to challenges students face in their everyday lives and how these are managed and negotiated in light of university policy, procedures and institutional expectations. The ability of faculty members to engage with their students and understand the specific challenges they face is vital to providing meaningful support for Aboriginal and Torres Strait Islander students. The discussion of support beyond the mere recruitment of students is critical to the conversation. As Tinto (2008) reports, access without effective support is not opportunity. Types of support highlighted in the literature as particularly significant include financial support (Bourke, Burden, & Moore, 1996; Shah & Widin, 2010), academic support (Laycock, Walker, Harrison, & Brands, 2009), social and cultural support (Craven, 2005) and overall institutional support.

The previous section in this report made brief reference to issues of cultural isolation and exclusion. Aboriginal and Torres Strait Islander university students often state they feel marginalised (Indigenous Higher Education Advisory Council, 2010). Sometimes they do not know any other Aboriginal and/or Torres Strait Islander university students and no one in their community or family has experience with higher education. According to some literature (DiGregorio, Farrington, & Page, 2000; Indigenous Higher Education Advisory Council, 2010), this isolation can have a profoundly negative effect on the success of the student. As a response to these issues, scholars in this field have called on universities to ensure that their students are guaranteed a place of 'cultural safety' (Coopes, 2009) where overt and covert instances of racism are identified and rectified (Herbert, 2010). Naming cultural safety as an issue for Aboriginal and Torres Strait Islander university students is increasingly overtaking the previous discourses of cultural responsiveness, sensitivity or cultural appropriateness. Bin-Sallik (2000, p. 21) states that:

Cultural safety extends beyond cultural awareness and cultural sensitivity. It empowers individuals and enables them to contribute to the achievement of positive outcomes. It encompasses a reflection on individual cultural identity and recognition of the impact of personal culture on professional practice.

The literature that advocates for the significant role of Indigenous Higher Education Centres touches on issues related to cultural safety and provides a corpus of evidence showing that many Aboriginal and Torres Strait Islander university students regularly use facilities and sites that enable them to spend time with peers, mentors, support staff and other people who value their knowledge (Whatman et al., 2008).

Isolation can come from many places, within and outside the institution. Because opportunities have historically been lacking for Aboriginal and Torres Strait Islander participation at universities, students also express their conflicted feelings between the values and goals of their families and the values and goals of the institution (Craven, 2005). One place where this is visible is in university timelines, where the university prioritises the goals of the institution (for example, completing a four-year degree in a timely manner), while Aboriginal and Torres Strait Islander students may instead prioritise family and community and therefore require more flexibility in terms of course progression. The oft-expressed desire to make a difference in their community (DiGregorio, Farrington, & Page, 2000) may override the desire to complete their course 'on time', which in turn creates an administrative concern for the university. In the university setting, students' prioritisation of family and community responsibilities may be misunderstood or dismissed, but the need for flexibility in course progression for Aboriginal and Torres Strait Islander students in Australia and in other countries has been addressed in the literature (Holmes, 2006). In addition, some literature notes that, at times, Aboriginal and Torres Strait Islander university students are mistakenly deemed to have 'failed' because they may appear to have left their studies or may have left the course before completion. However, they may later return to university study after a break or may have fulfilled their goals having found careers in their preferred fields.

In addition, the reasons for 'failure' seem to be regularly misunderstood. In 2001, the MCEETYA Task Force on Indigenous Education identified 'psychological state' as the most likely predictor of student withdrawal: 'Feeling uncomfortable on campus, loneliness, homesickness, anxiety, depression, low motivation and marital and family conflicts were most frequently cited as contributing factors' (Office of Evaluation and Audit, 2006, p. 29). This is significant in light of Foley's (1996) suggestion that professional and academic staff at universities tend to overemphasise the need for academic and tutorial support at the expense of personal support. Having said this, however, issues related to financial support are also notable and complex and may present significant barriers for students. Although the availability of scholarships may assist Aboriginal and Torres Strait Islander students, they are often not enough to address the fundamental issues of poverty and disadvantage that have a disproportionately large impact on the lives of Indigenous Australians (Banks, 2007). It should also be recognised that poverty is a layered

issue. Poverty influences other issues such as health, housing and personal safety. Even baseline scholarships may not be enough to remedy this disadvantage and attract Aboriginal and Torres Strait Islander students to full-time study. Nevertheless, the literature suggests there is good reason to offer financial incentives and support when possible.

None of these issues alone tells a full story, nor do generalised theories take into account the differences between urban, rural and remote teacher education programs; there is no 'one Indigenous experience'. Bunda, Zipin and Brennan (2011) argue strongly that an overemphasis on affirmative practices – such as student stipends and preferential access (for small numbers) to universities through 'special entry' programs – focuses on a 'compensatory logic [that] does not trouble the structural selectivity of cultural and epistemological codes embedded in "mainstream"—or, from Aboriginal or Torres Strait Islander standpoints, "whitestream"—curricula and pedagogies' (Anderson, 2009). Moreover, it projects a deficit view of cultures that is regularly lamented in the literature (Harrison, 2005; Whatman et al., 2008) and which contradicts impulses to recognise and include Aboriginal and Torres Strait Islander cultural knowledges in university teaching and learning. Writers such as Bunda et al. (2011) suggest that material disadvantage is less significant than epistemological Whiteness in influencing Aboriginal and Torres Strait Islander participation at university.

Aboriginal knowledges in the white academy

Many Indigenous and non-Indigenous scholars have discussed the dearth of Indigenous knowledges, Indigenous methodologies and Indigenous awareness within Australian universities. Tuhiwai Smith (1999) pointed out over a decade ago that many Indigenous students have struggled individually to engage with the disconnections that are apparent between two elements: the demands of their academic work and the realities they encounter among their own and other Indigenous communities with whom they share lifelong relationships. Some of the reasons suggested for the limited participation of Aboriginal and Torres Strait Islander university students are deeply related to differing epistemologies, standpoints and worldviews. Scholars such as Martin Nakata (2004) remind us that knowledge is power. Nakata argues that Aboriginal and Torres Strait Islander people must participate in higher degrees in order to undertake, or direct, or influence the research of Indigenous issues, or indeed, to influence knowledge in general. Thus, while acknowledging that higher degrees are not the only evidence of knowledge or expertise, the opportunity to obtain a higher degree is still significant to the pathways available to Aboriginal and Torres Strait Islander people. This focus on teacher education as an issue is most directly related to leadership.

Like Nakata, many Indigenous academics believe that the current barriers to full and inclusive participation in higher education in Australian universities can be overcome. This could be done most compellingly by 'decolonising the academy' and ensuring the full and equal incorporation of Indigenous knowledge and knowledge systems into the traditional Western structure and the participation of Indigenous scholars at all levels and in all disciplines therein (Phillips, Phillips, Whatman, & McLaughlin, 2007; Prior, 2009; Tuhiwai Smith, 1999; Woods & Biermann, 2008). A growing body of international indigenous literature exists on issues related to 'Indigenising the academy', 'de-colonising Indigenous tertiary education' (Arbon, 2008) or what Alfred in New Zealand (2004) calls 'warrior scholarship'. Universities are being called on to include indigenous knowledges at all scholarly levels, something that requires motivation, awareness and training. Embedding Indigenous knowledges is an oft-stated focus within faculties of education in Australian universities, though mostly with respect to non-Indigenous teacher education (Craven, 2005; Malezer & Sims, 2002; Phillips, 2011). However, in the Australian Education Union's (2005) survey of beginning Aboriginal and Torres Strait Islander teachers 37% of Indigenous teachers said they did not feel their pre-service teacher education prepared them for dealing with students from low socioeconomic or non-English-speaking backgrounds. In addition, 37.5% of the participants did not feel their pre-service teacher education prepared them for supporting the needs of Indigenous students.

3.3 Aboriginal and Torres Strait Islander teacher education: an historical perspective

Despite the historical exclusion of Aboriginal and Torres Strait Islander children in schooling, many early records exist of untrained Aboriginal teachers, primarily in mission schools and on stations. In 1911, John Lewis was the first Aboriginal person to lead a public school in New South Wales (Cleverley & Mooney, 2010). The first Aboriginal Teacher Aide (ATA) programs, however, did not commence until the late 1960s. Affiliated with TAFE colleges rather than universities, these programs were conceived as adult education programs and did not grant degrees or full teacher certification. Even in these early days, there was concern that diplomas not become 'a dead end road' (Cleverley & Mooney, 2010, p. 69) and there was acknowledgement that Aboriginal teacher aides were often exploited, underpaid and delegated menial duties such as photocopying. By the late 1970s, TAFE colleges were advised to forge stronger links with teacher training institutions. Cleverley and Mooney outline the complex politics that ensued when the ATA program moved from TAFE to the University of Sydney. TAFE programs were often more community-based and led by Aboriginal staff. The involvement of universities led to concerns about the responsibility of universities for tertiary preparation, given the limited schooling of many Aboriginal and Torres Strait Islander students who sought entry into the program (Hunter & Schwab, 2003), and issues that arose with respect to non-Indigenous staffing and administration.

Universities could provide 'real' credentials, but had less experience with community engagement. These ongoing tensions and uneasy relationships between universities and Indigenous Higher Education Centres have historical precedent that affects Aboriginal and Torres Strait Islander students. One area in which this tension plays out is in student support: the responsibility for monitoring how Aboriginal and Torres Strait Islander students are doing usually falls to the Indigenous Higher Education Centre. Cleverley and Mooney outline the origins of university-based Indigenous support programs, now generally referred to as Indigenous Higher Education Centres. Originally designed as enclave support, in the 1980s they began to provide special admission arrangements, tutoring and other assistance for students who were understood to be disadvantaged (Cleverley & Mooney, 2010; Price, 2011). Among other things, including the provision of safe places, these centres are the site of Aboriginal and Torres Strait Islander knowledges and research within the university. However, they are often perceived by the university as simply providing student support, such as the Indigenous Tutorial Assistance Scheme (ITAS-TT). This is an important role, but focusing solely on this role diminishes the scholarship of these centres with respect to Indigenous knowledges (Whatman et al., 2008). While Indigenous Higher Education Centres are crucial, each faculty/school of education is, however, increasingly urged to take responsibility for its own students, for whom it has a duty of care (Usher, Miller, Turale, & Goold, 2009). For example, understanding the significance of mentors, MCEETYA (2006, p. 28) suggests that ongoing tracking, monitoring and supporting of Aboriginal and Torres Strait Islander students is essential for improving retention rates in postschooling studies.

In many ways, the inclusion of Aboriginal and Torres Strait Islander peoples in teacher education programs is recent (since the 1970s) (Price, 2011). Nationally, however, little has changed since the 1980s, when the National Aboriginal Education Committee (NAEC) (Hughes & Willmot, 1982) called for '1000 Indigenous teachers by 1990'. The Ramsey Review (2000) of teacher education in New South Wales identified only 32 Indigenous teachers out of a population of more than 70,000 Indigenous people in the state (cited in Santoro, Reid, Simpson, & McConaghy, 2008, p. 1).

3.4 More Aboriginal and Torres Strait Islander teachers: why it matters

In 2011, the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA), as part of the Council of Australian Governments' (COAG) reform agenda to improve life outcomes for Aboriginal and Torres Strait Islander peoples, developed the Aboriginal and Torres Strait Islander Education Action Plan 2010–2014. Under this action plan, the Australian Government worked with government and non-government education providers, the higher education sector and Aboriginal and Torres Strait Islander peoples to develop a National Aboriginal and Torres Strait Islander Educator Workforce Strategy. The strategy has several objectives, including:

- increasing the number of Aboriginal and Torres Strait Islander school principals, teachers and education workers
- improving pathways into the early childhood and school education workforce for Aboriginal and Torres Strait Islander peoples
- supporting appropriate training and professional development for Aboriginal and Torres Strait Islander educators.

Generally, the call for more Aboriginal and Torres Strait Islander teachers comes largely from the belief that the provision of role models will help to address historically poor outcomes for Aboriginal and Torres Strait Islander learners and 'overcome the legacy of hostility towards schools' (Bethel, 2006, p. 1). A press release from the Australian Secondary Principals Association (2011) states that it is important that 'both Aboriginal and Torres Strait Islander students and other Australian students view Aboriginal and Torres Strait Islander people in school leadership and teaching positions as well as in other positions within the school'.

The need for more Aboriginal and Torres Strait Islander teachers is currently framed within this discourse of parity and leadership. Malin and Maidment's (2003) review of Indigenous education since the 1960s provides reminders that career pathways for Aboriginal and Torres Strait Islander educators were discussed as early as the 1960s. This was a time when adult education courses were already criticised for providing little social mobility for Aboriginal and Torres Strait Islander students or for the Aboriginal and Torres Strait Islander Education Workers who continue to contribute to schools in substantial numbers. One regularly stated concern is to provide genuine pathways to the many Aboriginal and Torres Strait Islander teacher aides and assistant teachers already working in schools. University education faculties are urged to provide these education workers with opportunities for 'a genuine and qualified status' (Cooper, 2008). This is very important because teacher aides and assistant teachers are often among the most insufficiently trained and otherwise marginalised teaching personnel. Cooper suggests that the upskilling of Aboriginal and Torres Strait Islander assistant teachers is especially important in remote communities (in this case, the Northern Territory) because they provide leadership and stability in schools with such a high turnover of teachers and because many of them speak the first language common to many students and families. He also suggests that Aboriginal and Torres Strait Islander teachers can provide role models, bridge cultural divides and address issues such as truancy.

The issue of language is noted in the literature as well, with 16% of Indigenous Australians nominating a language other than English as their first language (Australian Bureau of Statistics [ABS], 2008). Although it is less of an issue in urban centres, language is an 'invisible fence' (Willems, 2012) or barrier for many Aboriginal and Torres Strait Islander people in remote areas, hence the need for more Aboriginal and Torres Strait Islander teachers. Language is also an issue for Torres Strait Islander people for whom Standard Australian English is often at least their second language and sometimes their third or fourth (Shnukal, 2002). While universities are obliged to provide additional support (e.g., during exam time) for English as a second language learners from other countries, Aboriginal and Torres Strait Islander students are often forgotten by universities in this process (Whatman et al., 2008).

Increasing the number of Aboriginal and Torres Strait Islander teachers is considered an issue of social justice, social change and social inclusion. In addition, Aboriginal and Torres Strait Islander teachers are critical in providing cultural diversity and Aboriginal and Torres Strait Islander knowledges for Australian students, both Indigenous and non-Indigenous. Qualified (and quality) Aboriginal and Torres Strait Islander teachers are seen as crucial in current discussions about the Australian Curriculum, and the requirement of the National Professional Standards for Teachers to embed Aboriginal and Torres Strait Islander knowledges in the curriculum. Other more specific reasons to increase numbers of Aboriginal

and Torres Strait Islander teachers are also identified in the literature. Carnes (2011) links the urgency for more Aboriginal and Torres Strait Islander teachers to a specific social justice concern: education for Indigenous incarcerated students who need to be taught fundamental English literacy and numeracy skills by members of Aboriginal and Torres Strait Islander communities. Harris (2004) discusses the particular importance of Aboriginal teachers teaching Aboriginal children with hearing loss caused by otitis media.

Much of the literature addresses how non-Indigenous students fare during professional experience in Aboriginal schools (e.g., Hart et al., 2012). In contrast, few literature sources have examined the benefits that Aboriginal and Torres Strait Islander preservice teachers bring to university faculties of education and especially to practicum or professional experience placements, where non-Indigenous teachers may learn from exposure to Aboriginal and Torres Strait Islander cultures and benefits from a mutual learning experience (Bethel, 2006, p. 38; Jay, 2009). Although Aboriginal and Torres Strait Islander students report that they often encounter racism and cultural isolation on field experience placements (Malin, 1994; Santoro et al., 2008), some of these placements would ideally offer them valuable insight into mainstream schools.

Little of the literature makes this explicit, but there is no 'one size fits all' strategy for Aboriginal and Torres Strait Islander teacher education. The literature can largely be categorised into three groups that address different types of communities:

- urban Aboriginal and Torres Strait Islander teacher education, such as Collins and Poynting's (2000) writing about teacher education at the University of Western Sydney
- remote and community-based Aboriginal and Torres Strait Islander teacher education (York & Henderson, 2003)
- to a much lesser extent, rural Aboriginal and Torres Strait Islander teacher education (Reid et al., 2010).

There are clearly differences in terms of the needs of Aboriginal and Torres Strait Islander students in each of these settings and these needs have changed over time. For example, the report Australian Directions in Indigenous Education 2005–2008 (MCEETYA, 2006) states that additional programs to support academic skills – including English literacy, numeracy and second language teaching – remain issues for Aboriginal and Torres Strait Islander teacher education in remote areas more than in urban-based programs.

3.5 Aboriginal and Torres Strait Islander teacher education

Although it is often invisible within the literature, there has been some research into Torres Strait Islander teacher education. Price (2011, p. 13) documents the early years of programs such as the North Brisbane Centre for Adult Education program in the 1970s and the TAFE Cairns Torres Strait Islander Teacher Training Program, which began in 1981. These were both paraprofessional courses offering no formal teaching qualifications. Osborne and Sellars' (1987) early research into Torres Strait Islander teachers' strategies had implications for teacher education because their work highlighted their observations of significant cultural differences between Torres Strait Islander teachers and 'Anglo' teachers. Among other things, Osborne and Sellars observed that Torres Strait Islander teachers taught more slowly, spotlighted individual students less publicly and shared social control more than did their Anglo counterparts. Torres Strait Islander teachers also maintained warmth in their classrooms, while in some ways appearing more 'formal' than their Anglo peers. These deep cultural differences in preferred teaching style provide reminders for teacher educators about the cultural biases of teacher education. Loos and Wightman (1988) recounted their early experiences in the Aboriginal and Torres Strait Islander Teacher Education Program (AITEP) in north Queensland. They discussed the benefits they offered their students through their ability to speak Creole and language, as well as the pressures they felt to be better than the White teachers. Although there is little published research that examines teacher education as it specifically pertains to Torres Strait Islander people, there is a long tradition of teachers in the Torres Strait that could inform teacher education (Nakata, 2008).

3.6 Aboriginal and Torres Strait Islander perspectives and knowledges

In the recent literature, the Whiteness of university education faculties is regularly discussed. Aveling (2006, p. 262) claims that non-Indigenous students resist discussions of race, while Aboriginal and Torres Strait Islander students welcome the opportunity 'from a perspective that does not continually position them as helpless victims'. However, some of the other literature recounts the discomfort that Aboriginal preservice teachers sometimes feel when race is discussed in their presence (Frawley, Nolan, & White, 2009). Many Aboriginal and Torres Strait Islander students feel safer speaking openly among themselves and within their own community. This body of literature suggests the need for separate tutorial groups for Aboriginal and Torres Strait Islander and non-Indigenous students in mainstream courses in which Indigenous Studies is taught. Or at the very least, that there should be critical recognition that Aboriginal and Torres Strait Islander students are often a minority in lecture rooms when having to learn about and discuss Aboriginal and Torres Strait Islander histories, cultures and issues alongside other Australian students who outnumber Aboriginal and Torres Strait Islander students (Nakata et al., 2012, p. 122).

The idea that knowledge, or curriculum itself, can be taught through Aboriginal and Torres Strait Islander knowledges is taken up in Australia by Aboriginal scholars Davis (2012), Martin (2012) and Yunkaporta (with McGinty) (2009), all of whom explain the significance of relatedness to Aboriginal and Torres Strait Islander ways of understanding the world. Both the Canadian (e.g., Kitchen et al., 2010) and Australian sources explain Aboriginal and Torres Strait Islander curriculum and pedagogy diagrammatically and metaphorically, providing examples of teacher education curriculum that look quite different from mainstream course outlines. They provide pictorial models of how curriculum is defined differently from an Aboriginal and Torres Strait Islander perspective, which is something that university faculties of education could become better educated about as an opportunity for innovation and dialogue (Yunkaporta & McGinty, 2009) (see Figure 1).



Figure 1: Indigenous ways of knowing (Yunkaporta & McGinty, 2009)

Some of the literature emphasises the need for more Aboriginal and Torres Strait Islander academics in university faculties of education (Herbert, 2005), but the complexities surrounding this are also clear. There is little question that there are too few Aboriginal and Torres Strait Islander academics employed to teach both Aboriginal and Torres Strait Islander and non-Indigenous preservice teachers, and that those employed are reliant on untenured or unsustainable appointments. Also discussed, however, are the stresses that Aboriginal and Torres Strait Islander faculty members are under and the need for non-Indigenous faculty members to 'step up' to the job of supporting Aboriginal and Torres Strait Islander students, rather than leaving the work only to Aboriginal and Torres Strait Islander staff or higher education units (Asmar & Page, 2009). Herbert (2005) identifies the considerable stresses on Aboriginal and Torres Strait Islander academics to take responsibility for all things indigenous while also being true to their communities. These stresses are also reported by teacher education students and Aboriginal teachers working in schools. As Santoro's (2012) longitudinal study of Aboriginal teachers reports, principals must consider that even if Aboriginal teacher education graduates are willing to take greater responsibility for the education of Aboriginal and Torres Strait Islander students, their workload and responsibilities must be monitored and they must be provided with the same opportunities for mentoring and assistance as any other novice teacher.

3.7 Models of teacher education for Aboriginal and Torres Strait Islander peoples

A range of programs exists to support exclusively Aboriginal and Torres Strait Islander teacher education. Some programs take place largely in communities (generally through distance learning) and in mixed-mode programs that allow students to do some of their course on campus and the rest away from campus. Some programs are primarily offered on campus, others are offered from a remote location and primarily online, and some are offered in a combination of these modes. Some programs are defined here as 'cohort' (e.g., specifically offered to Aboriginal and Torres Strait Islander people) and others 'mainstream' (with Aboriginal and Torres Strait Islander people within the larger cohort of education students). In other words, there is diversity in the types of teacher education discussed in the literature, and though there are general statements that can be made about Aboriginal and Torres Strait Islander Teacher education, different types of programs and different communities identify different issues. As identified in parallel research into developing better strategies for recruitment, retention and support of Aboriginal and Torres Strait Islander medical students, no one size will fit all. Instead, universities are recommended to focus on developing coordinated and collaborative approaches to addressing a serious shortage (Drysdale et al., 2006).

Cohort programs: a brief review of the literature

Both overseas and in Australia, models of 'cohort' programs have been developed to support Aboriginal teachers. In general, these programs are designed to be culturally responsive and most are led by Aboriginal people. For example, Brock University in Canada runs a five-year indigenous teacher education program based on a Two-Worlds Education orientation (Kitchen et al., 2012). Founded on the idea that indigenous teachers are crucial 'cultural brokers', the program largely takes place in the community. Although it includes mainstream elements of the Bachelor of Education, students engage with First Nation pedagogies, including Talking Circles and curriculum based on the medicine wheel, which has some similarities with Yungaporta's diagrammatic representation of Aboriginal knowledge and curriculum represented in Figure 1. North Dakota's Tribal University names cohort models as 'best practice in teacher education for First Nations peoples from the U.S.' (Lamb, 2009). It is outside the scope of this literature review to detail each program and program type. Instead, some examples are given here of the research on these programs and some of the conclusions that are drawn that would be useful to university faculties of education.

Cohort models often differ from mainstream programs, not only in their student cohort, but also in their mode of delivery. Block-mode tuition is a form of mixed-mode tuition that couples residential on-campus intensives with lengthier off-campus periods (Willems, 2012). Block and mixed-mode study programs allow students (including those who are already working as Indigenous Assistant Teachers in schools) to study in their home communities with occasional time on campus. They provide important access to some Aboriginal and Torres Strait Islander students who would not otherwise be able to access higher education (Australian Department of Finance and Administration, Office of Evaluation and Audit Indigenous Programs, 2006).

In reverse-block release (a form of mixed-mode away-from-base delivery) on-site training is delivered primarily in the home community, with lecturers or providers travelling to the community, rather than the reverse (Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, 2012). While the literature reports favourably on the outcomes of these Australian Government-funded programs, there is considerable pressure on providers to demonstrate their standards and prove that they are cost-effective.

The Remote Area Teacher Education Program (RATEP) is provided by collaboration between James Cook University, Education Queensland and the Tropical North Queensland Institute of Technical and Further Education. In 2001, it boasted a retention rate of 82%, which York and Henderson (2003) claim is partly due to the support and security provided by distance education offered in a home community setting. RATEP provides a program that aims to reduce the alienation experienced by some Aboriginal and Torres Strait Islander preservice teachers in an urban campus. Bethel (2006) states that RATEP students benefit from staying on their own communities, no longer required to relocate or learn in a 'cultural void' (p. 31). This is especially true for communities that can cater for the cultural and linguistic needs of second or even third language learners. Bethel (2006) quotes impressive statistics for RATEP graduates with both the Bachelor of Education and Diploma of Teaching programs, but provides little information about

retention. Bethel (2006) claims, however, that once there are enough Aboriginal and Torres Strait Islander teachers in Australian schools, 'segregated' Aboriginal and Torres Strait Islander teacher education programs will no longer be necessary (p. 36).

Mason, Reid and Perry's (2003) history of the University of Western Sydney's Aboriginal Rural Education Program (AREP) identifies some of its struggles (for example, finding a central or important place within the university), and suggests that some of these have to do with never having been given a chance to prosper. The institutional insecurity of cohort programs is also mentioned in other literature, including reminders that these important programs should not make those involved in mainstream teacher education forget their responsibilities to Aboriginal and Torres Strait Islander students – Aboriginal and Torres Strait Islander education should also be 'core business' (MCEETYA, 2006). However, Mason et al.'s report is significant in highlighting a unique component of cohort programs: their ability to both indigenise and 'politicise' the curriculum and to ensure that Aboriginal voices are heard and Aboriginal and Torres Strait Islander politics openly discussed (see also Cassidy, 2004, for a discussion of teacher education and Aboriginal and Torres Strait Islander self-determination). The politicised role of community-based programs for Aboriginal and Torres Strait Islander preservice teachers has long been acknowledged. For many years, Henry and McTaggart (1987) have named Aboriginal self-determination as one of the guiding principles of Aboriginal teacher education, as well as prioritising their cultural appropriateness and commitment to both-ways education. As in Australia, Canadian researchers Goulet and McLeod (2002) explain how important it is for First Nations teachers to reclaim their knowledges and cultures through teacher education, especially in light of Canada's long history of removing children from their families.

The literature implies that cohort programs have a history of having to justify their place. The Dean of the University in Saskatoon, Canada, made a public statement against this position in a local newspaper:

For the record, ATEP students complete the same program as any student in the college of education. They are in no way involved in a modified program. They also meet university standards for graduation and are then certified by the provincial government, as are all the graduates from our college. (cited in Jacknicke, 2001)

This issue of credibility has also been a problem for Australian and international cohort programs such as RATEP, which Bethel (2006, p. 39) writes is not simply another 'bandaid' used to cover the infestations that culminate from Indigenous neglect but is an authentic remedy that attacks the core of the problem'. Nonetheless, cohort programs struggle for the university's recognition. Although they may be successful in community terms, they are often perceived by the university as a less credible 'offshoot' (Cleverley & Mooney, 2010, p. 111; Kitchen et al., 2010) or inferior (Tatz, 2009) and are thus dependent on unstable funding and support. While Aboriginal and Torres Strait Islander responses to the Australian Survey of Student Engagement (Asmar, Page, & Radloff, 2011) found that Aboriginal and Torres Strait Islander students are engaged with learning at a similar or slightly higher level than their non-Indigenous peers, block-release programs had between 16% and 20% higher course completion rates than those who were studying in full-time 'mainstream' programs on campus (Price, 2011). Community-based programs, such as Growing Our Own, which is operated by Charles Darwin University, sends mentor lecturers to Indigenous Teacher Assistants to provide teacher education in the students' own communities, rather than bringing Aboriginal and Torres Strait Islander students on campus (Giles et al., 2011). Programs such as these overcome some significant barriers for students who would otherwise have little or no chance of becoming qualified teachers. Maher (2011) also reports on Growing Our Own, proclaiming that preservice teachers enrolled in the innovative initial teacher education program

will, on graduation, be better placed than almost any other person to bridge the divide between the cultural aspirations of Aboriginal and Torres Strait Islander children and their parents in remote communities and those of a largely Western curriculum offered in their schools. (p. 12)

Maher also discusses some of the challenges faced by students in these programs, including low English literacy levels, English as a second language, community obligations and 'sorry business'. In addition, it takes time for relationships to develop between the university, the teacher education students and schools. These often present barriers that get in the way of graduation, though Maher suggests they can be overcome. Students in programs such as Growing Our Own are frustrated by the subservient positions (low pay, lack of respect) they encounter while employed as Aboriginal Teaching Assistants. While it is hoped that gaining full qualifications as teachers will redress inequities, Aboriginal teachers also encounter attitudes towards them that act as barriers (Thornton et al., 2011).

The benefits of cohort models, no matter the version, at least in part, are how culture is at the core of the program. Seen as a step towards self-determination, programs designed specifically for and with Aboriginal and Torres Strait Islander preservice teachers are praised for valuing ways of doing, knowing and being in the world that recognises Indigenous identity (Bat, 2010).

Although distance learning is advocated in programs such as RATEP and ATAP, some literature exists both to support and critique programs in which much of the learning is done off-campus. Programs with mixed-mode delivery, such as that funded by the Indigenous Education Strategic Initiatives Program (IESIP), are supported and recognised as benefiting the most disadvantaged/remote Aboriginal and Torres Strait Islander students, many of whom would not otherwise engage in higher education (Office of Evaluation and Audit, 2006). Such programs are well used and have comparable, if not marginally better, course completion outcomes compared with mainstream programs.

Many of these programs are heavily dependent on online learning. The action research study conducted jointly by Charles Darwin University and the University of Western Sydney reports on an action research learning design to use information communication technologies (ICTs) with Aboriginal and Torres Strait Islander pre-service teachers studying in the third and fourth years of a Bachelor of Education degree, and notes some of the problems involved with online learning (Milton & Vozzo, 2010). These include both practical deterrents, such as internet speed and access from remote settings, as well as the lack of familiarity and experience of some, though by no means all, Aboriginal and Torres Strait Islander students (Shah & Widin, 2010). Most significant, though, are suggestions that remote or online learning may be culturally alienating for Aboriginal and Torres Strait Islander students for whom relationships and deep connections are central (Willems, 2012). Willems recommends that distance higher education for Aboriginal and Torres Strait Islander students must pay special attention to connectedness, providing timely communications, flexibility, considerations in the learning design (including learning styles) and scaffolding necessary academic literacy skills (p. 20). The Office of Evaluation and Audit (2006) identifies some other issues related to away-from-base teacher education that are important predictors of students failing or withdrawing, including students with insufficient basic English literacy and numeracy to undertake and complete courses, and the competing demands on students to manage family, community, work and study. The report recommends that universities focus on attainment of educational outcomes rather than enrolment numbers.

General and mainstream issues

The literature on Aboriginal and Torres Strait Islander participation in mainstream teacher education has long included similar discussions of the need for both greater enrolments and improved support for better graduation outcomes (Buckley, 1996). Dalley-Trim and Alloway's (2010) research into regional Australian students' career aspirations suggests that high school students, including Aboriginal and Torres Strait Islander students, have good understanding of their options. It appears that, at least for school leavers, low enrolments may not primarily be a matter of lack of information. Other research, however, suggests that Aboriginal and Torres Strait Islander students generally still set their career aspirations at lower levels than their non-Indigenous peers (Craven in Price, 2011, p. 22). Nevertheless, there is some evidence that mainstream Aboriginal and Torres Strait Islander students benefit by feeling more 'immersed in the teaching profession' (Kitchen et al., 2010, p. 114). Once again, it would appear that a range of options is preferred by Aboriginal and Torres Strait Islander students, with no one program suiting all.

Support for academic literacy is discussed regularly in the literature, with the Indigenous Higher Education Advisory Council arguing for careful attention to be paid to appropriately preparing students to complete their studies. Supporting other research, Rabbitt's (1999) discussion of the needs identified by students enrolled in Edith Cowan University's community-based Aboriginal Teacher Education Program names financial stress, physical and social isolation, relationship between tutor and student, and culturally inclusive curriculum as the main areas of need.

While the literature refers to the significance of Aboriginal and Torres Strait Islander learning styles (Hughes et al., 2004), it comes with cautions about overgeneralisation, essentialising or making assumptions. Though there seems to be some evidence that Aboriginal and Torres Strait Islander university students are comfortable with practical, experiential learning (Boulton-Lewis et al., 2000), Nakata (2001) focuses on institutional deficit, as do Canadian researchers Kitchen et al. (2010). Kitchen et al. report that universities do not value the languages and cultural knowledge Aboriginal and Torres Strait Islander students bring to their studies, effectively 'weeding them out'. Bevan Cassidy (2004), winner of the 2003 Neville Bonner Award for the Indigenous Teacher of the Year, concurs in his belief

that while institutional systems must change, and Aboriginal and Torres Strait Islander priorities should be understood – this is different from thinking Aboriginal and Torres Strait Islander students are cognitively different. ‘Differences’ between Aboriginal and Torres Strait Islander and non-Indigenous learning styles have more to do with priorities. For instance, the centrality of relationship to Aboriginal and Torres Strait Islander people is highlighted by Trotman and Kerr (2010), who claim that their Aboriginal and Torres Strait Islander preservice teachers are especially responsive to assessments such as personal reflection and the writing of personal history. Herbert (2005) also argues for the use of personal stories to provide a space for Aboriginal and Torres Strait Islander voices such as Macquarie University’s published collection of stories told by Aboriginal and Torres Strait Islander Early Childhood teachers (Fleet & Kitson, 2009). The literature that attends to learning styles argues for teacher education to be more culturally responsive so that students may become ‘adaptive experts’ (Hatano & Ouro, 2003).

It would be remiss to ignore the literature that comments on institutional racism. Bin-Sallik’s (2000) edited collection of Aboriginal women’s narratives includes several accounts of the experiences of women studying to be teachers. Lyn Devow’s memories of studying to become a teacher in Darwin in the 1980s remind us how difficult it was to be an Aboriginal student prior to the existence of ‘special support units’. Devow remembers there being no safe places in a university where there were also ‘no Black faces’ (2000, p. 113). She explains that there was no acknowledgement of racism, suggesting she learned to be silent, remembering that other Aboriginal and Torres Strait Islander people who spoke out did not graduate. The themes that emerge in this collection include memories of racism and isolation, as well as positive memories of individual lecturers who supported Aboriginal and Torres Strait Islander students.

Collaborations between Aboriginal and Torres Strait Islander and non-Indigenous educators (Bunda et al., 2011; Phillips & Lampert, 2012) suggest the productive spaces that emerge within sustained relationships and much of the literature reminds us that the best teacher education programs will foster relationships between non-Indigenous and Aboriginal and Torres Strait Islander people (Harrison, 2007). With respect to teacher education, these examples from the literature provide examples of dialogue or conversations in which ‘both educators work together, respecting and valuing each other’s culture’ (Bevan & Shillinglaw, 2010, p. 14). These might be facilitated or nurtured in faculties of education. The urgent significance of ‘relationship’, or what Butcher et al. (2011) call ‘transformational partnerships’ is most present in the literature published by Aboriginal and Torres Strait Islander authors, many of whom report on the need to listen to Aboriginal and Torres Strait Island teachers, Elders and community. For example, Bevan and Shillinglaw discuss the fact that Indigenous Elders are the primary teachers for their own communities and, hence, argue that Elders should advise visiting teachers on culturally appropriate pedagogy. Similarly, Santoro Reid, Crawford and Simpson, (2011) suggest that Aboriginal and Torres Strait Islander teachers play crucial roles in mentoring non-Aboriginal and Torres Strait Islander teachers (though this also adds to their responsibilities). This Australian and international literature, including that focused on social capital and Aboriginal and Torres Strait Islander learning communities, views these relationships as paramount, suggesting more effort be made by faculties of education to support relationships with (or listen to) community, including developing relationships to facilitate students on field experience (Quinn & Saini, 2012). Bunda et al. (2011, p. 13) argue that within faculties of education Aboriginal and Torres Strait Islander academics have significant ‘re-educative’ effects on ‘whitestream’ (rather than ‘mainstream’) institutions. This is a powerful argument, suggesting more than the desirability of good relationships, instead emphasising the transformational effect that Aboriginal and Torres Strait Islander academics can have on the institutions and courses themselves. Authors such as these ask us to imagine a university with a genuine Indigenous standpoint rather than one that builds a ‘mere equity bridge’.

The significance of Indigenous Higher Education Centres is worth special mention since they are regularly cited in the literature as having provided crucial safe and supportive places for Aboriginal and Torres Strait Islander students (Ford, 2010; Whatman et al., 2008). Shah and Widen’s (2010) more recent Indigenous Student Satisfaction Survey notes the significance of faculty leadership to drive a long-term, sustainable strategy and recommending that senior Aboriginal and Torres Strait Islander people with membership to key university committees are important for the process of improving Aboriginal and Torres Strait Islander participation and success.

4 Findings: Initial teacher education data scan

A key component of the MATSITI-ACDE partnership was an agreement that self-audits or scans of Aboriginal and Torres Strait Islander student enrolments would be conducted by Australian universities that offer initial teacher education programs. The format and fields of the scan were workshopped at the first MATSITI-ACDE meeting of deans of education held in Sydney on 16 March 2012. At this meeting, the number, type and wording of the scan fields were discussed and agreement was reached about the overall process of collation and dissemination of the data. Ethical clearance for the MATSITI-ACDE research (including ethical clearance for the audit/scan documents) was granted and the scans were distributed to participating institutions on 3 May 2012. It was agreed that all institutional data from the scan would only be reported in an aggregated de-identified format and that only the MATSITI-ACDE research team would have access to the codes. Data in the following section is therefore reported in generic terms and is banded across five state groupings (this is particularly important for institutions such as the University of Tasmania and Charles Darwin University, which are the only universities in those states/territories and hence could easily be identified).

The process of conducting the scans was critical to the overall research project in two distinct ways. First, it enabled faculties and schools of education to examine their Aboriginal and Torres Strait Islander student enrolments beyond merely the aggregated data they provide yearly to the Federal Government for funding purposes. Second, for many faculties and schools of education, this was the first time they had conducted any fine-grain analysis of their Aboriginal and Torres Strait Islander student data. Although some institutions found the data easy to obtain from their central data/reporting division, others needed to open and explore new relationships with their Aboriginal and Torres Strait Islander Higher Education Centres to source the data.

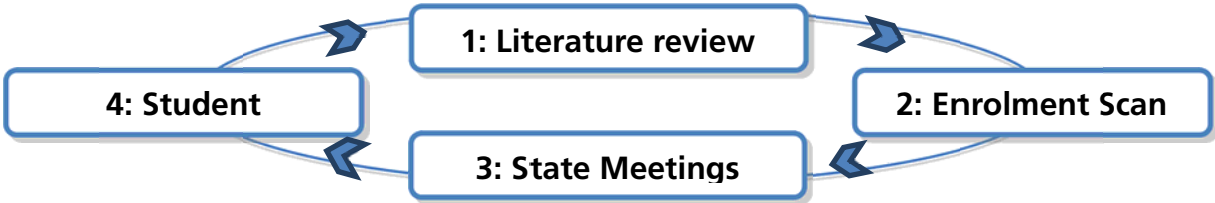


Figure 2: The retention and graduation project research process

Once the scan data was finalised (see Table 1), the MATSITI-ACDE research team conducted a series of state-based meetings with deans of education and leaders from Indigenous Higher Education Centres to provide an overview of the scan data and to discuss issues specifically relevant to the context of that state. Meetings were conducted with deans of education in Queensland, Victoria (combined with Tasmania), South Australia (combined with the Northern Territory), Western Australia and New South Wales. These state meetings proved an important dissemination conduit for the research, as well as providing the opportunity to negotiate locations for subsequent student interviews (discussed in later section of the report).

Table 1: Final ITE scan data

COURSE ENROLMENTS	2007	2008	2009	2010	2011	2012 (Preliminary)
Total (All students in education courses)	66523	67286	74284	79342	81775	69586
Total (Indigenous students)	1306	1462	1491	1505	1627	1386
<i>Indigenous %</i>	1.96 %	2.17 %	2.01 %	1.90 %	1.99 %	1.99%
Indigenous students: Place in course						
Commencing	551	647	641	540	621	490
Course completions	209	271	211	197	202	20
Indigenous Students: Level/Type of Course						
<i>4-Year Degree</i>						
Early Childhood (select from the following)						
EC - 0 to 5 years	89	56	87	75	77	34
EC - 0 to 8 years	32	51	51	62	78	97
Combined EC/Primary	73	55	68	90	106	101
Primary	447	607	469	524	620	498
Middle School and/or K-12	155	162	180	131	98	109
Secondary	229	220	194	223	245	243
Other	15	22	80	30	24	12
<i>Graduate Entry</i>						
Early Childhood (select from the following)						
EC - 0 to 5 years	0	3	4	2	1	0
EC - 0 to 8 years	7	11	21	24	18	15
Combined EC/Primary	47	41	59	73	75	118
Primary	22	24	29	30	31	30
Middle School and/or K-12	5	2	2	1	3	4
Secondary	53	59	69	78	84	71
Other	42	45	60	79	88	105
<i>Indigenous Students: Gender</i>						
Male	283	332	336	333	353	330
Female	1022	1129	1155	1170	1273	1072
<i>Indigenous Students: Age Group</i>						
School Leavers (17/18 years)	87	90	128	112	170	135
19–24 years	428	477	492	492	559	503
25+ years	743	841	808	823	830	660
<i>Indigenous Students: Study Mode</i>						
On-campus	591	815	762	803	780	595

COURSE ENROLMENTS	2007	2008	2009	2010	2011	2012 (Preliminary)
Off-campus	511	436	528	505	484	355
<i>Basis of Entry</i>						
ATAR	135	142	174	149	178	155
Indigenous Pathway/Entry program	93	120	139	138	152	127
TAFE qualification	48	41	59	66	78	47
Other	420	520	445	443	468	435

4.1 Analysis of scan data

The final format of the programmatic scans focused only on Aboriginal and Torres Strait Islander student enrolments and included the areas/fields as indicated in Table 1. As shown, the first section of the scan looked at course enrolments, with the total listed for all students in education courses, the total Aboriginal and Torres Strait Islander student enrolment and a percentage for Aboriginal and Torres Strait Islander students compared to the total enrolment. The second section compared commencing students with completing students across the six years of the scan. The third broke down the enrolments into the type and/or level of the course in which Aboriginal and Torres Strait Islander students were enrolled. Here both the *4-year Degree* and *Graduate Entry* degree/diploma were further broken down into Early Childhood, Primary, Middle School and Secondary strands. The fourth section examined *Gender* and the fifth looked at three *Age Groups* (17/18, 19–24 and 25+ years). The sixth section looked at the *Study Mode*, while the final section broke down the *Basis of Entry*, such as an ATAR score, Indigenous Pathway/Entry program, TAFE qualification or other mode of entry. While 34 institutions participated, there were only 33 universities providing full datasets for the scan. It is important to once again stress that all data displayed in the following pages is of an aggregate nature and is listed either by state grouping or Australia-wide format.

The data scan was conducted in May 2012 before firm figures for 2012 had been obtained by most institutions. Nonetheless, as Table 2 and Figure 2 show, there is a surprising degree of consistency in terms of the percentage of Aboriginal and Torres Strait Islander students studying an initial teacher education qualification across the period 2007-2012. Enrolment during this period indicates a mean of 2.003%, with deviations of 0.16% occurring in 2008 (high of 2.17%) and 0.1% occurring in 2010 (low of 1.90%).

Table 2: Course enrolments in education

Course enrolments (Australia-wide)	2007	2008	2009	2010	2011	2012 (Preliminary)
Total (All students in education courses)	66523	67286	74284	79342	81775	69586
Total (Indigenous students)	1306	1462	1491	1505	1627	1386
<i>Percentage of ITE Indigenous students</i>	1.96%	2.17%	2.01%	1.90%	1.99%	1.99%

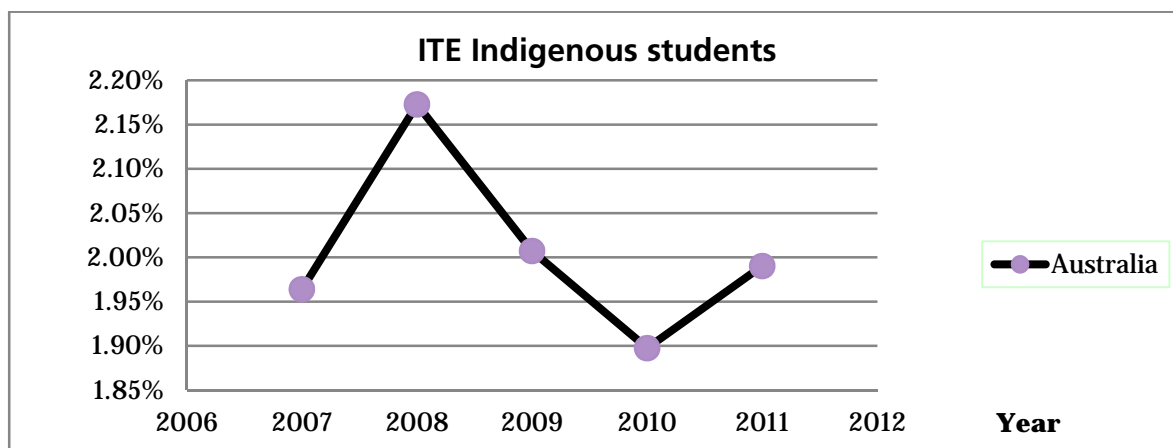


Figure 3: Percentage of student ITE enrolments

While the data indicate relative stability in terms of the actual number of Aboriginal and Torres Strait Islander students enrolled in ITE across any single year, there are considerable fluctuations across the states (as seen in Figure 3 outlining state percentages). The variation across states is an area that would benefit from further analysis because students enrolled in one particular state may possibly be residing in another state (this is particularly the case for off-campus, cohort and away-from-base programs). Some spikes seen, for example, in the 2008 Western Australian data have been explained by deans at the state meetings as representing one-off cohorts from programs focusing on the upgrading of qualifications.

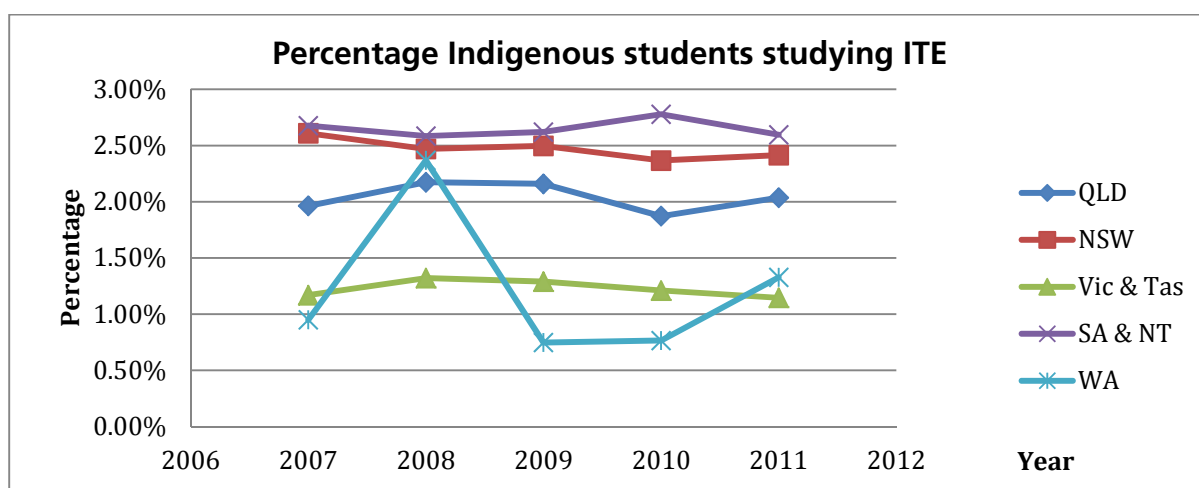


Figure 4: State and Territory percentages of students studying ITE

Given that the core focus of the MATSITI-ACDE partnership was improving the retention and graduation of Aboriginal and Torres Strait Islander students in ITE programs, by far the most alarming aspect of the scan (see Table 3 and Figure 4) is that between 2007 and 2012, data indicate a 68.2% attrition rate for Aboriginal and Torres Strait Islander students studying their initial teacher education qualification. Even when the 2012 preliminary figures are removed, attrition rates for Aboriginal and Torres Strait Islander students remain unacceptably high, with only 36.3% completing their course.

Table 3: Student course commencement/completions 2007–2012

Place in course (Australia-wide)	2007	2008	2009	2010	2011	2012 (Preliminary)
Commencing	551	647	641	540	621	490
Course completions	209	271	211	197	202	20

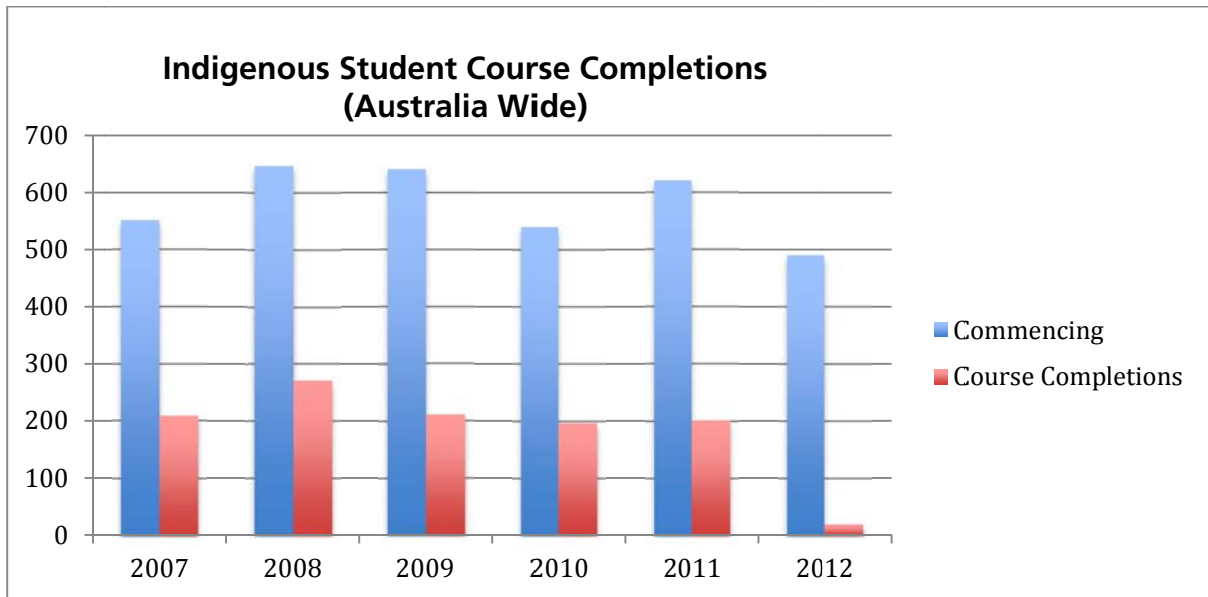


Figure 5: Student course completions

Once again, considerable variation occurs across the state groupings as seen in the comparison of commencing versus course completions presented in Table 4. Determining the factors influencing these alarming retention and graduation rates formed a major component of the more than 70 qualitative interviews conducted between July and October 2012. It is clear from the interview data that there are numerous and unique state-based issues, as well as other complex issues associated with remote versus metropolitan-based programs; mainstream versus cohort or block programs; and internal versus external programs. Several themes (such as cultural safety) resurface at multiple points across the students' experience while at university. However, because interviews were only conducted with students who were currently enrolled, it is not possible to accurately determine when students exited or the exact reasons in each case. While the interviews shed much light on perceived 'walking points' (these are discussed in more detail in later sections of the report), it is critical to note that much could be gained from a more detailed analysis of when and for what reasons students exit their course.

Table 4: Comparison of commencing versus course completions

State grouping	Commencing	Course completions	Percentage
QLD	637	238	37.3%
NSW	1487	593	39.8%
VIC & TAS	356	89	25%
SA & NT	236	108	45%
WA	285	62	

One of the problems that resurfaced while conducting the scans was the degree of variation of course offerings across state groupings. For example, within single sectors, such as Early Childhood, students could potentially be enrolled in a qualification that permitted them to only teach children aged up to 5 years, or only up to 8 years. As displayed in Table 5, such Early Childhood qualifications could sometimes also be combined with the ability to teach Primary, and even in some cases, a qualification that covered from Kindergarten to Year 12. Similarly, data on both Primary and Secondary Education students is at times spread across either Early Childhood or Middle School. Nonetheless, the data indicate the vast majority of students enrol in four-year Primary qualifications. The exact percentage of students enrolled in Primary is somewhat difficult to interpret as these numbers are spread both upwards into shared Secondary qualifications and downwards into some Early Childhood qualifications. When such qualifications (i.e., those shared with Primary), are moved into either Early Childhood or Secondary groupings, the percentages are as follows: Early Childhood 18.14%, Primary 48.33% and Secondary 33.52%. Figure 5 below, graphically displays the full range of four-year degree courses.

Table 5: Number of students enrolled in 4-year degree courses

Level/Type of course	2007	2008	2009	2010	2011	2012 (Preliminary)
4-year degree						
EC - 0 to 5 years	89	56	87	75	77	34
EC - 0 to 8 years	32	51	51	62	78	97
Combined EC/Primary	73	55	68	90	106	101
Primary	447	607	469	524	620	498
Middle School and/or K-12	155	162	180	131	98	109
Secondary	229	220	194	223	245	243
Other	15	22	80	30	24	12
Graduate Entry						
EC - 0 to 5 years	0	3	4	2	1	0
EC - 0 to 8 years	7	11	21	24	18	15
Combined EC/Primary	47	41	59	73	75	118
Primary	22	24	29	30	31	30
Middle School and/or K-12	5	2	2	1	3	4
Secondary	53	59	69	78	84	71
Other	42	45	60	79	88	105

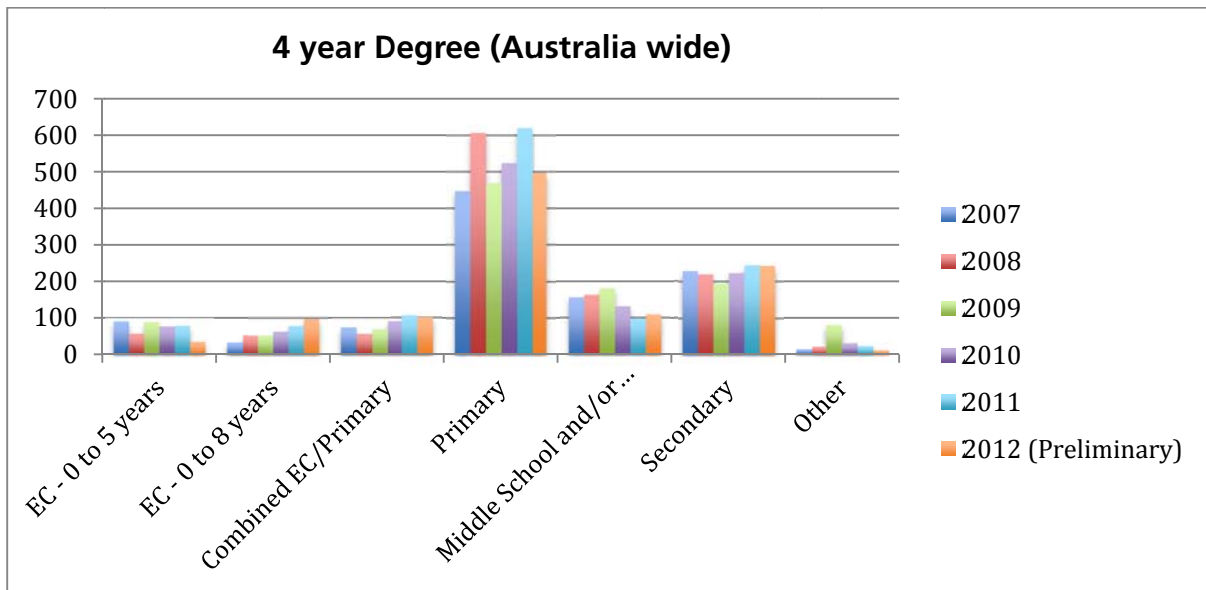


Figure 6: Numbers of enrolled in 4-year degree programs.

Similar issues are present in the data for Graduate Entry ITE (Figure 6), with a surprising number of student falling into the category 'Other', which, in this case, includes Vocational Education and Training and associated areas, for example, Tourism, Hospitality and Management or some form of Adult and Workplace Based Education. While Primary is by far the most common four-year undergraduate ITE course, data for Graduate Entry ITE shows that both Early Childhood (41.34%) and Secondary (42.23%) are much more popular, with only 16.41% of students choosing Primary.

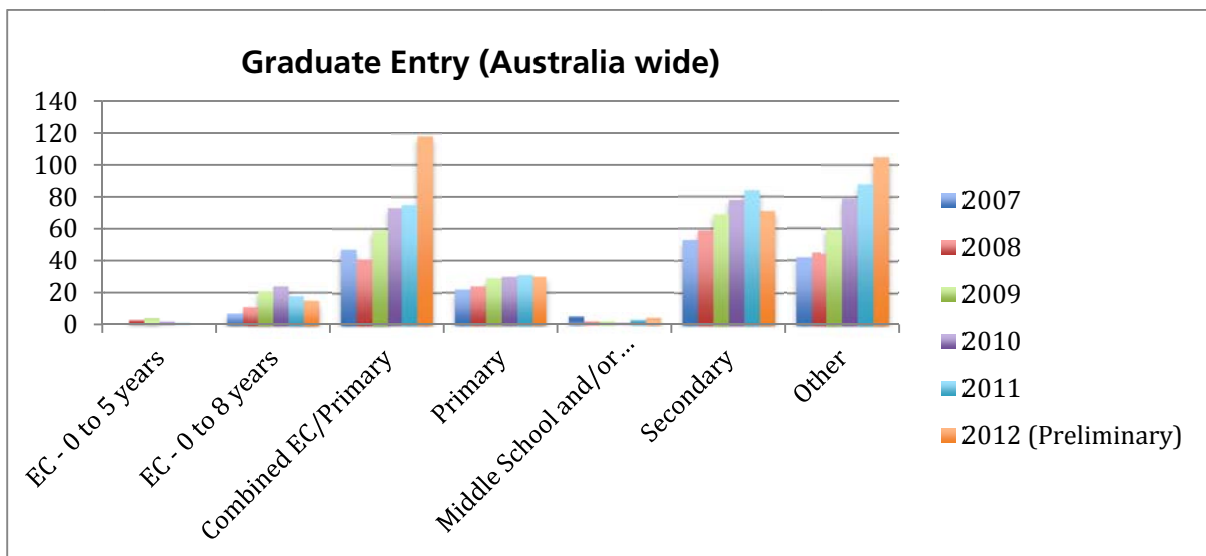


Figure 7: Numbers enrolled in graduate entry programs.

The feminised nature of the teaching profession, particularly within the Early Childhood and Primary sectors, is a source of considerable debate. While the MATSITI-ACDE scan did not attempt to capture mainstream ITE data, the scan data in this area (Table 6) does indicate that the vast majority of Aboriginal and Torres Strait Islander ITE student enrolments are female (77.61%), with only 22.38% being male (see Table 6). There are no significant variations in this breakdown across the state groupings and without a mainstream comparison it is not possible to gauge if this data differ from the general ITE population.

Table 5: Gender distribution of ITE student enrolments

Gender	2007	2008	2009	2010	2011	2012 (Preliminary)
Male	283	332	336	333	353	330
Female	1022	1129	1155	1170	1273	1072

In a similar manner to other fields within the scan, the difficulty of obtaining accurate mainstream ITE data makes a comparison of age groupings problematic. This component of the scan points to mature-age students in the 25+ grouping representing the majority of enrolments at 56.15% of the total. This is followed by the age grouping 19–24 years at 35.22% and School Leavers 17/18 years at 8.61% (Table 7). When this data were discussed with deans and Aboriginal and Torres Strait Islander Higher Education Centre leaders during the state meetings, there was considerable debate about whether this spread of age groups is typical of mainstream ITE enrolments. Opinions differed, with views approximately split equally. Qualitative data from the interviews indicate that the conduits into ITE programs, particularly in cohort and away-from-base programs, rely heavily on sources such as Indigenous Teaching Assistants or other staff such as Teacher Aides, who are predominantly female and clearly already working in the sector. This upgrading of qualifications for Indigenous Teaching Assistants has a historical basis in Australia. Hence, while clearly some cohort and away-from-base programs draw on mature-age students already employed in schools, it should be noted that a more fine-grained analysis would be beneficial.

Table 6: Age groupings

Age group	2007	2008	2009	2010	2011	2012 (Preliminary)
School Leavers (age 17/18)	87	90	128	112	170	135
Age 19-24	428	477	492	492	559	503
Age 25+	743	841	808	823	830	660

The scan listed two options for mode of study: on-campus or off-campus. When returning the scan some (but not all) institutions included extra fields that designated forms of off-campus study that combined an on-campus residential or block program (often entailing off-site visits by university staff to community or vice-versa). For the purpose of consistency, it was decided to list all data provided by universities offering cohort and away-from-base programs in the original 'off-campus' category, as the majority had listed their data under these two headings. It is important to note, therefore, that the off-campus figures (Table 8) contain both solely off-campus students as well as those completing courses offered in multi-modal study. The percentage breakdown shows 60.65% studying on-campus and 39.34% off-campus.

Table 7: Study mode

Study mode	2007	2008	2009	2010	2011	2012 (Preliminary)
On-campus	591	815	762	803	780	595
Off-campus	511	436	528	505	484	355

Feedback points to the *Basis of Entry* being one of the most difficult components of the scan for institutions to source data. While the figures point to the majority of students entering through the category 'Other', the exact nature of this grouping is unclear. For this reason, a component of the qualitative interviews conducted with over 70 ITE students explored the manner in which these students were accepted into their course. Based on this qualitative interview data, it is possible to suggest that a large percentage of students listed under the heading of Other were accepted through what is commonly termed Alternative Entry. While students listed under ATAR are usually school leavers, those listed under Indigenous Pathway/Entry programs and TAFE qualifications would appear to be, in many cases, entering cohort and away-from-base programs (see Table 9). However, such analysis is speculative and based on interview and anecdotal data because these figures from the scan do not allow further breakdown. It is highly recommended that any future collation of *Basis of Entry* data include a more fine-grained breakdown of the Other component.

Table 8: Basis of entry

Basis of entry	2007	2008	2009	2010	2011	2012 (Preliminary)
ATAR	135	142	174	149	178	155
Indigenous Pathway/Entry program	93	120	139	138	152	127
TAFE qualification	48	41	59	66	78	47
Other	420	520	445	443	468	435

5 Findings: Students' retention and graduation factors

This component of the report outlines the MATSITI–ACDE research project's findings in relation to factors affecting the retention and graduation of Aboriginal and Torres Strait Islander students enrolled in ITE courses across Australia. This second section of the research findings draws on:

- existing literature
- institutional scans from 33 Australian universities offering ITE
- interviews with Aboriginal and Torres Strait Islander teacher education students and key people involved in their support from both faculties and schools of education and Indigenous Higher Education Centres
- conversations held at state meetings with deans and Indigenous Higher Education Centres.

From the data, four themes emerged that identify ways to improve initial teacher education programs in order to retain and graduate more Aboriginal and Torres Strait Islander teachers and to achieve parity with non-Indigenous teacher graduation rates. The focus of this section of the report targets what faculties and schools of education can do to improve their practices, noting that contexts and programs vary considerably. This research highlights the need for multiple solutions.

While there is overlap between the four themes, they are presented separately in this section of the report because this format is perceived as most useful in assisting faculties/schools and Indigenous Higher Education Centres in developing the action plans that were a main objective of this research project. The identified themes are more than theoretical: they provide guidance for change. Dividing findings into themes is intended to allow those responsible for Aboriginal and Torres Strait Islander education students to consider how barriers might be addressed, by whom, and with what partnerships in place.

Themes related to retention and graduation can be broadly represented as falling under the following four areas:

1. Issues relating to institutional structures/procedures
2. Issues related to the personal, social, academic and financial support of Aboriginal and Torres Strait Islander students (including, but not limited to, pastoral care)
3. Issues related to coursework
4. Course-specific issues related to cohort models (including mixed-mode or away-from-base programs)

5.1 Institutional structures and procedures

One finding of this study is the significance of institutional practices as central to student success. These practices include issues related to key partnerships, staffing, institutional flexibility and record-keeping. While Indigenous Higher Education Centres may support students, without sustainable practices of faculties and schools, Aboriginal and Torres Strait Islander students are often both invisible and often unsupported by their faculties. Where support exists, it remains ad hoc – often left to the goodwill of individuals, rather than being positioned as core business. Institutional practice also encompasses the actions institutions take to provide culturally safe places for Aboriginal and Torres Strait Islander students, with a call for these practices to be visible, ongoing and embedded in the schools/faculties themselves.

Partnerships between schools/faculties of education and Indigenous Higher Education Centres are crucial to success

Where strong and ongoing partnerships and relationships between schools/faculties of education and Indigenous Higher Education Centres were evident, the schools/faculties had a strong awareness of their Aboriginal and Torres Strait Islander students and the issues they encountered, and were able to provide examples of problem-solving that made a difference to individual students and to overall awareness. For instance, where partnerships existed, institutions were easily able to provide us with their institutional scans – schools/faculties knew who to ask for this data and awareness of students was easily shared. In another example, a strong partnership enabled one university to give numerous examples of students who had come close to dropping out but, after phone calls from both the school and the Indigenous Higher Education Centre, received the support they needed to continue in their program. When schools/faculties took an active part in activities such as orientation and the selection of ITAS-TT tutors, the success of these programs seemed to have been optimised.

Some of the specific points made about institutional practices and procedures:

- Schools/faculties often are not aware of the Aboriginal and Torres Strait Islander students in their program. Indigenous Higher Education Centres would need to be consulted with respect to the ethics of identification, and strong partnerships would have to be maintained for schools/faculties to understand protocols, procedures and the efficacy of identification in order to know how to support their students. While support from schools/faculties is crucial, issues of cultural safety would have to be understood.
- Working relationships between faculty/schools and Indigenous Higher Education Centres should be institutionalised/formalised, sustainable and ongoing, with regular meetings or liaison.
- Schools/faculties and Indigenous Higher Education Centres should work together to map out their roles and responsibilities and the roles and responsibilities provided by centres. While centres currently take responsibility for supporting Aboriginal and Torres Strait Islander students, it was often suggested that schools/faculties should play a greater role in academic support in particular, and generally knowing their students. For example, when faculty scholarships are awarded faculties should actively participate in supporting students as a shared responsibility. Many schools and faculties were often unaware, except in a vague sense, of the business of centres.
- Repeated calls were made for an allocated Aboriginal and Torres Strait Islander higher student liaison position within schools/faculties. This position would be separate to the Indigenous Higher Education Centre. There would be an allocated workload attached to this liaison position, rather than merely having the staff member doing the work based on his/her goodwill or sense of social justice.
- Pathways and basis of entry need to be better understood by faculty/schools (benefits in the basis of entry being understood as falling broadly under either Direct Entry or Alternative Entry) in order to identify risk factors (e.g., possible academic literacy needs). This component of the scan proved to be one of the most difficult for institutions to source their data.

Improved systems to track progress of students

The difficulties schools/faculties had in supplying institutional scans and the complexities of organising interviews with students indicated gaps in record-keeping that make it difficult to know how students are progressing and reasons they may exit their programs prior to graduation. In addition, because course progression is not always straightforward for Aboriginal and Torres Strait Islander students who may reduce their load, defer or leave their programs and return later, greater and more regular tracking of student progress is important. It is also relatively common for students to 'stay on the books' even though the student is not currently enrolled (most often the result of lack of familiarity with institutional withdrawal procedures). Consequently, programs may appear to have more Aboriginal and Torres Strait Islander students enrolled than is accurate, and enrolled students continue to incur HECS debt without knowing they remain enrolled in the program. Without stronger data, 'true' enrolments are difficult to gauge and potentially inaccurate, and reasons for withdrawal are hard to address.

Tracking progress is also important for student support and in the identification of 'at-risk' students. We heard examples of scholarship students who were disappointed that they had never been contacted; however, the largest institutional gap is in tracking Aboriginal and Torres Strait Islander students who left before completion. Almost no institutions conduct exit surveys, which makes it impossible to identify factors related to why students leave. The need for exit surveys and better record-keeping is perceived as crucial to improving retention and graduation.

Some of the specific points made about tracking the progress of students:

- Institutionalised and systemic mechanisms for schools/faculties should be developed within individual institutions to track progress of Aboriginal and Torres Strait Islander students, with the responsibility determined in partnership with the Indigenous Higher Education Centre.
- Institutional procedures should be developed to enable flexibility in course progression, something identified as a contributing success factor for Aboriginal and Torres Strait Islander students.
- Strong evidence was provided of the benefits of regular contact with, and follow-up of, Aboriginal and Torres Strait Islander students throughout the year (a shared responsibility of both school/faculty and Indigenous Higher Education Centre).
- Exit interviews are required to better understand the reasons why students may leave their programs prior to completion.

Institutionalised practices around cultural visibility and cultural safety

As institutionalised practice, feedback was consistently provided with respect to two things in particular: (i) the lack of visibility of indigeneity in schools and faculties, and a related issue, (ii) the alienation (and lack of cultural safety) students sometimes feel when they are invisible in the school/faculty. Similar to other points, these concerns overlap with other barriers. As a component of institutionalised practice, some of this invisibility can be addressed by measures that embed Aboriginal and Torres Strait Islander knowledges in schools/faculties in conscious and concrete ways.

Some of the specific points made about cultural safety:

- Repeated calls were made for visible Aboriginal/Torres Strait Islander presence in schools/faculties (e.g., on promotional materials and websites, and reflected in staffing).
- Professional development in relation to cultural safety/awareness should be required of school/faculty academic staff and general staff.

5.2 Support of Aboriginal and Torres Strait Islander students

Confirmed by this research and well documented elsewhere, the largest contributions to Aboriginal and Torres Strait Islander student success have to do with student support. Although there is a wealth of documentation about the kinds of support students find helpful, the outcomes of this research suggest that the areas in which improvement is needed have remained consistent over many years. While funded for student support, Indigenous Higher Education Centres share a range of responsibilities including, though not exclusive to, research and policy. The majority of ITE students praise the support they are given by centres, suggesting repeatedly that they might not have completed their degree without it. The support they receive from schools/faculties also obtained some praise, but this form of support was generally not formalised and depended on the goodwill of individuals. Areas here loosely identified as 'student support' include financial support, personal and social support and academic support. There appear to be particular juncture points where timely support is crucial: during the first year of study, when assessment is due, before and after professional experience (practicum) and during the final year of the course. During this research, we came to see these critical times as potential 'walking points'.

Student support – shared responsibilities

Interviews with students, heads of Indigenous Higher Education Centres and deans of schools/faculties all discussed student support. Centres currently offer both formal and informal support of students. ITAS-TT tutoring was seen by most students as central to their success and, where they existed, students also mentioned centre activities such as orientation, help with scholarship applications, personal, course and career counselling, and social events, and facilities such as computer labs. In some cases, centres organise regular visits from an Elder. Support offered by centres thus represented financial, personal, social and academic support. Though positive suggestions were made about the need for better selection of ITAS-TT tutors, overall, centres are seen as the 'safe place' for education students. However, in some cases, Aboriginal and Torres Strait Islander students said they did not use the centre, for a variety of reasons. Nonetheless, there was widespread concern that centres not be seen as the **only** avenue of support. This is because it was widely believed that schools/faculties should also offer support to Aboriginal and Torres Strait Islander students, both supplementing and collaborating with the centres in more concrete and institutionalised ways. Therefore, improved partnerships between schools/faculties and centres was seen as paramount to improving support overall.

Some of the specific points made about shared responsibilities:

- A general lack of knowledge was evident in schools/faculties about the specific roles and responsibilities within the Indigenous Higher Education Centres. Repeated calls were made for clarification over the division of responsibilities for support of Aboriginal and Torres Strait Islander students (between school/faculty/Indigenous Higher Education Centres). This clarification was described as important, 'in order for wheels not to constantly be reinvented'.
- Repeated calls were made for student support to not be the sole responsibility of the Indigenous Higher Education Centre, and that memorandums of agreement be drafted to clarify these partnerships.
- In most cases, it was perceived that course-specific support should be the responsibility of the faculty/school.
- Benefits were evident when there is an allocated Aboriginal and Torres Strait Islander student liaison/support position within schools/faculties **in addition to** support offered from Indigenous Higher Education Centres. This person was described in one institution as a 'trusted friend' of the centre.
- In other words, students felt supported when they knew there was someone specific in their faculty whose job it was to support them. Students often approached Aboriginal and Torres Strait Islander staff and general staff within schools/faculties where they existed. However, these school/faculty members often felt isolated. The benefits of strong personal relationships between students and approachable, committed individuals within schools/faculties were regularly expressed.

Student support – financial support

While Aboriginal and Torres Strait Islander education students represent a diversity of personal circumstances, financial hardship continues to be a strong reason that students leave their programs before they graduate. Scholarships make study possible for numerous students, but information about them is often not centralised, and the application process is cumbersome and difficult for students who are unfamiliar with institutional procedures. In addition, some students lack the technology and associated literacies to apply online. Although financial assistance may exist, it is often difficult to access or inadequate for the needs of mature-age students, many of whom are the main breadwinners in their family and have significant community responsibilities.

Again, certain points within the four-year degree pose particular financial burden. For example, to undertake professional experience, students must give up paid work, purchase new sets of professional clothing and must sometimes travel away from home.

Some of the specific points made about financial support:

- Strong evidence was provided that while all ITE students (including those targeted through Widening Participation funding programs) face financial issues, these same issues led to Aboriginal and Torres Strait Islander students dropping out of their courses (HECS, costs of professional experience, loss of income, arranging leave from employer).
- Repeated calls were made for schools/faculties to be aware of, and to support and track the progress of scholarship holders (because financial awards should also include other types of support).
- Though schools/faculties may not be able to address the broad issues of disadvantage, flexibility, for instance, around course progression, may alleviate pressure on students.

Student support – personal and social support

To some extent, the issues students express about their personal and social needs are related to the need for cultural safety. We were repeatedly told how crucial it was for students to have other people who understood them available to talk to, to relax with, and to study with. Except in schools/faculties in which there were nearly no Aboriginal and Torres Strait Islander mainstream students, those we spoke to felt safe when there were others around with whom they could relate. Some students expressed this personal safety as the reason they had selected a cohort or away-from-base program over a mainstream program. Students in mainstream programs confirmed that while they had elected to enrol in their programs, they needed somewhere to go and 'be themselves'. Many students confirmed that they would only seek support (of any kind) from other Aboriginal and Torres Strait Islander people (e.g., we heard comments from male students about wanting personal guidance from male Aboriginal and Torres Strait Islander staff). In other cases, as long as students had a designated mentor or knew who to go to, they were likely to feel supported.

Cultural safety problems included the identification of indigeneity. While students wanted to be valued and recognised as Aboriginal/Torres Strait Islander, they sometimes experienced stigma, racism, ignorance or huge expectations about representing their culture and people. Support therefore included having a safe place away from these situations. A balance must be found between students being identified in order to deliver better support on the one hand, and the disadvantage to identification leading to stigma on the other. The need to find this balance is another reason that partnerships between centres and schools/faculties must be established and protocols around identification established.

Some of the specific points made about personal and social support:

- Overwhelming evidence exists in the literature and further information was gathered in the interviews concerning the importance of relationships (described by some as pastoral support or mentoring). The lack of relationships was seen as one disadvantage to online or external coursework.
- Regular reports of ignorance and racism from both school/faculty staff and other students/peers indicate the need for better professional development of both academic and general staff and of antiracism within ITE programs in general.
- Repeated calls were made for increased sensitivity and awareness towards a host of issues that may arise specifically during professional experience (for example, on-site cultural safety issues such as racism, financial hardship, lack of mentoring).
- Repeated mention was made of stress related to having to be the 'expert' on everything related to Aboriginal and Torres Strait Islander matters (for example, in courses, on professional experience).
- Repeated mention was made of isolation as a risk factor (both cultural and geographic for students studying away-from-base or in remote settings).

Student support – academic skills

Academic skills were identified as a ‘stumbling block’ by some students. The causes were varied – for example, a lack of opportunity in their own schooling, or being the first in the family to enter higher levels of education, or the complex transition students must make from the working world or TAFE to the expectations at university. Students identified the need for academic support, especially at critical juncture points. While successful students persevered, repeated subjects or sought help, many suggested that less resilient or less assertive students feel embarrassed to ask for help, are eventually demoralised and then give up. Concerns about academic skills include academic language (unfamiliar discipline language such as curriculum or pedagogy), English literacy and numeracy at the level required in their coursework, ESL (with some students speaking English as a third or fourth language), and tertiary level skills such as essay writing or referencing. Students enrolling through alternative entry report a steep learning curve in the first year, which appears to be a major attrition point.

Some of the specific points made about academic support:

- Some students value courses and pre-orientation programs targeting academic literacies.
- Schools/faculties and centres must collaborate on developing entry tests and other requirements and assessing needs on entry into a program.
- ‘Plain language’ information concerning university procedures, scholarships and ITAS-TT must be developed.
- Closer links must be generated between schools/faculties and centres surrounding the selection and training of ITAS-TT tutors.
- Dual responsibility of schools/faculties and centres must be developed to intervene at critical risk moments (such as bridging courses, the first year, the first assessment, professional experience and in discipline-specific areas such as mathematics).

5.3 Coursework

This research also identified concerns students had about specific aspects of their coursework. Specific and repeated mention was made of:

- professional experience/field experience
- the experience of participating in Aboriginal and Torres Strait Islander education subjects (where they existed)
- the benefits students felt from programs in which Aboriginal and Torres Strait Islander knowledges were present in their coursework.

The first two of these themes came up regularly as common issues and are currently underrepresented in the literature, while the Whiteness of teacher education is well represented. Also related to coursework were the issues commonly identified with respect to flexibility in course progression and procedures that allowed students to study part-time, out of sequence or over a period of time when interruptions to study occurred.

Coursework – professional experience

While experiences are obviously diverse, and many are positive, enough students identified concerns about professional experience to indicate it as an area requiring future attention. Discussed by most students as ‘practicum’, a range of experiences was recorded. Numerous mainstream students reflected on racism they encountered from teachers and students in schools, some reflecting on (and shocked by) the fact that this was the first time they had encountered it. Understandably, those who reported it found it infuriating, hurtful, silencing and, for some, it ‘turned them off teaching’. A few students were grateful they had been able to reflect on these encounters with centre staff or in assignments designed for reflection. Others spoke about professional experience in other ways, wishing there had been opportunity to engage in professional experience with an experienced Aboriginal or Torres Strait Islander teacher. A few spoke of trying themselves to embed Aboriginal and Torres Strait Islander knowledges in their classroom. With respect to professional experience, more specific issues arose for urban and away-

from-base, remote rural and program students. The problems were related to economic hardship (e.g., loss of income while on professional experience, as discussed above), the pressures on students doing field experience in schools when they are already employed as Indigenous Teaching Assistants (e.g., loaded responsibilities, lack of support from schools for time to study), and practicalities such as housing.

Some of the specific points made about academic support:

- The importance of professional experience sites that are culturally safe was emphasised, as was the importance of professional development of staff in professional experience offices.
- The need was noted for increased understanding (cultural safety and cultural awareness) across the school/faculty in terms of the issues and community obligations faced by Aboriginal and Torres Strait Islander students (e.g., funerals, child care, family).

In some cases, more targeted relationship-building between schools and schools/faculties of education was required.

Coursework – Aboriginal and Torres Strait Islander education subjects

Education courses vary in terms of how much they embed Aboriginal and Torres Strait Islander knowledges in their curriculum or whether and how they offer core or elective units on Aboriginal and Torres Strait Islander Studies, knowledges or perspectives. The presence or visibility of these knowledges or subjects was reported by students as positive and validating and, for some, crucial to their success. Nonetheless, aspects of embedded knowledges in coursework also provoked other responses. Numerous mainstream students talked about their distress at hearing non-Indigenous students discuss 'them' as though they were not in the room or at being made to stand up and represent all Aboriginal and Torres Strait issues. Some wished their tutors had more knowledge or professional development in the area. Students expressed their praise for Aboriginal and Torres Strait Islander academic staff in schools/faculties and others wished there were some or more Aboriginal and Torres Strait Islander lecturers and tutors. Numerous students talked about wanting a separate tutorial in those units when numbers allowed so they could discuss Aboriginal and Torres Strait issues in a more culturally safe environment.

Some of the specific points made about Aboriginal and Torres Strait Islander knowledges in coursework:

- Evidence was collected that some students find participation in compulsory Aboriginal and Torres Strait Islander ITE courses/content empowering, while for others, this leads to alienation/intimidation.
- More formalised professional development is required for those teaching in the subjects.
- More Aboriginal and Torres Strait Islander faculty is desirable, as is the sustainability of those positions and better support for them.

Coursework – course progression

As identified previously, Aboriginal and Torres Strait Islander students may take longer to complete their courses. Many successful students interviewed talked about deferring for periods of time, shifting from full-time to part-time study or re-enrolling after periods of absence. Almost all students and centre staff saw flexibility in course progression as a factor contributing to their success and we gathered much evidence that without it students would feel pressured to leave their programs. In some cases, we heard that the centre and school/faculty were able to work together to support individual students who needed advice and supportive arrangements for flexible deadlines and course progression. Students often required course advice from school/faculty staff. This advice requires professional staff and faculty alike to be culturally aware and sensitive to the students' difficulties in asking for help. Flexibility was also a factor in the success of scholarship students. In some cases, scholarship conditions were inflexible and high-achieving students struggled to fulfil the requirements related to full-time study or 'timely completion'.

Some of the specific points made about course progression:

- Repeated evidence was given of students re-entering their course after periods of absence.
- Positive feedback was provided when students received timely and culturally responsive advice and were able to make flexible arrangements.
- Evidence was collected of solutions made possible by strong partnerships between centres and schools/faculties.
- A positive role was played by mentors, whether in schools/faculties or centres.

5.4 Course-specific issues

This section of the report outlines some of the common issues identified by the research. While many of these issues have been raised consistently in the interviews, we acknowledge that there are other complex issues uniquely associated with remote versus metropolitan-based programs; mainstream versus cohort or block programs; and internal versus external programs. There are also unique state-based problems. Briefly, here are some specific issues identified in cohort programs (the majority of which are away-from-base or block programs):

- Block-mode students often find institutional procedures daunting. This affects their access to scholarships and other support structures.
- Institutional barriers include familiarity with institutional procedures such as enrolment and accessing information.
- Block and or cohort-mode students and associated staff and faculty are often forced to defend the legitimacy of their courses in relation to mainstream courses.
- There is evidence of the benefits in some locations resulting from close relationships between university programs and state departments of education. TAFE remote/block students report both benefits (e.g., flexibility) and restrictions (e.g., online access).
- Cohort students commonly discussed these problems: how expensive their programs were, online access, the need for personal relationships and a sense of isolation from the institution.
- Major benefits were evident when regular contact/interaction such as site visits/phone calls occurred. The more contact and relationship they had with the university the better.

7 Findings: Student journeys

This section provides narratives from the interviews conducted with 72 Aboriginal and Torres Strait Islander teacher education students across the country. Interviews were sought from both mainstream and cohort initial teacher education programs, and from programs catering for urban, regional and remote students. We also looked to represent students whose programs were delivered in a variety of modes. While full-time, mainstream students identified their needs, those studying in 'mixed-mode', 'away-from-base' and 'reverse-block release' programs identify specific issues relating, among other things, to distance education and technology, housing and financial support, residential blocks and community obligations. In many cases, despite the context, common needs were identified, but no one size fits all. The narratives represent multiple voices, and provide the reminder that each institution and course is best suited to identify its own strategies.

Strategies for identifying interviewees varied. The MATSITI scans informed us of the institutions with the highest numbers of Aboriginal and Torres Strait Islander education students. In the first instance, some faculties volunteered themselves at state MATSITI-ACDE meetings and interviews were set up with either the faculty deans or the Heads (or representatives) of their Indigenous Higher Education Centre. Focus groups and individual interviews were organised at times when students were on campus, either during their semester or during a residential. In other cases, centres and faculties were telephoned to assist us in identifying students to interview. When possible, we travelled to universities and met with students in person. In some cases, telephone interviews were conducted and, in a few situations, students sent long emails to us in response to calls put out by centres or faculties. Interviews were also conducted at the MATSITI conference in July. All respondents were presented with information about the MATSITI project, ethical clearance forms and consent forms.

- We asked respondents five guiding questions:
- Why did you decide to become a teacher?
- What has been your journey so far?
- What have you found supportive in your program?
- What have you found difficult in your program?
- What recommendations would you make to better support, retain and graduate Aboriginal and Torres Strait Islander teachers?

During these open-ended interviews, we hoped students would tell us their stories – and they did. In many cases, these interviews were lengthy, with some lasting over an hour.

The eight narratives in this section are amalgamations representing just some of the stories told to us in these interviews. Respondents and their institutions are de-identified.

Julie

We interviewed many different students in different locations, with different sets of dynamics at play. Julie, for example, is from a capital city and is enrolled in a mainstream teacher education course at a large urban university. She enrolled at university straight out of school and was doing pretty well academically – so well in fact that because of her results she was successfully nominated for a faculty-based Indigenous scholarship at the end of her first year. While she holds an Indigenous scholarship she openly says she **'is invisible to the lecturers, to the university even'**. Yet, she does have a very strong relationship with the centre, where she does her assignments and draws on ITAS-TT support. Several people in the centre know her family and she describes it as **'a place I like to go'**.

She feels that much of her success is a direct result of three things: the centre, the financial support that her scholarship provides and the support that her ITAS-TT tutors are able to give. She is very modest because her success is also a result of how hard she has worked. While she excels across most of her degree, and likes most courses, she has struggled to pass what she describes as **'this %##%* compulsory Maths course'**. Then there is the Indigenous Studies Unit. In some ways, she says, it was affirming. But because her Aboriginality is 'not visible', she recounts how she **'sometimes has to listen to a lot of ignorance and resistance from the other students who don't know that I am Aboriginal and this really, really, really hurts'**.

She says, **'It felt awful to keep my mouth shut when I heard what they were saying – but I didn't know what to do. I think I'm the only Aboriginal student in my year'**. She found that many non-Aboriginal students taking the Indigenous Studies Unit were negative about the content and this made her feel wary about stating her opinions. She wishes there were more Aboriginal students to relate to, and more Aboriginal lecturers and says openly that she is surprised not to see Aboriginal business except in the centre – **'no faces on posters', 'no mention full stop'**.

Throughout her first and second years at university, she maintains a high GPA. But it all starts to unwind during the first semester of her third year as she struggles to juggle her studies with a range of community obligations that include taking care of her sister's baby for a while. At the end of the semester, she receives a form or standard letter from the university telling her that her scholarship is going to be withdrawn because she failed to complete certain units that semester. Suddenly, this exceptional preservice teacher is on the cusp of having to drop out.

While she is offered the option of studying part-time, she feels embarrassed at having lost her scholarship. She is first in her family to attend university and many people around her have been building her up as a leader. She acutely feels the pressure.

Although we suspect there are many stories similar to Julie's that do not end well, in this case, the School of Education and the centre had good lines of communication open and they were able to quickly revise the conditions of Julie's specific scholarship. This enabled her to continue the program with financial support and Julie will graduate halfway through 2013, out of step, but graduate, nonetheless.

At present, Julie is maintaining a GPA in the top 20% across the majority of her courses.

Jack

Jack is similar to Julie in that he attends an urban, mainstream university. However, Jack is from a regional town several hundred kilometres away. Jack grew up in this small town that serviced a rural community; he knew no other kids who had gone on to university. While he did not do that well in high school, he completed a foundation course after lots of encouragement from a family member and entered university through an alternative entry route.

At 19, he moved to the capital city of his state to start an Arts degree (majoring in History). It was not long, however, before he started to experience loneliness and cultural dislocation. He repeatedly told us how he missed his family and his community, and that in his first year he hated the city: **'I had no friends or family'**. He described how he felt like an outsider in that first year. He could not figure out how to access scholarships, did not know how to take books out of the library, could not find his lecture rooms – in general, he found the size of the campus daunting and he struggled throughout his first semester. Well before the end of his first year, he dropped out and returned to the rural town where he was born and, once again, began to hang out with his mates. The turnaround for Jack happened when a

contact from the centre followed up and encouraged him to return to his studies. This was helped by the fact that he had family members who were teachers who also encouraged him to re-enrol into an initial teacher education course. He now spends his spare time working and hanging out in the centre: **'it's quiet and I like it – yeah, it's the first place I go when I arrive every day'**. He says, **'You know I've had the same ITAS-TT tutor for 4 years'**. While Jack did not initially like to ask for help, he has increasingly sought out individual mainstream tutors and lecturers who he finds are helpful. As a young male student in his cohort program, Jack was well aware that he was not the norm. He spoke to us of gender issues as well as other points related to his program. Jack explained that he enrolled in a Certificate IV because he liked kids, but he was being teased by members of his family who see teaching as women's work. Alongside the other male students interviewed, Jack said he appreciated that his university's Indigenous Higher Education Centre enables him to see a male support officer.

Jack presented as having no specific needs and he describes himself as someone who generally gets through problems on his own and does not like to ask for help. He is now in his fourth year and doing great. He is out of step because he still has a couple of third-year courses to complete as a result of attending three funerals last year. Jack opened up when we talk about his field or professional experience as he had a 'hostile' encounter in his first school. He says, **'You wouldn't send your worst enemy to that school'**. He heard many racist comments in the staffroom from teachers who were saying things like **'All my Aboriginal students are hopeless'**. He found the experience silencing and disempowering. Personally, he wishes he had been able to do his prac with an Aboriginal supervising teacher. He raises the point that he was offered a chance to reflect on this experience in one of his university assignments, which he found very helpful.

Jack now mentors other Indigenous students and has a close relationship with the Head of the School of Education and a couple of other lecturers who have, together with the centre, worked closely to support Jack – they continue to monitor his progress. Jack continues to do well and cannot wait to get out of the city again next year. He hopes to teach next year in a rural town close to where he grew up.

Cindy

Cindy is now in her 30s and lives in the remote community where she grew up. Cindy did not have a lot of formal schooling, but grew up with culture primarily from her grandmother, who taught her to **'trust her heart and mind'**. She speaks English as a third language. At 13, Cindy left school to work in tourism with her father. But after many years working as a guide, she decided that what she really liked was working with children – so she got a job as a teaching assistant.

In her current job at the school, Cindy takes on many roles. She and the other Aboriginal teaching assistants do most of the behaviour management and they train the new non-Indigenous teachers, who stay on average, she says, around six months. Without the teaching assistants, **'the kids go crazy and the teachers don't speak language'**. The Aboriginal teaching assistants are crucial to the school. After a while, Cindy started to **'feel used'** and decided she wanted to be the teacher, instead of working for the teacher.

When she first enrolled at university (which **'took forever'** because she did not know how to enrol online) she thought, **'Oh my God, I'm going to die. It was so scary'**. On top of English as a third language, the academic literacy was very difficult and the speed of the course has been tough, though the university has been quite flexible. She has come in and out of her course, mostly because it was hard for her to be away from family and country. But she is back now, and appreciates her remote area cohort program because **'it embraces what I have to offer'**, that is, her cultural knowledge.

Cindy talked a lot about the pressures of working full-time in a school as well as studying full-time. She talked about 'school pressures' – that despite encouraging her to become a teacher, the school she works in is not that supportive of her taking time to study or giving her time for her professional experience (practicum). She also talked about how she does not get paid while on field experience and suggested she did not get treated the same as non-Indigenous preservice teachers, for instance **'I'm not entitled to teacher accommodation while on prac'**. She explains field experience as a **'prickly issue'**.

While Cindy had nothing but praise for her lecturers and tutors, she did find having to take an Indigenous Studies Unit intended for non-Indigenous students **'a bit weird'**. She feels it is hard for her to be as selfish as she is required to be to study – there are many people depending on her.

Victoria

Victoria is a young urban woman enrolled in Secondary Education in a mainstream education program. She says she would not be getting through without the support of her Indigenous Higher Education Centre. She seeks out the specific people that offer her academic, cultural and social support within the mainstream setting and her centre has an Elder who comes in on a regular basis. Victoria explained, for instance, that she would be unlikely to go to a mainstream counsellor. She wants the connection to community.

Teaching is something she always wanted to do and her mum was a primary school teacher. Victoria grew up in the city, and there were few other Aboriginal students at the high school she attended. Although Victoria is sometimes angered by the fact that she **'doesn't necessarily look Aboriginal, so people just assume I'm not'**, she is very involved in her community. She does well academically, but laments that there are not **'more opportunities to incorporate Indigenous knowledge through my entire degree. I would LOVE to have more Aboriginal students like me in my degree, people who I can relate to. Where are they?'**

Despite having a lot of support from her family, Victoria found herself very close to dropping out in her first year. She said, **'I found it really hard. I had the support of an ITAS-TT tutor but when I changed tutors I felt in control and capable. It's as little as finding the right tutor'**.

Victoria had specific advice to offer. She really enjoyed her compulsory Indigenous Education subject, but wished her tutors had managed to acknowledge Aboriginal students in the course 'without singling them out'. Some of the non-Indigenous students said **'very negative things'** in the unit, and it made her **'feel very wary about voicing her opinion'**. Often, racist comments were made right in front of her and it **'brought back how my mother growing up had been discouraged from her own indigeneity'**. In some ways, though, the Indigenous Studies Unit helped her reconnect with her own heritage. Victoria felt that some education tutors in other subjects also needed some cultural training. She said, **'Tutors are meant to help you, not to be so racist you can't even look at them'**. Victoria suggested **'more Aboriginal and Torres Strait Islander teachers, more speakers, more units, more posters...'**

While Victoria is on a scholarship, which has made it possible for her to study, she did have some advice about how she could have been better supported by both the Indigenous Higher Education Centre and her faculty. She was very surprised – as were her family members – that once she received her scholarship she was never once contacted about it. The only communications she ever received were administrative form letters. She was very disappointed by this.

Margaret

The first thing Margaret told us was that she would not be getting through her studies without the support of the Indigenous Higher Education Centre at her university. She never in a million years thought she would have the confidence to be a teacher. She had been through **'some very hard times'** and did not think she was very smart. But she ended up being retrenched from her job with Telstra and then meeting some people who thought she was up to it, and enrolling in teaching has changed her life. She is passionate about working with her people and teaching so that her own children never have to put up with the racism she experienced in her own schooling. She sees her own kids and their friends putting up with things in her rural town (like **'getting suspended for mucking up on NAIDOC Day'**) and is determined to change things for them and she **'wanted [her] kids to see [she] could do something'**. She is very proud of herself and says she has had a lot of help from the centre, but also individual lecturers who have become friends.

To get into her program, Margaret did a bridging course. At the time, she thought she had no academic skills at all, but she has ended up being fine and getting good grades. In retrospect, she believes that the bridging course was good, **'not because I really needed it, but because it was so good to start uni with a group of people. A network of support made a huge difference'**. She talked at length about the significance in her life of relationships, both initially with other students and later with some lecturers because **'as Indigenous people we value relationships'**. Margaret told us how hard the last few years had been for her and praised a lecturer who often let her use the phone in his office to call home: **'I greatly appreciated his kind offer. The concern and support I was offered helped me to**

deal with this ... I was an emotional mess and did not have the state of mind to meet my academic commitments on time. The staff were just wonderful! They gave me time to deal with my issues and continue on in the course. My confidence has grown immensely and my success in this course has positively impacted other members of my family and other areas of my life.'

However, even though the group of people she did the bridging course with **'felt close and supported each other'**, none remain in the program except for her and a few who went into nursing.

Margaret feels she has to prove herself more because she is Aboriginal. She does not mind, but she talks about being **'thrust into being spokesperson'** all the time as the only Aboriginal person in her mainstream program.

Donna

When Donna was in Year 12 in a rural town, every single one of her teachers resigned during the year and she was the only student to graduate from high school. She was successful in obtaining a university scholarship and was determined to be the kind of teacher who would stick it out. At 19, she has a passion to work with Indigenous kids, and one day wants to be principal of a school like the one she went to, so she can make a difference.

Donna is the first in her family to go to university and her father cannot read or write. She remembers her first day of lectures on campus, crying afterwards for two hours. Enrolled in a mainstream program eight hours away from her family and friends, Donna lists the many things she found frightening: she was lonely, the campus was huge, she had no money, she was too scared to set foot in the library. She made herself some promises, including learning how to use 'university language', in contrast to what she called her **'home language'**. Coming from a very small school and with a barely literate father, she was surprised to find that universities treated everyone **'as though they were on the same playing field'**.

She really did not know about the Indigenous Higher Education Unit until her third year, and would have liked an ITAS-TT tutor earlier, suggesting it also might have been helpful to have a mentor, a phone call every now and then, a blog or a forum. As it stands, she feels fairly isolated and gets all her support from her sister, with whom she lives an hour away from campus. Donna worries that students who **'don't hang out at the centre won't know where to get support at all'**. Donna says she is somewhat torn between wanting to use the centre and proving she can do it all herself. She says this is partly because she is aware of racism – that some non-Indigenous students say things to her like, **'Oh, you got a good prac because you're Black'**. It makes her want to distance herself from the centre in case she is perceived as getting handouts.

Michelle

Michelle lives and works in a rural community (a former mission) several hours from the city campus. She is enrolled in a mixed-mode, block program that requires her to travel to campus several times a year for intense weeks of study. She then returns home to her community with study packages and works on her assignments. If she had to study on campus, she would not do the program at all – **'It would be impossible'**. Michelle is enrolled in a secondary teaching degree with Aboriginal Studies as one of her teaching areas.

As a single mother, Michelle does her best to juggle responsibilities. Because of the isolation of her community, she has no access to an ITAS-TT tutor or a library and says, **'that's a bit of a problem'**. She is on a scholarship, for which she is **'very grateful'**, and because she is **'not very technological'**, she spends all her scholarship money on books that she does not know how to access online. She says, **'computers are not my favourite thing in the world'**. Her biggest issue has been access – she feels remote students need some sort of meeting or central point because the only time she sees others in the same boat as her is during the residential. And even then, she says, **'It's so daunting away from home'**. As a mature-age woman, she tries to take care of the younger students, who she feels are not so resilient, and she says she would have given up when she was younger. She wants more chance to talk to others in her program: **'We talk the same language, our mob'**. **'Way more than half'** of the students she started with have left the program.

Michelle initially did a bridging course to get into university, but it has taken a lot of time for her to pass some of her courses and she says she **'struggled with the grammar'**. Learning the language of essays was tough, and even though she says she knows a lot about kids, she did not expect studying to be a teacher would be so hard. Sometimes she is not quite sure what questions are being asked in assessment and it would be much easier if she had access to an ITAS-TT tutor. Michelle is happy with her course but admits she is not very confident: **'I find it hard to work at home as even though my family are supportive they do not understand how much time I actually need to put into my subjects'**.

Michelle talked candidly about interruptions to her degree. **'A lot of personal things have gone on'**, she says, and so while she started her degree in 2001 she is just now, in 2012, at the end of her third year. She is glad she has not been kicked out, and says she is determined. One of the things that has kept her going is her practicum in her own community. She has a strong relationship with the kids she teaches and they were recently written up in the local paper. She hopes the school in her own community will have a job for her when she finishes.

Grace

Grace is a Torres Strait Islander woman in her late 30s, who still lives in the Torres Strait. When her own children started school she thought, **'I'm a mum - I can help kids'** and gained employment as a teaching assistant in her own children's school. When she had been there a few years, the principal tapped her on the shoulder and suggested she enrol in teacher education. Because she had not finished high school, she enrolled first in an enabling course and then a Certificate IV. Once that was completed, she began her teaching degree. She is now in her final year, though her studies have been interrupted by community responsibilities (including seven funerals in five months last year) and she is off-stream with a few subjects left to complete.

For Grace, the transition from TAFE to her degree program was a **'huge leap'**. Academic language was daunting and she felt out of her depth, not so much because of English, but because of the language of the university, with which she was unfamiliar. Nobody in her family had attended university. Institutional procedures are always an issue – for example, Grace has had trouble with enrolment, accessing information and does not understand the credit system. She says, **'I don't know what I have to take. I just do what I'm told'**.

Most of Grace's course is offered through online lectures, which she says are generally good, but she **'doesn't like being stuck on a computer'**. She also has ongoing frustration with technology because there is no broadband where she lives and she uses a wireless broadband dongle, which often fails. While Grace praises the tutors who set up opportunities for online discussion, this is not always the case and she feels disadvantaged compared to students who are on campus. Grace also has trouble accessing resources. For instance, library books can be delivered to the nearest study centre but, in her case, getting there is still a 300 km round trip. The study centre will not let her borrow the books and take them home, so to study she needs to get to the centre – something she can rarely do.

Grace says she feels **'a bit like a poor cousin'**, both in terms of resources and always having to prove the credibility of her cohort program. On one residential, she overheard a non-Indigenous student say **'Oh you get everything. All you have to do enrol and you will get a job'**. In fact, she has heard her course referred to as a **'Blackfella Degree'**, which she found highly insulting.

Grace also talked about logistical problems on field experience. She does her field experience a long way from home and this caused financial problems because she was not receiving an income and she is her family's main income source.

Like other mature-age students, Grace told us she will complete her course, no matter how long it takes her. **'I'm patient, and I'm stubborn, so I'll just keep going.'**

8 Recommendations for further exploration

The process of conducting the MATSITI–ACDE research project, together with the dissemination of the project’s quantitative and qualitative data, has been significant in that it:

- enabled participating universities to look at a fine-grained analysis of their Aboriginal and Torres Strait Islander student enrolments
- facilitated focused dialogue concerning levels of Aboriginal and Torres Strait Islander student attrition
- brought together deans of education and the leaders of their Indigenous Higher Education Centres in a collaborative discourse that will hopefully produce many tangible outcomes in the years ahead.

The MATSITI–ACDE research project was largely exploratory in nature – primarily consisting of analysis of enrolment and programmatic data, and focus groups and interviews at a range of Australian universities that have initial teacher education programs. The research has therefore identified a number of gaps in our understanding of the critical factors leading up what we call walking points, when Aboriginal and Torres Strait Islander students leave their initial teacher education course. For this reason, the following areas are suggested as points of further exploration and research.

Longitudinal tracking

The research findings point to a number of factors that affect an Aboriginal/Torres Strait Islander student’s decision not to complete their study. These include supporting students through enrolment, providing smooth transition into university life, supporting students culturally, socially, academically and financially when required. It would appear that many of these factors centre on a student’s first experience and exposure to university life. For example, the first time they have lived away from home/community, their first exposure to the university campus, their first time finding lecture rooms or using facilities such as the library, their first piece of assessment and the first time they engage in professional experience in schools. The interviews indicate that these events are closely linked to critical walking points, which are times when Aboriginal and Torres Strait Islander students disengage from the academy. Ultimately, these events prevent these students from completing their course or graduating. Importantly, many of these walking points occur during a student’s first year and it is therefore suggested that much could be learnt from tracking a number of Aboriginal and Torres Strait Islander students in a range of urban, regional, away-from-base and remote programs from their point of enrolment through to the end of their first year. It is acknowledged that research entailing multi-institutional longitudinal tracking of students would need to ensure participating institutions did not perceive the research as an evaluation of their program.

Exit interviews

An important point to note is that that all Aboriginal and Torres Strait Islander students interviewed in the MATSITI–ACDE research project were currently enrolled. We therefore mostly heard the stories of successful students, which meant the research was limited to anecdotal second-hand accounts of the reasons for students exiting their course before graduation. It is therefore suggested that in addition to the longitudinal tracking of a range of first-year students across various programs (mentioned above), further research should attempt to capture the first-hand voices/stories of non-graduating students through some form of exit interviews in a range of urban, regional, away-from-base and remote programs.

Action plans and mapping of best practice

The research project culminated in a one-day forum in Sydney (on 16 March, 2012) at which deans of schools and faculties of education met alongside heads of Indigenous Higher Education Centres to develop institutional action plans. At the time of writing this report, universities across Australia are submitting action plans that aim to formalise strategies that make a difference in terms of the retention and graduation of Aboriginal and Torres Strait Islander students studying initial teacher education courses. Many of these action plans include memorandums of agreement that target specific initiatives to be undertaken in 2013 and beyond (documents from the action planning process are included in the appendices).

This recommendation targets the key aspects of individual action plans and the manner/process in which institutions implement their plans. It is suggested here that critical elements highlighted in an individual plan might be selected across several institutions. Such elements might include the experiences of Aboriginal and Torres Strait Islander students on professional experience; both the positive and negative aspects of online learning; or the need for students to feel culturally safe in their Indigenous Education subjects. Participating institutions could then engage in a collaborative action research process that enables the faculty/school and Indigenous Higher Education Centres to map and subsequently share their model of change. In a similar fashion to the recommendations listed above, it is acknowledged that any such action research process would need to be positioned as the learning and sharing of best practice, and not as any form of an evaluation.

Professional development

This final suggestion relates to the development of training modules that faculties and schools of education could use as professional development programs with their academic and professional staff. The modules would target topics such as cultural safety and could be developed with assistance from Indigenous Higher Education Centres

9 References

- Aboriginal Research Institute. (1993). *Ethics in Aboriginal research*. Adelaide: Author.
- Alfred, T. (2004). Warrior scholarship: Seeing the university as a ground of contention. In D. Mihesuah & A. Wilson (Eds.), *Indigenizing the Academy Transforming Scholarship and Empowering Communities* (pp. 88–99). Lincoln: University of Nebraska Press.
- Arbon, V. (2008). *Arlathirnda ngurkarnda ityirnda: Being, knowing, doing: de-colonising Indigenous tertiary education*. Teneriffe, Qld: Post Pressed.
- Asmar, C., & Page, S. (2009). Sources of satisfaction and stress among Indigenous academic teachers: findings from a national Australian study. *Asia Pacific Journal of Education*, 29(3), 387–401.
- Asmar, C., Page, S., & Radloff, A. (2011, April). *Dispelling myths: Indigenous students' engagement with university*. *Australasian Survey of Student Engagement Research Briefing* (Vol. 10). Camberwell, Vic: Australian Council for Educational Research.
- Australian Bureau of Statistics. (2008). Cultural Diversity in 1301.0 - Year Book Australia, 2008. Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/0/636F496B2B943F12CA2573D200109DA9?opendocument>
- Australian Education Union. (2005). *AEU Beginning teacher survey media information: Key national results*. Retrieved from <http://www.aeufederal.org.au/Publications/Btsurveyres.pdf>
- Australian Secondary Principals Association. (2011). *National conversations with principals 2011*. Retrieved from http://www.aspa.asn.au/index.php?option=com_content&view=article&id=416%3A2011-national-conversation-with-principals&Itemid=59
- Aveling, N. (2006). "Hacking at our very roots": rearticulating White racial identity within the context of teacher education. *Race Ethnicity and Education*, 9(3), 261–274.
- Banks, G. (2007, June). *Overcoming Indigenous disadvantage in Australia*. Paper presented at Second OECD World Forum on "Statistics, Knowledge and Policy", Istanbul, Turkey.
- Bat, M. (2010). *Learning from the journeys: Quality in Indigenous teacher education in Australia* (Unpublished doctoral thesis). Charles Darwin University, Darwin.
- Behrendt, L., Larkin, S., Griew, R. & Kelly, P. (2012). *Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People: Final Report*. Canberra, ACT: Australian Government.
- Bethel, B. (2006). Critical approaches to inclusion in Indigenous teacher education in Queensland: The case of RATEP. *International Journal of Pedagogies and Learning*, 2(3), 30–41.
- Bevan, C., & Shillinglaw, D. (2010). Biggest mob Mirlimirli: Teaching two way: codeswitching cultures and dialects. *Literacy Learning: The Middle Years*, 18(2), 11–17.
- Bin-Sallik, M. (Ed.). (2000). *Aboriginal women by degrees: Their stories of the journey towards academic achievement*. St. Lucia, Qld: University of Queensland Press.
- Boulton-Lewis, H., Marton, F., Lewis, D., Wilss, L. (2000). Aboriginal and Torres Strait Islander university students' conceptions of formal learning and experiences of informal learning. *Higher Education*, 39, 469–488.
- Bourke, C., Burden, K., & Moore, S. (1996). *Factors affecting performance of Aboriginal and Torres Strait Islander students at Australian universities: A case study*. Canberra, ACT: Department of Education, Training and Youth Affairs.
- Bradley, D., Noonan, P., Nugent H., & Scales, B. (2008). *Review of Australian higher education*. Retrieved from http://www.deewr.gov.au/HigherEducation/Review/Documents/PDF/Higher%20Education%20Review_one%20document_02.pdf

- Buckley, P. (1996). Controversial and difficult issues in Aboriginal teacher education: some western educators' views of Aboriginal teacher training. *Australian Journal of Indigenous Education*, 24(1), 26–33.
- Bunda, T., Zipin, L., & Brennan, M. (2011). Negotiating university 'equity' from Indigenous standpoints: a shaky bridge. *International Journal of Inclusive Education*, 1–17.
- Butcher, J., Bezzina, M., & Moran, W. (2011). Transformational partnerships: A new agenda for higher education. *Innovative Higher Education*, 36, 29–40.
- Carnes, R. (2011, November). *Education for incarcerated Aboriginal Western Australians: Education revolution or just plain revolting?* Paper presented at the Australian Association for Research in Education Conference, Hobart, Tasmania.
- Cassidy, B. (2004, April). Who will be the voice for the people? *HERDSA News*, 9–12.
- Cleverley, J., & Mooney, J. (2010). *Taking our place: Aboriginal education and the story of the Koori Centre at the University of Sydney*. Sydney: Sydney University Press.
- Collins, J., & Poynting, S. (2000). *The other Sydney: Communities, identities and inequalities in Western Sydney*. Melbourne, Vic: Common Ground Publishers.
- Cooper, J. (2008). Embedding literacy in indigenous education through assistant teachers: Lessons from the National Accelerated Literacy Program. *Australian Journal of Indigenous Education*, 37, 120–129.
- Coopes, R. (2009). Can universities offer a place of cultural safety for Indigenous students? In J. Frawley, M. Nolan, & N. White (Eds.), *Indigenous issues in Australian universities* (pp. 106–113). Darwin, NT: Charles Darwin University Press.
- Craven, R. (2005, November). *Turning points in Indigenous education: new findings that can really make a difference and implications for the next generation of Indigenous education research*. Paper presented at the Australian Association for Research in Education Conference, Paramatta, New South Wales.
- Dalley-Trim, L., & Alloway, N. (2010). Looking "Outward and onward" in the outback: Regional Australian students' aspirations and expectations for their future as framed by dominant discourses of further education and training. *The Australian Educational Researcher*, 37(2), 107–125.
- Davis, J. (2012, in press). Community connections in education: Community Durithunga—yarning in circle on Country, our way. In J. Phillips & J. Lampert (Eds.), *Introductory Indigenous Studies: Ways of knowing*. Frenchs Forest, NSW: Pearson.
- Day, D., & Davison, P. (2005). Career development for Indigenous students in Australian universities: Personal and professional resilience for the future. *International Journal of Learning*, 11, 481–488.
- Devow, L. (2000). Anything but Aboriginal. In M. Bin-Sallik (Ed.), *Aboriginal women by degrees: Their stories of the journey towards academic achievement* (pp. 107–122). St. Lucia, Qld: University of Queensland Press.
- DiGregorio, K., Farrington, S., & Page, S. (2000). Listening to our students: Understanding the factors that affect Aboriginal and Torres Strait Islander students' academic success. *Higher Education Research & Development*, 19(3), 297–309.
- Drysdale, M., Faulkner, S., & Chesters, J. (2006). *Footprints forward: Better strategies for the recruitment retention and support of Indigenous medical students*. Melbourne: Monash University School of Rural Health.
- Fleet, A., & Kitson, R. (2009). *Deadlier with a degree!* Sydney: Macquarie University, Institute of Early Childhood.
- Foley, D. (1996). Perspectives on effective student support for Indigenous students in a tertiary institution. *Australian Journal of Indigenous Education*, 24(2), 53–55.
- Ford, P. (2010). *Aboriginal knowledge, narratives & country: marri kunkimba putj putj marrideyan*. Teneriffe, Qld: Post Pressed.

- Frawley, J., Nolan, M., & White, N. (Eds.). (2009). *Indigenous issues in Australian universities: Research, teaching, support*. Darwin, NT: Charles Darwin University Press.
- Giles, W., Prescott, D., & Rhodes, D. (2011). Innovative teacher training in remote Australian Indigenous communities: A sustainable staffing model. *Global University Network for Innovation*. Retrieved from <http://www.guninetwork.org/guni.toolbox/he-articles/innovative-teacher-training-in-remote-australian-indigenous-communities-a-sustainable-staffing-model-1>
- Goulet, L., & McLeod, Y. (2002). Connections and reconnections: Affirming cultural identity in aboriginal teacher education. *McGill Journal of Education*, 37(3), 355–355. Retrieved from <http://search.proquest.com/docview/202729464?accountid=13380>
- Harris, D. (2004). Why we need more Aboriginal adults working with Aboriginal students. *Australian Journal of Teacher Education*, 29(1), 1–8.
- Harrison, N. (2005). The learning in-between: The search for meta-language in Indigenous education. *Educational Philosophy and Theory*, 37(6), 871–884.
- Harrison, N. (2007). Where do we look now? The future of research in Indigenous Australian education. *The Australian Journal of Indigenous Education*, 36, 1–5.
- Hart, V., Whatman, S., McLaughlin, J., & Sharma-Brymer, V. (2012, in press). Pre-service teachers' pedagogical relationships and experiences of embedding Indigenous Australian knowledge in teaching practicum. *Compare: A Journal of Comparative and International Education*, 42(5).
- Hatano, G., & Ouro, Y. (2003). Commentary: Reconceptualising school learning using insight from expertise research. *Educational Researcher*, 32(8), 26–29.
- Henry, J., & McTaggart, R. (1987). Aboriginal teacher education for bicultural education: The D-BATE Program as a first step. *The Territory Teacher*, 13(2), 10–12.
- Herbert, J. (2005, December). *Owning the discourse: Seizing the power!* Paper presented at the Australian Association for Research in Education Conference, Cairns, Queensland. Retrieved from <http://aare.edu.au/05pap/her05217.pdf>
- Herbert, J. (2010). Indigenous studies: Tool of empowerment within the academe. *The Australian Journal of Indigenous Education*, 39(Suppl.), 23–31.
- Holmes, D. (2006). *Redressing the balance: Canadian university programs in support of Aboriginal students*. Ottawa, Canada: Association of Universities and Colleges of Canada.
- Hughes, P., More, A., & Williams, M. (2004). *Aboriginal ways of learning*. Adelaide, SA: Paul Hughes.
- Hughes, P., & Willmot, E. (1982). A thousand Aboriginal teachers by 1990. In J. Sherwood (Ed.), *Aboriginal Education. Issues and Innovations* (pp. 45–49). Perth, WA: Creative Research.
- Hunter, B., & Schwab, R. G. (2003). *Practical reconciliation and recent trends in Indigenous education*. Retrieved from http://www.australianreview.net/journal/v4/n2/hunter_schwab.pdf
- Indigenous Higher Education Advisory Council. (2010). *Submission to Consultation Paper: Meeting Australia's research workforce needs*. Canberra, ACT: Australian Government.
- Jacknicke, K. (2001, November 29). Nothing inferior about native teachers. *Star-Phoenix*, A15. Retrieved from <http://search.proquest.com.ezp01.library.qut.edu.au/docview/348578123>
- Jay, J. (2009). The aboriginal practical experience and its impact on pre-service teachers' decisions about living and working in remote indigenous communities in Australia. *Education in Rural Australia*, 19(3), 35.
- Kitchen, J., Cherubini, L., Trudeau, L., & Hodson, J. (2010). Weeding out or developing capacity? Challenges for aboriginal teacher education. *Alberta Journal of Educational Research*, 56(2), 104–123. Retrieved from <http://search.proquest.com/docview/754907003?accountid=13380>; [http://www2.education.ualberta.ca/educ/journals/ajer/56%20files/56\(2\)files/A1.html](http://www2.education.ualberta.ca/educ/journals/ajer/56%20files/56(2)files/A1.html)
- Kitchen, J., Hodson, J., & Raynor, M. (2012, in press). Indigenous teacher education as cultural brokerage: A university/First Nations partnership to prepare Nishnawbe Aski. *The International education journal: Comparative Perspectives*.

- Lamb, C. (2009). *Cohort model learning communities: The tribal perspectives model of best practices in teacher education* (Unpublished doctoral thesis). University of North Dakota, USA.
- Laycock, A., Walker, D., Harrison, N., & Brands, J. (2009). *Supporting Indigenous researchers: A practical guide for supervisors*. Darwin, NT: Cooperative Research Centre for Aboriginal Health.
- Levin, B. (2009, May). Aboriginal education still needs work. *Phi Delta Kappan*, 689–690. Retrieved from <http://search.proquest.com/docview/218499263?accountid=13380>
- Loos, N., & Wightman, L. (1988). On becoming a Torres Strait Islander teacher. *Aboriginal Child at School*, 16(3), 24–36.
- Maher, M. (2011). Making inclusive education happen: the impact of initial teacher education in remote Aboriginal communities, *International Journal of Inclusive Education*, 1-15.
- Malezer, B., & Sims, C. (2002, December). *Issues for teacher preparation in Indigenous Australian studies: Benefits of teaching Indigenous Australian Studies in a cross-cultural context*. Paper presented at the Australian Association for Research in Education Conference, Brisbane, Queensland.
- Malin, M. (2004). Why is life so hard for Aboriginal children students in urban classrooms? *The Aboriginal Child at School*, 22, 141–153.
- Malin, M., & Maidment, D. (2003). Education, indigenous survival and well-being: Emerging ideas and programmes. *The Australian Journal of Indigenous Education*, 32, 85–100.
- Martin, K. (2012). Aboriginal early childhood: past, present, and future. In J. Phillips & J. Lampert (Eds.), *Introductory Indigenous studies: Ways of knowing*. Frenchs Forest, NSW: Pearson.
- Mason, T., Reid, C., & Perry, B. (2003). The Aboriginal Rural Education Program in teacher education at the University of Western Sydney. *Change: Transformations in Education*, 6(2), 75–81.
- Milton, M., & Vozzo, L. (2010, September). *Using new technologies to support the learning of Aboriginal pre-service teachers*. Paper presented at the ALARA 8th World Congress 2010, Melbourne, Victoria.
- Ministerial Council for Education, Early Childhood Development and Youth Affairs. (2011). *National Aboriginal and Torres Strait education action plan 2010–2014*. Canberra, ACT: Australian Government. Retrieved from http://www.mceecdya.edu.au/mceecdya/atsieap_action_plan_201014_press_release,33444.html
- Ministerial Council on Education, Employment, Training and Youth Affairs. (2006). *Australian directions in Indigenous education 2005-2008*. Canberra, ACT: Australian Government.
- Nakata, M. (2001). Another window on reality. In B. Osborne (Ed.), *Teaching democracy and diversity* (pp. 331–353). Altona, Vic: Common Ground Publishing.
- Nakata, M. (2004). Ongoing conversations about Aboriginal and Torres Strait Islander research agendas. *The Australian Journal of Indigenous Education*, 33, 1–6.
- Nakata, M. (2008). *Savaging the disciplines: Disciplining the savages*. Canberra: Aboriginal Studies Press.
- Nakata, M., Nakata, V., Keech, S., & Bolt, R. (2012). Decolonial goals and pedagogies form Indigenous studies. *Decolonization: Indigeneity, Education & Society*, 1(1), 120-140.
- Nolan, M., Frawley, J., & White, N. (2009). Canvassing the issues: Indigenous Australians in higher education. In M. Nolan, J. Frawley, & N. White (Eds.), *Indigenous issues in universities* (pp. 1–6). Darwin, NT: Charles Darwin University Press.
- Office of Evaluation and Audit (Indigenous Programs). (2006). *Evaluation of the Indigenous Education Strategic Initiatives Programme: Away-from-base for 'mixed-mode' delivery (IESIP-AFB)*. Canberra: Department of Finance and Administration.
- Osborne, B., & Sellars, N. (1987). *Torres Strait Islanders teaching Torres Strait Islanders*. Townsville, Qld: James Cook University.
- Pechenkina, E., & Anderson, I. (2011). *Consultation paper on Indigenous Australian higher education: Trends, initiatives and policy implications*. Canberra, ACT: Commonwealth of Australia.
- Phillips, J. (2011). *Resisting contradictions: non-Indigenous pre-service teacher responses to critical Indigenous studies* (Unpublished doctoral thesis). Queensland University of Technology, Brisbane.

- Phillips, J., & Lampert, J. (2012, in press). *Introductory Indigenous studies: Ways of knowing*. Frenchs Forest, NSW: Pearson.
- Phillips, S., Phillips, J., Whatman, S., & McLaughlin, J. (2007). Introduction: Issues in (re)contesting Indigenous knowledges and Indigenous studies. *The Australian Journal of Indigenous Education*, 36(Suppl.), 1–6.
- Price, K. (2011). *Aboriginal and Torres Strait Islander education: A review of the literature*. Unpublished manuscript, The More Aboriginal and Torres Strait Islander Teachers Initiative, University of South Australia, Adelaide, South Australia.
- Prior, D. (2009). Decolonising research agendas: claiming voice and power in academia. In J. Frawley, M. Nolan, & N. White (Eds.), *Indigenous issues in Australian universities: Research, teaching, support* (pp. 66–74). Darwin, NT: Charles Darwin University Press.
- Quinn, A., & Saini, M. (2012). *Touchstones of hope: Participatory action research to explore experiences of First Nation communities in Northern British Columbia*. Toronto: Faculty of Social Work, University of Toronto.
- Rabbitt, E. (1999, November). *We do it our way: A study of a two way learning exchange for external students in remote Western Australia*. Paper presented at the Australian Association for Research in Education Conference, Melbourne, Victoria.
- Reid, J., Green, B., Cooper, M., Hastings, W., Lock, G., & White, S. (2010). Regenerating rural social space? Teacher education for rural–regional sustainability. *Australian Journal of Education*, 54(3), 262–276.
- Santoro, N. (2012). 'I really want to make a difference for these kids but it's just too hard': one Aboriginal teacher's experiences of moving away, moving on and moving up. *International Journal of Qualitative Studies in Education*, 1–14. doi: 10.1080/09518398.2012.724466
- Santoro, N., Reid, J., Crawford, L., & Simpson, L. (2011). Teaching Indigenous children: Listening to and learning from Indigenous teachers. *Australian Journal of Teacher Education*, 36(10), 5.
- Santoro, N., Reid, J., Crawford, L. & Simpson, L. (2012). Teaching Indigenous teachers: valuing diverse perspectives. In T.N. Basit & Tomlinson, S. (Eds.), *Social inclusion and higher education* (pp. 255–271). Bristol, UK: Polity Press.
- Santoro, N., Reid, J., Simpson, L., & McConaghy, C. (2008, November). *Exploring the career experiences of Indigenous teachers: Beyond policy and resource initiatives*. Paper presented at Australian Association Researchers Education Conference, Brisbane, Queensland.
- Shah, M., & Widin, J. (2010). Indigenous students' voices: Monitoring Indigenous student satisfaction and retention in a large Australian university. *Journal of Institutional Research*, 15(1), 28–41.
- Shnukal, A. (2002). Some language-related observations for teachers in Torres Strait and Cape York Peninsula schools. *Australian Journal of Indigenous Education*, 30(1), 8–24.
- Tatz, C. (2009). Aboriginal education, again. *Australian Aboriginal Studies*, 1, 92–96.
- Thornton, S., Giles, W., Prescott, D., & Rhodes, D. (2011). Exploring the mathematical confidence of Indigenous preservice teachers in a remote teacher education program. *Mathematics Education Research Journal*, 23(2), 235–252.
- Tinto, V. (2008). Access without support is not opportunity. *Inside Higher Education*. Retrieved from <http://www.insidehighered.com/views/2008/06/09/tinto>
- Trotman, J., & Kerr, T. (2010). Making the personal professional: Pre-service teacher education and personal histories. *Teachers and Teaching: Theory and Practice*, 7(2), 157–171.
- Trudgett, M. (2009). Build it and they will come: Building the capacity of Indigenous units in universities to provide better support for Indigenous Australian postgraduate students. *The Australian Journal of Indigenous Education*, 38, 9–18.
- Trudgett, M. (2011). Western places, academic spaces and Indigenous faces: Supervising Indigenous Australian postgraduate students. *Teaching in Higher Education*, 16(4), 389–399.
- Tuhiwai Smith, L. (1999). *Decolonising methodologies*. Dunedin, New Zealand: University of Otago Press.

- Usher, K., Miller, M., Turale, S., & Goold, S. (2005). Meeting the challenges of recruitment and retention of Indigenous people into nursing: outcomes of the Indigenous Nurse Education Working Group. *Collegian: Journal of the Royal College of Nursing Australia*, 12(3), 27–31.
- Whatman, S., McLaughlin, J., Willsteed, S., Tyhuis, A., & Beetson, S. (2008). Quality and efficacy of the Indigenous Tutorial Assistance Scheme (ITAS) for university students. *The Australian Journal of Indigenous Education*, 37, 118–130.
- White, N. (2009). University-educated Indigenous women: their struggles and triumphs in their leadership journeys. In J. Frawley, M. Nolan & N. White (Eds.), *Indigenous issues in Australian universities: Research, teaching, support* (pp. 95–105). Darwin, NT: Charles Darwin University Press.
- Willems, J. (2012). Educational resilience as a quadripartite responsibility: Indigenous peoples participating in higher education via distance education. *Journal of Open, Flexible and Distance Learning*, 16(1), 14–27.
- Woods, G., & Biermann, S. (2008). Sharing knowledge, sharing experience, sharing power. *Journal of Australian Indigenous Issues*, 12(1–4), 116–131.
- York, F. & Henderson, L. (2003). Making it possible: The evolution of RATEP—a community based teacher education program for Indigenous peoples. *The Australian Journal of Indigenous Education*, 32, 77–84.
- Yunkaporta, T., & McGinty, S. (2009). Reclaiming Aboriginal knowledge at the cultural interface. *The Australian Educational Researcher*, 36(2), 55–72.

10 Appendices

10.1 MATSITI-ACDE Steering and Reference Groups

MATSITI-ACDE Steering Group

- Professor Peter Buckskin (Dean of Indigenous Scholarship, Engagement and Research, University of South Australia)
- Professor Toni Downes (President of the Australian Council of Deans of Education and Executive Dean, Charles Sturt University)
- Professor Peter Kell (Head of the School of Education, Charles Darwin University)
- Professor Paul Chandler (Dean of Education, University of Wollongong)
- Professor Annette Patterson (Head of the School of Cultural and Language Studies in Education, Faculty of Education, Queensland University of Technology)
- Professor Wendy Patton (Executive Dean, Faculty of Education, Queensland University of Technology)

MATSITI-ACDE Reference Group

- Professor Anita Lee Hong (Director, Oodgeroo Unit, Queensland University of Technology)
- Joel Anderson (Widening Participation Program Coordinator, Oodgeroo Unit Queensland University of Technology)

State facilitators (ACDE forum, Sydney, September 2012)

New South Wales: Associate Professor Janet Mooney (Director of the Koori Centre, Sydney University)

Queensland: Joel Anderson (Widening Participation Program Coordinator, Oodgeroo Unit Queensland University of Technology)

South Australia and Northern Territory: Michael Colbung (Lecturer, School of Education, University of Adelaide)

Victoria and Tasmania: Gary Thomas (Director, Equity and Student Support Services/Director, Indigenous Education La Trobe University)

Western Australia: Associate Professor Simon Forrest (Director, Centre for Aboriginal Studies, Curtin University)

10.2 Interviews conducted

Site	Date	No. of interviews	Mainstream or cohort	Referral
Qld	20 June, various	15	6 cohort 1 mainstream (face-to-face) + 8 by email, telephone)	Arranged through School of Education
SA	5 July	2	Mainstream (face-to-face)	Arranged through Indigenous Higher Education Centre with School of Education
MATSITI Conference, Adelaide	July 9,10,11, various	30	Various (at conference, in workshops, follow-up by telephone)	MATSITI conference (all states represented)
WA	9 August	3	Cohort and mainstream (face-to-face)	Arranged through Indigenous Higher Education Centre (various universities)
NT & Victoria	September 19, 20 , various	17	6 cohort, 11 mainstream (face-to-face)	Arranged through schools of education
NSW	Monday 24 September, various	5	Mainstream and cohort (email, telephone and face-to-face)	Arranged through Indigenous Higher Education Centres and schools of education

72 interviews in total were conducted by the QUT research team.

10.3 Action planning process: documents

Needs Analysis/Goal Setting

What strategies are the Faculty/School of Education currently implementing targeting the retention and graduation of Aboriginal and Torres Strait Islander Initial Teacher Education (ITE) Students?	What combined strategies are the Aboriginal and Torres Strait Islander Higher Education Centre and Education Faculty/School currently implementing targeting the retention and graduation of Aboriginal and Torres Strait Islander Initial Teacher Education (ITE) Students?	What strategies are the Aboriginal and Torres Strait Islander Higher Education Centre currently implementing targeting the retention and graduation of Aboriginal and Torres Strait Islander Initial Teacher Education (ITE) Students?

What needs to be done?

Example of Needs Analysis/Goal Setting

What strategies are the Faculty/School of Education currently implementing targeting the retention and graduation of Aboriginal and Torres Strait Islander Initial Teacher Education (ITE) Students?	What combined strategies are the Aboriginal and Torres Strait Islander Higher Education Centre and Education Faculty/School currently implementing targeting the retention and graduation of Aboriginal and Torres Strait Islander Initial Teacher Education (ITE) Students?	What strategies are the Aboriginal and Torres Strait Islander Higher Education Centre currently implementing targeting the retention and graduation of Aboriginal and Torres Strait Islander Initial Teacher Education (ITE) Students?
3 identified positions (not all filled)	Current research into professional experience	ITAS-TT
1 core Aboriginal and Torres Strait Islander Core Unit (2 core units to be included in new degree program)	POP (Pre-Orientation Program led by centre)	POP Week
Activity around Embedding Indigenous Knowledges	Identifying appropriate ITAS-TT tutors	Student Ambassadors
Scholarships <ul style="list-style-type: none"> School based undergraduate scholarship (Primary) Post grad scholarship (includes Grad Dip) 	Selection panel for faculty scholarships	Academic Advisors <ul style="list-style-type: none"> advocacy
Ad hoc activities led by committed staff	Centre Representation on faculty committees (such as Equity Committee)	Learning Support Officers <ul style="list-style-type: none"> advocacy
Aboriginal and Torres Strait tutors employed in Aboriginal and Torres Strait Islander Studies subjects		Scholarships <ul style="list-style-type: none"> Commonwealth DETA- Pearl Duncan Equity
		Culturally safe facilities <ul style="list-style-type: none"> Physical space
		Pre-Graduation Ceremony
		Community Engagement

What needs to be done?
<p>Overarching Goal: Develop a closer relationship between faculty/school and Aboriginal and Torres Strait Islander Higher Education Centre to better track and support students through the following means:</p> <ul style="list-style-type: none"> Formalise processes and systems around interactions for specific purposes, i.e. a Memorandum of Agreement In consultation with Indigenous Higher Education Centre, professional development for faculty/school to increase knowledge of cultural safety/cultural awareness amongst faculty staff (both academic and professional) Formalise faculty roles Disseminate Indigenous Higher Education Centre roles to faculty Faculty to better support students at-risk Faculty to nominate key personnel as designated Academic Advisors Increased mechanisms for flexibility

10.4 Action planning process: guide questions

Guide questions used in action planning process

As there is overlap between themes, we suggest there may be no need to answer each question separately. Instead, these are intended as guide questions related to the themes identified through the research.

Institutional structures and procedures

What procedures are in place for your school/faculty Indigenous Higher Education Centre to regularly work together on support, retention and graduation of education students?

Which roles and responsibilities belong to the school/faculty, which belong to the centre and which roles and responsibilities are shared? Is there a formal agreement between the school and the centre? Could an MOU be formalised?

How does the centre track student progress? How does the school/faculty track student progress and can these processes be formalised?

How (and by whom) are at-risk students identified? At what stages? How is support offered to those students and what role can the schools/faculties take in following up and supporting these students before they exit?

Does the school/faculty have a designated academic advisor whose responsibility it is to know and support Aboriginal and Torres Strait Islander students? Can this be part of workload? How will this person communicate with the centre?

How can the school/faculty make an Aboriginal and Torres Strait Islander presence visible (e.g., on its website, through embedding in its courses, in its long-term staffing, etc.)

Does the school/faculty conduct exit interviews with students who leave the course? Could this provide better understanding of issues related to retention and graduation?

What could the school/faculty and centre offer (besides existing ITAS-TT tutoring) to identify and support students' academic literacy needs, especially for students coming in through alternative entry?

What professional development is needed within schools/faculties and who could offer this professional development? Could it be compulsory? How could it be offered and what could it include (cultural safety? Antiracism?) How can permanent, part-time and sessional/contract staff be made aware of commonly identified issues?

How could school/faculty offer specific support to scholarship holders?

How could schools/faculties assist centres in the identification and preparation of quality ITAS-TT tutors?

How could the school/faculty provide safe space alongside the centre to address the cultural and geographic isolation students commonly express?

How could the school/faculty's field experience staff better support Aboriginal and Torres Strait Islander students? What professional development could be offered to Academic Advisors and general staff?

How could the school/faculty allow for flexibility with respect to course progression, part-time study, leave of absence, etc? What institutional systems are in place to allow for this without penalty?

Course progression

How could school/faculty and/or centre produce 'plain English' explanations of institutional procedures and university requirements? Who could develop these and how could they be disseminated?

What discussions could take place about the credibility issues commonly expressed by block/cohort students? What strategies could be taken to remedy this perceived problem?

10.5 Action planning process: templates

Example Action Plan

How will the school/Faculty of Education and the Aboriginal and Torres Strait Islander Higher Education Centre develop a closer and more productive relationship?		
Strategy: Formalise processes and systems around interactions for specific purposes		
Action	Responsibility	Timeline
Memorandum of Understanding (MOU) to be drafted	Dean and Head of Centre	
MOU to be agreed upon and signed by both parties	Dean and Head of Centre	
implement MOU deliverables (see below strategies for further details)	Dean and Head of Centre	
Strategy: In consultation with Unit, Professional Development for Faculty to increase knowledge of cultural safety/ cultural awareness amongst faculty staff (both academic and professional)		
Action	Responsibility	Timeline
Cultural Safety Workshop facilitated at each school staff meeting (compulsory attendance for Academic Staff)	Head of School in consultation with Head of Centre	
Cultural Safety Workshop facilitated at each Professional staff meeting (compulsory attendance for Professional Staff)		
Strategy: Formalise Faculty roles		
Action	Responsibility	Timeline

Strategy:		
Action	Responsibility	Timeline

10.6 Participating universities

NB: Smaller universities/institutions with very small numbers of enrolled ITE students did not participate while several larger universities chose not to participate.

1. Australian Catholic University
2. Charles Sturt University
3. Macquarie University
4. Southern Cross University
5. The University of New England
6. The University of New South Wales
7. The University of Newcastle
8. The University of Sydney
9. University of Technology Sydney
10. University of Western Sydney
11. University of Wollongong
12. Charles Darwin University
13. Central Queensland University
14. Griffith University
15. James Cook University
16. Queensland University of Technology
17. The University of Queensland
18. The University of Southern Queensland
19. University of the Sunshine Coast
20. Flinders University
21. The University of Adelaide
22. University of South Australia
23. University of Tasmania
24. Deakin University
25. La Trobe University
26. Monash University
27. RMIT University
28. University of Ballarat
29. Victoria University
30. Curtin University
31. Edith Cowan University
32. Murdoch University
33. The University of Notre Dame
34. The University of Western Australia



More Aboriginal and Torres Strait
Islander Teachers Initiative
www.matsiti.edu.au
info@matsiti.edu.au
(08) 8302 0036